Ingersoll Rand

Electronic Access Control Catalog

June 2012 Edition

Thank you for choosing Ingersoll Rand Security Technologies electronic access control products. This catalog contains overviews and technical specifications. In the back of the catalog you will find several wiring and riser diagrams for a number of products.

The electronic security industry is ever-changing. In order to make sure that you have the most current and up to date product information, we recommend that you register your catalog by clicking on the registration button in the toolbar seen on the left side of your viewer. By registering and providing your email address, you will receive important updates to your catalog, and other product and solution information from Ingersoll Rand.

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Access Control & Video Solutions

This section of the Electronic Access Control catalog covers Schlage's Security Management System, bright blue® and Video Solutions.

Overview

Schlage provides a comprehensive suite of access control and video solutions to meet the security needs and budget of virtually any customer. With our Standalone, Networked and Enterprise offerings, we can help you find the right solution – whether you're a small office building, a university or a global corporation, we have the right products to meet your needs today and grow with you into the future.

Standalone Solutions

- **SMS Express** is an offline, user-friendly and affordable solution that is perfect for small to medium sized organizations with basic access control needs. It's best for installations with less than 100 doors where real-time information is not required. Supported devices include Schlage's AD-200, CO-200, CT-5000 offline controller and the BE367 Programmable Electronic Deadbolt.
- **SMS Select** was designed for small to medium sized organizations as well as colleges and universities utilizing offline locks. It's the right choice for any organization that may grow to more than 100 offline doors as it has a grouping feature for mass-assignment of people and doors. With SMS Select, you can also design and create photo ID badges as well as associate video clips with offline lock transactions. It also delivers advanced reporting capabilities and can be seamlessly upgraded to online levels of SMS. Supported devices include Schlage's AD-200, AD-250, CO-200 and CO-250.

Networked Solutions

- **bright blue®** is the easiest to use web-based access control solution on the market today. It supports up to 32 online devices including Schlage's AD-300 hardwired and AD-400 wireless electronic locks as well as standard proximity, magnetic stripe and smart card readers. We use state-of-the-art embedded intelligence technology, which means that the software resides on the controller board. This allows you to access your system like any other web page on the internet. Simply connect a network cable and you are ready to manage your system.

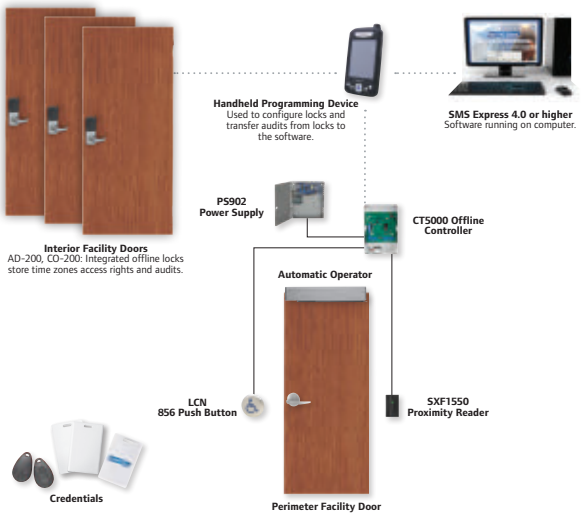
Enterprise Solutions

- **SMS Premier** was developed for medium to large sized organizations including financial institutions, colleges, hospitals, government facilities and more. It supports online and offline devices within the same environment and gives you the ability to manage multi-site facilities either centrally or individually. In addition, card transactions can be associated with video clips and badging photos for fast incident recognition and/or resolution. 1, 5, or 10 client licenses are available. Supports AD-Series and CO-Series electronic locks as well as Wiegand readers.
- **SMS Enterprise** was developed specifically for large, multi-site or global organizations. It includes all of the features of SMS Premier along with a standard visitor management module, redundant recovery option, alarm graphics package and two-man rule feature. It also supports an unlimited number of client licenses to meets the needs of the world's largest organizations. Supports AD-Series and CO-Series electronic locks as well as Wiegand readers.

Video Solutions

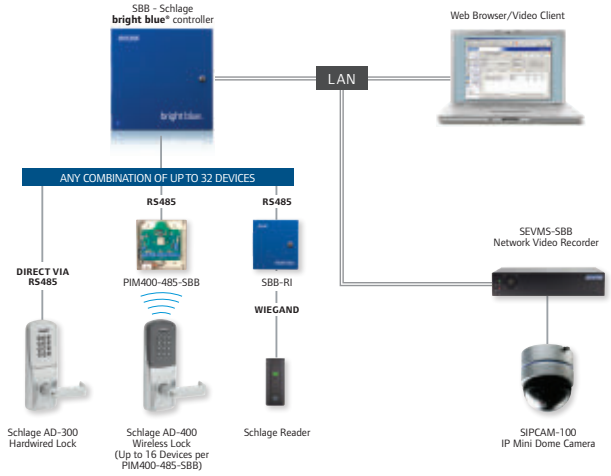
- **Video surveillance** is a critical component to any security system. It provides a visual record of who comes in and out of your facilities and can be a powerful crime and theft deterrent. Schlage's video solutions can be stand alone or easily integrated into your bright blue® web-based access control system or Security Management System. Our solutions deliver advanced monitoring, with easy investigation and surveillance management features across analog, IP and hybrid environments. Whether your organization consists of a single facility or multiple facilities worldwide, Schlage delivers the tools you need to manage your facility with ease and efficiency.

Standalone Access Control Solution:



** Example shown is a typical standalone access control opening with an automatic operator.*

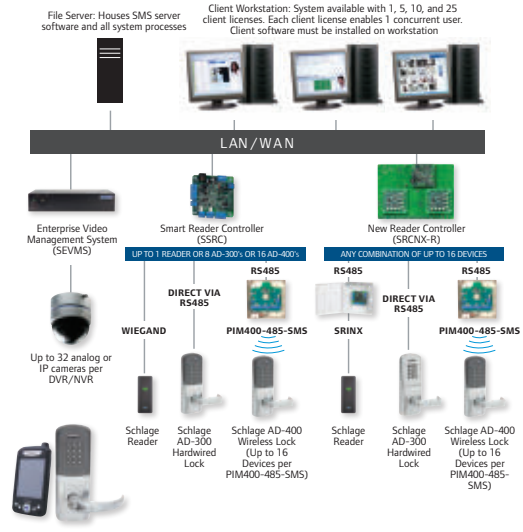
Networked Access Control Solution:



▶ Connect multiple facilities that reside on the same LAN:

Extend the reach of your system with the bright blue Network Reader Interface (SBB-NRI). The SBB-NRI is IP-based and connects directly to your network so it can be located at any remote opening or facility that is on the same network as your **bright blue®** controller.

Enterprise Security Solution:



AD-200 Standalone Locks
- Manage access rights, time zones and holidays with SMS Enterprise Software
- Utilize HHD Handheld Device to configure locks and transfer updates & audits between software and locks

Schlage Enterprise Video Solutions:
- Multiple hardware and storage configurations
- SMS supports an unlimited number of NVR/DVRs
- Automatically associate digital video to access transactions

ACVS Software Comparison

PRODUCT	Security Management System				bright blue®
LEVEL	Express	Select	Premier	Enterprise	
System Capacity					
Online Devices	N/A	N/A	Unlimited	Unlimited	32
Offline Devices	100 lock max. at 1000 users	Unlimited	Unlimited	Unlimited	N/A
Users/Cardholders	50 locks max. at 2000 users	5000	Unlimited	Unlimited	5000
Concurrent System Operators	1	Up to 5	Up to 10	Unlimited	1
Time Zones	8	8	Unlimited	Unlimited	100
Holidays	16	16	Unlimited	Unlimited	100
Software Features					
Integrated Photo ID Badging	No	Yes	Yes	Yes	No
Visitor Management Module	No	No	Yes	Yes	No
Optional Integrated Video	No	Yes	Yes	Yes	Yes
Transaction Monitoring	N/A	N/A	Yes	Yes	Yes
Alarm Graphics	No	No	No	Yes	No
Alarm Monitoring	N/A	N/A	Yes	Yes	No
Lockdown	Credential-enabled only	Credential-enabled only	Yes	Yes	Yes
Anti-Passback	N/A	N/A	Yes	Yes	Yes
Standard Reports	Yes	Yes	Yes	Yes	Yes
Door Status Monitoring	N/A	N/A	Yes	Yes	Yes
Manual Overrides	N/A	N/A	Yes	Yes	Yes
First Person In Rule	N/A	No	Yes	Yes	Yes
Elevator Control	No	No	Yes	Yes	No
System Information					
System Software Architecture	PC-Based	PC-Based	Client/Server	Client/Server	Web-based
Multi-Panel Support	N/A	N/A	Yes	Yes	No
Automatic Back-Up	No	No	Yes	Yes	Yes
Import and Export Capabilities	Yes	Yes	Yes	Yes	Yes
Dealer Certification Required	No	No	Yes	Yes	No

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SBB
bright blue® *Controller*

Overview

bright blue® is a web-based access control system from Schlage. Its embedded intelligence design means it does not require special software installation or a dedicated PC. Any computer running a standard web browser can be used to access, monitor and manage your system. The system's user-friendly design means that anyone can use it, making access control a simple part of your busy life.

This system is web-based so you can access it like any other web page on the internet. **bright blue**® comes network-ready and easily connects to your network using an Ethernet port. After the controller is hooked up, you simply use any network-connected computer to access and manage your system. It's web-based design makes installation a breeze.

Everything about Schlage's **bright blue**® is easy - from installation and training to system management, support and maintenance. It is user-friendly and reliable. The system provides easy-to-use configuration wizards and help tips so that even novice computer users will be able to set up and navigate their access control system. The configuration wizards allow you to add personnel, set up doors, and assign personnel access to doors based on their time schedules.

Enhance your security system with **bright blue**® video integration. When used with bright blue, each card swipe can be linked to video, thereby allowing the user to perform investigations with accuracy.

Features and Benefits

- Support for up to 32 doors and 5000 cardholders
- Built-in web server
- Standardized reports
- System back-up
- Access anytime, anywhere, with a network connected computer
- Anti-passback function to eliminate unauthorized entry
- Manual overrides to temporarily unlock doors
- Native communication to Schlage's hardwired and wireless networked electronic locks, including the AD-Series
- Holiday and event scheduling
- Door status monitoring
- Remote access and administration
- Flashable firmware upgrades
- Video integration available
- User-selectable language: English, Spanish, Portuguese
- Includes enclosure, lock and tamper switch
- BAA compliant

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SIMPLE AND SECURE

All User ID's and passwords are protected with security encryption providing you with secure access to monitor, control and manage your system's personnel data, transactions, and activities. **bright blue**® provides you with three log-on access levels including User, Operator and Administrator. Each level provides a different set of access rights to the system. That way, system users will only be able to access functions that you want them to manage or view. The **bright blue**® controller is also built on a Linux operating system, which means that your system is very stable and secure from external threats.

SAVE MONEY WITH SCHLAGE

bright blue® is not only simple, but saves you money too! The web-based application eliminates the need for a dedicated PC and software as with conventional access control systems. Furthermore, when you utilize Schlage's hardwired and wireless electronic locks, including the AD-Series, it eliminates the need for a reader interface and other door hardware, resulting in hundreds of dollars in savings per door.

Specifications	
Supports up to 32 devices	
Database	8GB flash drive
Rating	NEMA 1 rated locking enclosure with tamper switch
Operating System	Linux
Microprocessor	32-bit, 200 MHz NET+ARM
Encryption	SSL
Web-browsers Supported	Internet Explorer v7.0 - 9.0 and FireFox v3.0 - 6.0
Ethernet	10/100 Base-T
Supports DHCP or Static IP addressing	
64MB flash memory and 64MB SRAM	
Supports magnetic stripe, proximity and smart card technologies	
Power Requirements	12VDC to 24 VDC
Power Consumption	250mA (excluding peripheral devices)
Operating Temperature	0°C to 30°C; 32°F to 85°F
Humidity	10% to 90% (non-condensing)
Board Dimensions	11.5″ H x 11.5″ W
Enclosure Dimensions	14″ H x 14″ W x 3.5″ D
Battery backup available with Schlage UL listed power supplies	

ORDERING INFORMATION

SBB - **bright blue**® Controller

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SBB-RI
bright blue® *Reader Interface*

Overview

The SBB-RI offers a cost effective, modular approach to access control system design. The SBB-RI is the bridge between the reader controller and the reader, and is supported by the Schlage **bright blue**® Reader Controller (SBB). The SBB-RI is compatible with several read head technologies.

Features and Benefits

- SBB-RI connects one reader via RS485 protocol to the SBB reader controller
- Compatible with proximity, smart card, biometrics, magnetic stripe, barcode and Wiegand read head technologies
- Two form C, single pole/double throw, mechanically latching 1A relays (pre-programmed for dedicated functionality)
- Four contact inputs
  - Door exit request
  - Door position switch
  - Push button override
  - Auxiliary input
- Metal enclosure with hinged and dual screw door
- On board connection for tamper switch
- Tamper switch, lock & key option available
- BAA complaint

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Specifications	
Dimensions	3-3/16" H x 3-3/16" W x 3/4" D
Enclosure	8.25" H x 7.5" W x 3.5" D
Power Requirements	12VDC to 24 VDC, can be powered from reader controller or locally
Power Consumption	300mA (with read head)
Ambient Temperature (without heater)	32° – 120°F or 0° – 49°C
Humidity	10% - 90% (non-condensing)
Maximum Distance to SBB	4,000 feet, RS485 data
Recommended Cable to Read Head	18 AWG/6 COND, stranded, shielded, twisted
Recommended Cable to the SBB Controller	18 AWG/4 COND, stranded, shielded, twisted
NEMA 1 rated enclosure with optional lock and tamper switch	

ORDERING INFORMATION

SBB-RI - **bright blue**® Reader Interface

OPTIONS

SLOCKRI - Enclosure Lock (comes with (2) keys, tamper switch and cables)

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SBB-NRI

bright blue® *Network Reader Interface*

Overview

The SBB-NRI is a cost-effective solution that can extend the reach of your **bright blue**® system. This IP-based reader interface is perfect for remote locations where wiring can be a challenge. The SBB-NRI connects to the SBB controller board via your network, allowing you to bring remotely located readers online with your **bright blue**® access control system.

The SBB-NRI is compatible with most card readers (any device with a Wiegand output), including the Schlage SXF Series Card Readers.

Features and Benefits

- SBB-NRI connects to a card reader via Wiegand protocol, and then over the network to the SBB reader controller
- 10 Base-T Ethernet connection
- Supports DHCP or Static IP addressing
- Compatible with proximity, magnetic stripe and smart card technologies
- Suitable for small to mid-sized organizations with remote locations and an available IP network
- Reduces wiring and labor costs
- SBB-NRIs and SBB-RIs can be combined on a **bright blue**® system
- Compatible with most card readers (any device with a Wiegand output)
- Two form C, single pole/double throw, mechanically latching 1A relays (pre-programmed for dedicated functionality)
- Four contact inputs
  - Door exit request
  - Door position switch
  - Push button override
  - Auxiliary input
- BAA compliant

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Specifications	
Standard Ethernet network connection	
Dimensions	3.187" H x 3.187" W x 1.75" D
Enclosure	7.5" H x 8.25" W x 3.5" D
Power Requirements	20VDC to 32VDC
Power Consumption	300mA (without read head)
Ambient Temperature (without heater)	32° – 120°F or 0° – 49°C
Humidity	85% +/- 5%
Recommended Cable to the Read Head	18 AWG/6 COND, stranded, shielded, twisted
NEMA 1 rated enclosure with optional lock and tamper switch	
Battery Backup	available with Schlage UL listed power supplies

ORDERING INFORMATION

SBB-NRI	**bright blue**® Network Reader Interface
SBB-NRIUL	**bright blue**® Network Reader Interface with UL approved Ethernet Data Suppressor
SLOCK	Enclosure Lock (includes (2) keys, tamper switch and cables)
PS902	2A @ 12/24 VDC-field selectable
900-BBK	Battery Backup Kit (includes two 7A/hr batteries)

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SPEBBLE
bright blue® *Badging*

Overview

The SPEBBLE Printer offers brilliant vibrant images printed on demand or in volume. The SPEBBLE supports single-sided edge-to-edge printing. Print high resolution texts, logos, pictures, signatures and barcodes in just a few seconds. Its compact and ergonomic design allows it to integrate on any reception desk or office environment.

Features and Benefits

- Full color edge to edge printing
- Integrated ribbon saver for monochrome printing
- 150 cards per hour in color and 1000 cards per hour in monochrome
- The printer allows for automatic or manual feed
- Provides single side printing
- Provides color dye sublimation and monochrome thermal transfer printing
- Software for designing and editing badges

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Specifications	
Resolution:	300dpi
Card Types	PVC, Composite PVC, ABS and special varnished plastic cards
Card Formats	ISO CR-80, ISO 7810 (3.375" x 2.125")
Card Thickness	.25mm (10mil) to 1mm (40mil)
Print Area	Edge-to-edge
Input Hopper	300 cards
Exit Hopper	150 cards
Interface	USB and Ethernet TCP-IP connections
RAM	16MB
Dimensions	7.55" H x 9.25" W x 15.59" L
Weight	13 lbs
Operating Temp.	59 to 86° F
Power source	AC power source AC110/230v 50/60Hz
Compatible with Windows™ XP, Vista and 7	

ORDERING INFORMATION

SPEBBLE - Standard Printer

OPTIONS

SPEBRIBBON - 250 print color ribbon

SPEBRIBBON-B - 500 print black only ribbon

SPEBCLEAN - Cleaning kit

NOTE: Badge printer is a standalone system.

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AD Software Compatibility Matrix

Offline Locks	AD-200			AD-250
Feature	**SMS Express**		**SMS S/P/E**	**SMS S/P/E**
System Capacity at Lock				
*Number of Users or Audits/Locks	2,000 users/audits 50 lock max.	1,000 users/audits 100 lock max.	5,000	Users: Unlimited Audits: 10,000
Holidays	16		32	32
1st Person In	Yes		Yes	Yes
Time Zones	8		16	16
Auto Unlocks	8		8	8
Reader				
Keypad Only	Yes		Yes	No
Magnetic Stripe Card	Yes		Yes	Yes
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card	Yes (aptiQ™ Smart Cards)		Yes	No
Card + PIN	3-6 digit PIN		3-6 digit PIN	3-8 digit PIN
Status Monitor				
Mechanical Key Override (ATK)	Yes		Yes	Yes
Battery Status	Yes		Yes	Yes
Lock Functions				
Classroom/Storeroom	Yes		Yes	Yes
Office/Toggle	Yes		Yes	Yes
Privacy	Yes		Yes	Yes
Apartment	Yes		Yes	Yes
Credential Attributes				
Normal Credential	Yes		Yes	Yes
Toggle Credential	Yes		Yes	Yes
Pass Thru Credential	Yes		Yes	Yes
Visitor/One Time Use Credential	Yes		Yes	No
Freeze Credential	Yes		Yes	Yes
Lock Down Credential	No		No	No

NOTE: Shaded boxes indicate features that are only available in the upgraded versions of software: SMS Express v4.0, bright blue® v2.1 and SMS v5.3.5 or higher.
Previous versions (SMS Express 3.5.7 and older) support 1000 Users/Audits and 100 locks, and do not include AD-Series and CO-Series software labels.

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Networked Hardwired and Wireless Locks	AD-300 & AD-400	
Feature	**bright blue®**	**SMS P/E**
System Capacity at Lock		
Number of User	5,000	Unlimited
Holidays	100	Unlimited
1st Person In	Yes	Yes
Time Zones	100	Unlimited
** Degraded Cache Mode	Yes	Yes
Reader		
Keypad Only	Yes	Yes
Magnetic Stripe Card	Yes	Yes
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card	Yes	Yes
Card + PIN	Up to 4 digit PIN	Up to 4 digit PIN
Status Monitor		
Request to Exit	Yes	Yes
Door Position Switch	Yes	Yes
Interior Cover Tamper Guard	Yes	Yes
Lock/Unlock Status Clutch Position	Yes	Yes
Mechanical Key Override (ATK)	Yes	Yes
Request to Enter	Yes (AD-400 only)	Yes (AD-400 only)
Deadbolt Position	Yes	Yes
Battery Status	Yes	Yes
Communication Status	Yes	Yes
*** Wake-up On Radio Lockdown	Yes (AD-400 only)	Yes AD-400 only)
Lock Functions		
Classroom/Storeroom	Yes	Yes
Office/Toggle	Yes, w/RS485 connection to host	No
Privacy	No	No
Apartment	No	No
Credential Attributes		
Normal Credential	Yes	Yes
Toggle Credential	Yes	No
Pass Thru Credential	Yes	No
Visitor/One Time Use Credential	No	No
Freeze Credential	No	No
Lock Down Credential	Yes	No

NOTE: Shaded boxes indicate features that are only available in the upgraded versions of software: SMS Express v4.0, bright blue® v2.1 and SMS v5.3.5 or higher

* *Larger systems should consider SMS Select for better database manageability.*

** *If enabled, grants access to last 113 unique user IDs, option to expand to 1,000. Or, use facility/site codes instead of user IDs. No events are captured in audit trail when operating in cache mode.*

*** *Wake-up on Radio over PIM400-485 on up to 16 doors requires implementation of specific RSI commands. Also available on PIM400-TD2.*

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SMS Software Levels

Overview

The Security Management System from Schlage delivers a powerful, single source solution for integrating a facility's access-control technologies, digital video, and alarm monitoring systems. Four software levels are provided to meet your current security requirements and can expand to meet your growing business needs, while satisfying your budget constraints.

Security Management System Express: Includes One client license. Supports Schlage AD-200, CO-200, CM, KC-2, CT-1000 and BE367 offline locks.

Security Management System Select: One or Five client packages are available. Supports Schlage offline locks, including AD-Series, CO-Series, CM and CL.

Security Management System Premier: One, Five, or Ten client packages are available. Supports Schlage online and offline locks, including AD-Series, CO-Series, CM, CL, VIP, Wireless and Wiegand devices.

Security Management System Enterprise: One, Five, Ten or Twenty-Five client packages are available. Single client expansions after 25 are available. Supports Schlage online and offline locks, including AD-Series, CO-Series, CM, CL, VIP, Wireless and Wiegand devices.

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Security Management System Software
Features & Benefits

ENTERPRISE	PREMIER	SELECT	EXPRESS	
■	■	■	■	AD-200 & CO-200 Offline Lock Management
■	■	■	■	Reports
■	■	■	■	Transaction Monitoring (sync required for offline devices)
■	■	■		AD-250 & CO-250 Offline Lock Management
■	■	■		Multiple Clients
■	■	■		Badging
■	■	■		System Security
■	■	■		History Archive
■	■	■		Automatic Overrides
■	■	■		5-Client Expansion (Optional)
■	■	■		Video Retrieval Tied To Audit Events
■	■			Portrait Monitoring
■	■			Audit Trail
■	■			Alarm Monitoring
■	■			Manual Overrides
■	■			10 - Client Expansion (Optional)
■	■			CCTV/Universal Interface
■	■			Schlage Enterprise DVR (Optional)
	■			Guest Pass (Optional)
■				Guest Pass (Single Seat - Standard)
■				Report Scheduling
■				Two-Man Rule
■				Alarm Graphic
■				Redundant Recovery (Optional)
■				25 Client Expansion (Optional)
■				Single Client Expansion After 25 (Optional)

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SMS Enterprise Software

Overview

The Schlage Security Management System delivers a powerful, single source solution for integrating a facility's access-control technologies, digital video, and alarm monitoring systems. Four software levels are provided to meet your current security requirements and can expand to meet your growing business needs, while satisfying your budget constraints.

The Enterprise system is perfect for large, multi-site or global organizations. It supports an unlimited number of cardholders and readers and gives you unparalleled flexibility by supporting both online and offline devices. The Enterprise system also enables an organization to manage facility administration from any location and provides real-time monitoring and audit trails.

Features and Benefits

Access Control Features

- Anti-passback
- Two-man rule and occupancy rule
- First card in capability
- Temporary usage badges
- Portrait monitoring
- Unlimited reports
- Report scheduling
- ODBC Compliant
- Online and offline lock integration
- Manual and automatic overrides
- Full-featured Guest Pass system
- Design and print badges
- Programmable flash for downloads and firmware updates
- Wireless reader devices
- Unlimited holidays
- Unlimited cardholders and readers
- Unlimited number of concurrent users available
- Unlimited time zones

(continued)

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Access Control Features
(continued)

- Universal triggers
- Schlage AD-Series and CO-Series lock support
- Video retrieval tied to access control events (optional)
- BAA compliant

Alarm Management Features

- Color coded Alarms
- User-definable individual alarm instructions
- Pre-defined responses
- Send alarms to operator or email
- Keypad duress alarm
- Alarm annunciation
- Alarm graphics

Video Features

(See SEVMS datasheets for specifications)

- Full integration with Schlage DVR/NVR
- High resolution video motion detection with masking capabilities
- Search on video motion detection
- Uninterrupted recording during playback and image archiving
- Remote viewing
- Send video clips via email
- Customizable pre and post-recording upon an event
- Proprietary viewer software for viewing encrypted files
- Scalable
- 100% date/time synchronization
- Full PTZ functionality
- Virtual camera grouping across servers
- Advanced security permissions
- Database backup and recovery
- Audio per camera available
- Accepts analog and/or IP addressable cameras

Usability Features

- Configuration wizards
- Easy-to-navigate
- Customizable views per operator
- Unlimited User-defined fields

Operating System Compatibility

- Microsoft Windows XP Professional SP1A, SP2 or SP3
- Microsoft Windows 2003 Server SP1 and SP2 (32bit or 64bit)
- Microsoft Windows 2008 Server SP1 and SP2 (32bit or 64bit)
- Microsoft Windows Vista SP1 and SP2 (all versions except Home Edition)
- Microsoft Windows 7 (all versions except Home Edition)
- VM ESX 3.5 or up to VSphere (ESX 4.0) - All service pack levels.
  - An 'Anywhere USB' device is required if running a multi-user system in a VM ware environment

ORDERING INFORMATION

SOFTWARE ONLY

E-SENT-SFT-1 - Enterprise software with 1 client license

E-SENT-SFT-5 - Enterprise software with 5 client licenses

E-SENT-SFT-10NSQL - Enterprise software with 10 client licenses (Microsoft SQL not included)

E-SENT-SFT-25NSQL - Enterprise software with 25 client licenses (Microsoft SQL not included)

E-SENT-SFT-EXPNSQL - 1 client expansion license; for greater than 25 licenses (Microsoft SQL not included)

SOFTWARE & SERVER

E-SENT-SVR-1 - Includes server, monitor, keyboard, mouse and software with 1 client license

E-SENT-SVR-5 - Includes server, keyboard, mouse and software with 5 client licenses (monitor sold separately)

* For specific requirements for larger systems, please contact Technical Support

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SMS Premier Software

Overview

The Schlage Security Management System delivers a powerful, single source solution for integrating a facility's access-control technologies, digital video, and alarm monitoring systems.

Four software levels are provided to meet your current security requirements and can expand to meet your growing business needs, while satisfying your budget constraints.

The Premier system is perfect for medium to large organizations and supports both online and offline devices. It provides unparalleled flexibility by supporting an unlimited number of cardholders, readers and alarm points. The Premier system also enables an organization to manage facility administration from any location and provides real-time monitoring and audit trails.

Features and Benefits

Access Control Features

- Anti-passback
- First card in capability
- Temporary usage badges
- Portrait monitoring
- Unlimited reports
- ODBC Compliant
- Online and offline lock integration
- Manual and automatic overrides
- Full-featured Guest Pass system (optional)
- Design and print badges
- Programmable flash for downloads and firmware updates
- Wireless reader devices
- Unlimited holidays
- Unlimited cardholders and readers
- Unlimited time zones
- Universal triggers
- Schlage AD-Series and CO-Series lock support
- Video retrieval tied to access control events (optional)
- BAA compliant

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Alarm Management Features

- Color coded Alarms
- User-definable individual alarm instructions
- Pre-defined responses
- Send alarms to operator or email
- Keypad duress alarm
- Alarm annunciation

Video Features
(See SEVMS datasheets for specifications)

- Full integration with Schlage DVR/NVR
- High resolution video motion detection with masking capabilities
- Search on video motion detection
- Uninterrupted recording during playback and image archiving
- Remote viewing
- Send video clips via email
- Customizable pre and post-recording upon an event
- Proprietary viewer software for viewing encrypted files
- Scalable
- 100% date/time synchronization
- Full PTZ functionality
- Virtual camera grouping across servers
- Advanced security permissions
- Database backup and recovery
- Audio per camera available
- Accepts analog and/or IP addressable cameras

Usability Features

- Configuration wizards
- Easy-to-navigate
- Customizable views per operator
- Unlimited User-defined fields

Operating System Compatibility

- Microsoft Windows XP Professional SP1A, SP2 or SP3
- Microsoft Windows 2003 Server SP1 and SP2 (32bit or 64bit)
- Microsoft Windows 2008 Server SP1 and SP2 (32bit or 64bit)
- Microsoft Windows Vista SP1 and SP2 (all versions except Home Edition)
- Microsoft Windows 7 (all versions except Home Edition)
- VM ESX 3.5 or up to VSphere (ESX 4.0) - All service pack levels.
  - An 'Anywhere USB' device is required if running a multi-user system in a VM ware environment

ORDERING INFORMATION

SOFTWARE ONLY

SPRE-SFT-1 - Premier software with 1 client license

SPRE-SFT-5 - Premier software with 5 client licenses

SPRE-SFT-10NSQL - Premier software with 10 client licenses (Microsoft SQL not included)

SOFTWARE & SERVER

SPRE-SVR-1 - Includes server, monitor, keyboard, mouse and software with 1 client license

SPRE-SVR-5 - Includes server, keyboard, mouse and software with 5 client licenses. Monitor sold separately.

* For specific requirements for larger systems, please contact Technical Support

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SMS Select Software

Overview

The Schlage Security Management System delivers a powerful, single source solution for integrating a facility's access-control technologies, digital video, and alarm monitoring systems. Four software levels are provided to meet your current security requirements and can expand to meet your growing business needs, while satisfying your budget constraints.

The Select system is ideal for small to medium sized organizations utilizing offline locks. The Select system also enables an organization to design and create badges as well as associate video with offline locks.

Features and Benefits

Access Control Features

- First card in capability
- Temporary usage badges
- Unlimited reports
- ODBC and MDAC Compliant
- Schlage AD-Series and CO-Series offline lock support
- Design and print badges
- Reports
- Video retrieval tied to access control events (optional)
- BAA compliant

Video Features

- Full integration with Schlage DVR/NVR
- High resolution video motion detection with masking capabilities
- Search on video motion detection
- Uninterrupted recording during playback and image archiving
- Remote viewing
- Send video clips via email
- Customizable pre and post-recording upon an event

(continued)

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Video Features

(continued)

- Proprietary viewer software for viewing encrypted files
- Scalable
- 100% date/time synchronization
- Full PTZ functionality
- Virtual camera grouping across servers
- Advanced security permissions
- Database backup and recovery
- Audio per camera available
- Web-based option
- Accepts analog and/or IP addressable cameras

Usability Features

- Configuration wizards
- Easy-to-navigate
- Customizable views per operator
- Unlimited user-defined fields

Operating System Compatibility

- Microsoft Windows XP Professional SP1A, SP2 or SP3
- Microsoft Windows 2003 Server SP1 and SP2 (32bit or 64bit)
- Microsoft Windows 2008 Server SP1 and SP2 (32bit or 64bit)
- Microsoft Windows Vista SP1 and SP2 (all versions except Home Edition)
- Microsoft Windows 7 (all versions except Home Edition)
- VM ESX 3.5 or up to VSphere (ESX 4.0) - All service pack levels.
  - An 'Anywhere USB' device is required if running a multi-user system in a VM ware environment

ORDERING INFORMATION

SOFTWARE ONLY

SSEL-SFT-1 - Select software with 1 license

SSEL-SFT-5 - Select software with 5 client licenses

SOFTWARE & SERVER

SSEL-SVR-1 - Includes server, monitor, keyboard, mouse and software with 1 license

SSEL-SVR-5 - Includes server, keyboard, mouse and software with 5 client licenses (monitor sold separately)

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SMS Express Software

Overview

The Schlage Security Management System delivers a powerful, single source solution for integrating a facility's access-control technologies, digital video, and alarm monitoring systems.

Four software levels are provided to meet your current security requirements and can expand to meet your growing business needs, while satisfying your budget constraints.

The Express level software is designed for facilities with basic access control needs. It supports Schlage offline locks and is recommended for smaller systems. New users or access points can be entered into the system in seconds. Reporting capability is available to show audit trails retrieved, access privileges granted, and time functions established by either user or door.

Features and Benefits

- Effective, simple means to manage access control within your facility
- Manages PIN Codes, iButtons, Magnetic Stripe Cards, Proximity and Smart Card Credentials
- Normal (momentary) use access
- Toggle (maintained) use access
- One-time access
- Pass-through access
- Supports credential activation and deactivation
- Support Card and PIN for higher security
- Auto unlock schedules- allows weekly repeating for automatic locking and unlocking of doors (Up to 16 defined per system; up to 8 assigned per lock)
- Supports magnetic stripe, proximity and smart cards
- Supported devices include CO-200, AD-200, CM, KC-2, CT-1000, CT5000 and BE367 (Programmable Electronic Deadbolt)
- Supports Windows 7 (32 and 64 bit) Professional and higher
- User times zones- limits the hours and days a user can access assigned points (Up to 8)

(continued)

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Features and Benefits

(continued)

- Holidays- suspends normal operations for user defined periods per door during non-normal days (Up to 16)
- Import utility to easily upgrade software level
- Users/Audits and Lock support*
  - 2,000 Users/Audits and 50 Locks/Devices
  - 1,000 Users/Audits and 100 Locks/Devices
- Supports 12 button keypad with up to 6 digit PIN codes
- Duplicate PIN notification feature
- BAA compliant

Accessories

- HHD KIT - Handheld device to manage Schlage offline locks (USB Cable included for managing AD-Series and CO-Series locks)
- HHD-USB - Additional or replacement cable used to connect HHD to AD-Series and CO-Series products
- HH-Serial - Serial Cable used in conjunction with HHD KIT and CIP for managing legacy Schlage offline locks
- P512112 - Computer interface module used in conjunction with HH-Serial Cable for managing legacy Schlage offline locks
- P101203 - Computer Interface module with ibutton reader used in conjunction with HH-Serial Cable for managing legacy Schlage offline locks
- P394548 - Female/female serial cable. Used to connect computer interface module to laptop/pc
- SDB9USBCBL - six inch cable adapter allows a serial port device to be used with a USB port device (for use with PS12112)
- CRP2 - Proximity Credential Enrollment Reader. Used to read proximity data for enrollment into Schlage Security Management software database; USB connectivity; compatible with SMS Express 4.0 and higher
- CRM2 - Magnetic Stripe Credential Enrollment Reader. Used to read magnetic stripe data for enrollment into Schlage Security Management software database; USB connectivity; compatible with SMS Express 4.0 and higher

** Larger systems should consider SMS Select for improved database managability.*

Specifications	
Hardware	Intel Pentium II processor (Pentium III or IV recommended), CD-Rom, Mouse or compatible pointing device, VGA or Super VGA Monitor, Keyboard
Hard Disk Space	1 GB for software; will require additional space for stored data
Memory	256 MB RAM minimum or the memory required for the operating system, whichever is greater
Operating System	Microsoft Windows XP and XP Professional SP1/SP2, Windows Vista 32-bit (except Home or Starter Edition), Windows 7 32-bit & 64-bit Professional and higher
Reports with the built-in viewer Internet Explorer 6 or higher must be installed.	
Required for programming with Security Management System software	For offline locking system programming using a Schlage approved HHD device the following is required: • Available USB port on the PC • Approved HHD device with installed communications software and interface cables from Schlage
	For offline legacy locking system programming done directly from the PC, the following is required: • Available USB port on the PC • Programming interface cables

ORDERING INFORMATION

SXPR-SFT-1 - SMS Express software only

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AD Software Compatibility Matrix

Offline Locks	AD-200			AD-250
Feature	**SMS Express**		**SMS S/P/E**	**SMS S/P/E**
System Capacity at Lock				
*Number of Users or Audits/Locks	2,000 users/audits 50 lock max.	1,000 users/audits 100 lock max.	5,000	Users: Unlimited Audits: 10,000
Holidays	16		32	32
1st Person In	Yes		Yes	Yes
Time Zones	8		16	16
Auto Unlocks	8		8	8
Reader				
Keypad Only	Yes		Yes	No
Magnetic Stripe Card	Yes		Yes	Yes
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card	Yes (aptiQ™ Smart Cards)		Yes	No
Card + PIN	3-6 digit PIN		3-6 digit PIN	3-8 digit PIN
Status Monitor				
Mechanical Key Override (ATK)	Yes		Yes	Yes
Battery Status	Yes		Yes	Yes
Lock Functions				
Classroom/Storeroom	Yes		Yes	Yes
Office/Toggle	Yes		Yes	Yes
Privacy	Yes		Yes	Yes
Apartment	Yes		Yes	Yes
Credential Attributes				
Normal Credential	Yes		Yes	Yes
Toggle Credential	Yes		Yes	Yes
Pass Thru Credential	Yes		Yes	Yes
Visitor/One Time Use Credential	Yes		Yes	No
Freeze Credential	Yes		Yes	Yes
Lock Down Credential	No		No	No

NOTE: Shaded boxes indicate features that are only available in the upgraded versions of software: SMS Express v4.0, bright blue® v2.1 and SMS v5.3.5 or higher.
Previous versions (SMS Express 3.5.7 and older) support 1000 Users/Audits and 100 locks, and do not include AD-Series and CO-Series software labels.

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Networked Hardwired and Wireless Locks	AD-300 & AD-400	
Feature	**bright blue®**	**SMS P/E**
System Capacity at Lock		
Number of User	5,000	Unlimited
Holidays	100	Unlimited
1st Person In	Yes	Yes
Time Zones	100	Unlimited
** Degraded Cache Mode	Yes	Yes
Reader		
Keypad Only	Yes	Yes
Magnetic Stripe Card	Yes	Yes
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card	Yes	Yes
Card + PIN	Up to 4 digit PIN	Up to 4 digit PIN
Status Monitor		
Request to Exit	Yes	Yes
Door Position Switch	Yes	Yes
Interior Cover Tamper Guard	Yes	Yes
Lock/Unlock Status Clutch Position	Yes	Yes
Mechanical Key Override (ATK)	Yes	Yes
Request to Enter	Yes (AD-400 only)	Yes (AD-400 only)
Deadbolt Position	Yes	Yes
Battery Status	Yes	Yes
Communication Status	Yes	Yes
*** Wake-up On Radio Lockdown	Yes (AD-400 only)	Yes AD-400 only)
Lock Functions		
Classroom/Storeroom	Yes	Yes
Office/Toggle	Yes, w/RS485 connection to host	No
Privacy	No	No
Apartment	No	No
Credential Attributes		
Normal Credential	Yes	Yes
Toggle Credential	Yes	No
Pass Thru Credential	Yes	No
Visitor/One Time Use Credential	No	No
Freeze Credential	No	No
Lock Down Credential	Yes	No

NOTE: Shaded boxes indicate features that are only available in the upgraded versions of software: SMS Express v4.0, bright blue® v2.1 and SMS v5.3.5 or higher

* *Larger systems should consider SMS Select for better database manageability.*

** *If enabled, grants access to last 113 unique user IDs, option to expand to 1,000. Or, use facility/site codes instead of user IDs. No events are captured in audit trail when operating in cache mode.*

*** *Wake-up on Radio over PIM400-485 on up to 16 doors requires implementation of specific RSI commands. Also available on PIM400-TD2.*

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SCHLAGE

CO Software Capability Matrix

Offline Locks	CO-200		CO-250
Feature	**SMS Express**	**SMS S/P/E**	**SMS S/P/E**
System Capacity at Lock			
* Number of Users or Audits/Locks	2,000 Users/Audits 50 Lock max. | 1,000 Users/Audits 100 Lock max.	2,000	Users: Unlimited Audits: 4,000
Holidays	16	32	32
1st Person In	Yes	Yes	Yes
Time Zones	8	16	16
Auto Unlocks	8	8	8
Reader			
Keypad Only	Yes	Yes	No
Magnetic Stripe Card	Yes	Yes	Yes
125 kHz Prox Card	Yes	Yes	No
Status Monitors			
Mechanical Key Override (ATK)	Yes	Yes	Yes
Battery Status	Yes	Yes	Yes
Lock Functions			
Classroom/Storeroom	Yes	Yes	Yes
Office/Toggle	Yes	Yes	Yes
Privacy	Yes	Yes	Yes
Credential Attributes			
Normal Credential	Yes	Yes	Yes
Toggle Credential	Yes	Yes	Yes
Pass Thru Credential	Yes	Yes	Yes
Visitor/One Time Use Credential	Yes	Yes	No
Freeze Credential	Yes	Yes	Yes
Lock Down Credential	No	No	No

NOTE: Shaded boxes indicate features that are only available in the upgraded versions of software: SMS Express v4.0 and SMS v5.3.5 or higher.
Previous versions (SMS Express 3.5.7 and older) support 1000 Users/Audits and 100 locks, and do not include AD-Series and CO-Series software labels.

* Larger systems should consider SMS Select for better database manageability.

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SSRC
Smart Reader Controller

Overview

The Schlage Smart Reader Controller (SSRC) is an intelligent device with a modular approach. The SSRC is an independently programmable device that effectively combines the capabilities of a controller and reader interface into a single board. It communicates with the Security Management System software via TCP/IP protocol and can be connected to a variety of different read head technologies and electronic locking devices. The communication architecture is capable of being fully networked thereby saving the customer wiring and expensive installation labor costs. Includes enclosure with a tamper switch, lock and key.

Features and Benefits

- Software selectable options allow support for:
  - A single card reader, or
  - Up to (8) AD-300 Hardwired Locks, or
  - One PIM400-485-SMS for support of up to (16) AD-400 Wireless Locks
- Linux operating system
- 64Mb flash memory & 64Mb RAM
- Clock/data, Wiegand or serial (RS232 or RS485; jumper selectable)
- Supports proximity, smart card, magnetic stripe, biometrics, bar code and Wiegand technologies
- Communicates via network protocol 10 Base-T Ethernet
- Connection for on-board unsupervised tamper switch
- Includes four supervised or unsupervised input contacts for devices such as exit request (REX), door position switch
  (DOD), etc.
- Two Form 'C' single pole/double throw, mechanically latching, 1 A relays
- BAA compliant

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Specifications	
Dimensions:	3-13/16″ H x 3-13/16″ W x 3/4″ D
Enclosure:	8-1/4″ H x 7-1/2″ W x 3-1/2″ D
Power requirements:	20 - 32VDC; powered locally
Power consumption:	100mA (without read heads)
Ambient temperature:	0° to 49° C or 32° to 120° F
Humidity:	10% to 90% (non-condensing)
Recommended cable:	Network protocol 10 Base-T Ethernet
Compatible with Schlage Security Management System software version 5.3.1 and higher. Programming templates available in v5.3.5 and higher.	
Requires a UL 294 power limited power supply	
UL 294 Approved with UL approved ethernet data suppressor	
Battery backup available with Schlage UL listed power supplies	

ORDERING INFORMATION

SSRC - Smart Reader Controller

Note: SSRC can be ordered without enclosure. Use (NB) to specify no box.

OPTIONS

PS902 - 2A @ 12/24 VDC-field selectable

900-BBK - Battery Backup Kit (includes two 7A/hr batteries)

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SRCNX-R
Reader Controller

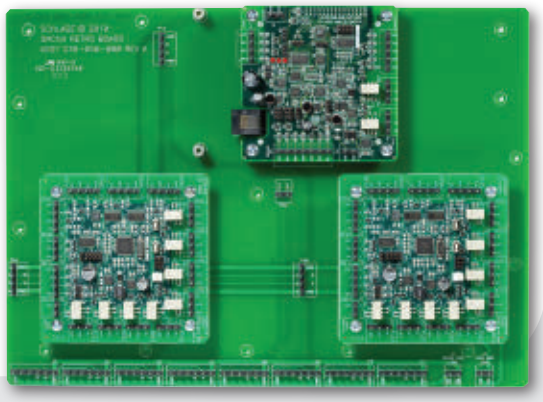

Photo shown with all options

Overview

The Reader Controller Board (SRCNX-R) is a newly designed controller with updated technology that incorporates additional memory and input / output capabilities onto a single back board for easy installation. The back board includes an SSRC Smart Reader Controller and expansion capabilities for two optional SIONX-8 input / output boards. Compatible with Schlage Security Management System software, the SRCNX-R supports up to (16) devices including Wiegand, AD-300 Series hardwired locks and AD-400 Series wireless locks. Mix and match capabilities are supported within certain guidelines. Similar devices only per channel. The SRCNX-R also serves as an easy replacement for an existing SRCNX if necessary. Mounting holes and the reader channel connectors are identical to the original SRCNX reader controller for simplified replacement. Includes enclosure with a tamper switch, lock and key.

Features and Benefits

- On board 10 Base-T Ethernet connection
- Two RS485 channels of 8 multi-dropped terminal strips
- On board tamper switch connector
- Linux operating system
- 64 MB flash memory and 64 MB RAM
- Supports proximity, smart card, magnetic stripe, biometrics, barcode and Wiegand technologies
- BAA compliant

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Specifications	
Dimensions:	9-3/8″ H x 12-15/16″ W x 1-1/2″ D
Power Requirements:	300mA @ 20VDC-32VDC (SSRC only)
Power Consumption:	100mA (SSRC Main Controller only)
Ambient temperature:	0° to 70° C or –40° to 185° F
Humidity:	10% to 90% (non-condensing)
Recommended data cable:	18 AWG/2 COND, stranded, shielded, twisted (up to 4000′) to RS-485 channel devices
Recommended power cable:	18 AWG/2 COND, stranded, shielded, twisted (up to 500′); devices beyond 500′ should be powered locally
Compatible with Schlage Security Management System software version 5.3.1 and higher. Programming templates available in v5.3.5 and higher.	
Battery backup available with Schlage UL listed power supplies	

ORDERING INFORMATION

SRCNX-R - Reader Controller Board – Includes one SSRC Reader Controller mounted on a back board. Includes enclosure.

Note: SRCNX-R can be ordered without enclosure. Use (NB) to specify no box.

OPTIONS

PS902 - 2A @ 12/24 VDC-field selectable

PS904 - 4A @ 12/24 VDC-field selectable

PS906 - 6A @ 12/24 VDC-field selectable

900-BBK - Battery Backup Kit (includes two 7A/hr batteries)

SIONX-8 - Input / Output Expansion Board
Note: Use (NB) to specify no box

SRINX - Single Reader Interface
Note: Use (NB) to specify no box

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SRINX
Reader Interface

Overview

The SRINX Reader Interface offers a cost effective, modular approach to access control system design in all environments. Schlage Reader Interfaces can be used in smaller systems as well as large installations with thousands of readers. The SRINX communicates directly with the Schlage Reader Controller. Schlage SRINX Reader Interfaces are capable of running in degraded mode, allowing for local decision making, if communication fails between the Reader Interface and the Reader Controller. Includes enclosure.

Features and Benefits

- SRINX connects one read head to a Schlage reader controller via RS-485 protocol
- Supports proximity, smart card, magnetic stripe, biometrics, bar code and Wiegand technologies
- Two Form "C", single pole/double throw, mechanically latching 1 A relay outputs
- Four supervised or unsupervised contact inputs
- Metal enclosure with hinged and dual screw door
- On board connection for tamper switch
- Tamper switch, lock and key option available
- BAA compliant

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Specifications	
Dimensions:	3-13/16″ H x 3-13/16″ W x 3/4″ D
Enclosure:	8-1/4″ H x 7-1/2″ W x 3-1/2″ D
Power requirements:	14 - 24VDC, can be powered from reader controller or locally
Power consumption:	120mA (without read heads)
Ambient temperature:	0° to 49° C or 32° to 120° F
Humidity:	10% to 90% (non-condensing)
Maximum RS485 (data) distance between reader controller to SRINX is 4,000 feet with local power	
RS-232 communication also available	
Recommended cable:	18 AWG/2 COND, Stranded, Shielded, Twisted (RS485data only)
UL 294 Approved	

ORDERING INFORMATION

SRINX - Single Reader Interface

Note: SRINX can be ordered without enclosure. Use (NB) to specify no box.

OPTIONS

SLOCK - Enclosure Lock (comes with (2) keys, tamper switch and cables)

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SIONX-8

Input Output Board

Overview

The Schlage Input / Output Expansion Board (SIONX-8) provides 8 contact inputs and 8 SP/DT relay outputs. The SIONX-8 communicates directly to any of the SRCNX or SSRC reader controller boards. The SIONX-8 supports universal triggers, which integrates any input associated with any output response or a multitude of output responses. The SIONX-8 integrates alarm control and/or elevator floor control. Includes enclosure.

Features

- SIONX-8 connects to the reader controller via RS-485 protocol
- 16Kb flash memory and 1Kb RAM
- Two serial ports (RS232 or RS485)
- (8) supervised or unsupervised contact inputs
- Contacts can be defined as alarms, door status, egress, or other environmental conditions
- (8) Form "C" single pole/double throw, mechanically latching
  1 A relay outputs
- Metal enclosure with hinged and dual screw door
- Connection for on-board tamper switch
- Tamper switch, lock and key option available
- BAA compliant

Elevator Control

- One or more SIONX-8 boards can be used to provide individual elevator floor control. Each SIONX-8 is capable of up to 8 floors (1 contact per floor).

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Specifications	
Dimensions:	4-3/16″ H x 4-3/16″ W x 1/2″ D
Enclosure:	8-1/4″ H x 7-1/2″ W x 3-1/2″ D
Power requirements:	14 - 24VDC; powered locally
Ambient temperature:	0° to 49°C or 32° to 120° F
Maximum RS485 (data) distance between reader controller to SIONX-8 is 4,000 feet with local power	
Recommended cable:	18AWG/2 COND Stranded, Shielded, Twisted (RS485 data only)
UL 294 Approved	

ORDERING INFORMATION

SIONX-8 Input / Output Expansion Board

SLOCKRI Enclosure Lock (comes with (2) keys, tamper switch and cables)

Note: SIONX-8 can be ordered without enclosure. Use (NB) to specify no box

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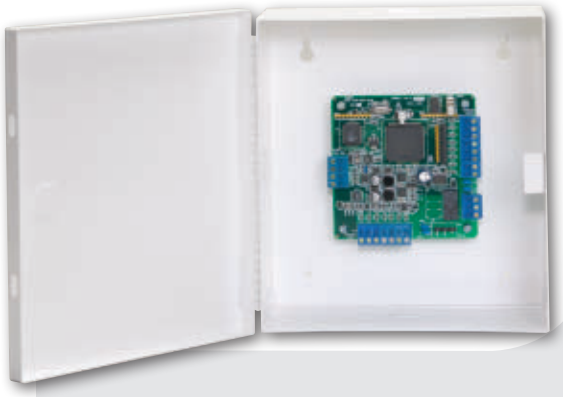
SURI
Universal Reader Interface



Overview

The SURI is designed for sharing one reader on up to three different access control systems. The SURI can work with multiple reader technologies (i.e. proximity, magnetic stripe, biometric, keypad, etc). The SURI is perfect for multi-tenant buildings with multiple access control systems utilizing turnstiles, elevators, etc.

Features and Benefits

- Routes transactions directly to the corresponding access control system only
- Eliminates unnecessary transactions in multiple access control systems from a shared reader
- Works on any Wiegand format reader (i.e. proximity, magnetic stripe, keypad, biometric, etc).
- Ideal for building owners or property managers who have tenants with different access control systems who share readers in common areas.
- BAA compliant

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Specifications	
Dimensions	3-3/16" H x 3-3/16" W x 1-3/4" D
Enclosure	8-1/4" H x 7-1/2" W x 3-1/2" D
Power Requirements	12VAC/12VDC can be powered from SRCNX
Power Consumption	100mA (without read head) @ 200 mA fully configured
Ambient Temperature	0° to 70° C or –40° to 185° F
Humidity	10% to 90% (non-condensing)
Maximum Distance	500 feet wiegand data communication 18AWG 4 cond
Wiegand Output Signal	Pulse width: 50 us./ Time between two pulses: 2.2ms
Led Control	All led control lines from SRINXs should connect to one of seven contact points on SRINX board. If one of the seven contacts is logically low, P1 pin 5,6,7 which is led control output pin, will be low to set led on reader head to green. If all seven contacts are logically high, P1 pin 5,6,7 is high and led on the reader head is red.
Relay Control	Relay 1 on SURI will be energized whenever led on reader head is green. User can use the relay to control a door lock.
Reader Head	This firmware is designed for a reader head that emits Wiegand signal with one wire led control line. Led is red when led control is logically set high and led is green when led control is logically set to low, such as HID prox reader, sensor swipe reader, etc.

ORDERING INFORMATION

SURI - Universal reader interface

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SRCNX-ENCL

Custom Access Control Enclosure

Overview

The Custom Enclosures are pre-wired, pre-tested enclosures that allow for consistent installations. They make service and maintenance easy and enable service technicians to be immediately familiar with the equipment when at a customer's site. Every custom enclosure has clearly marked components, snap on connectors, and clearly labeled landing connectors for field wiring.

Features and Benefits

- Pre-wired and pre-tested enclosures
- Plug and use design powers all lock mechanisms, read-heads, PIR motion detectors, local annunciators and on-board components
- Design allows for easy replacement of all components
- Significantly reduces manpower requirements during installation
- Decreases disruption in a client's daily business
- Clearly marked landing strips allow for consistent installations
- Enclosures are provided with Fire tie relays
- AC Fail LED indicator located on the outside of the enclosure
- Each door has tamper protection
- BAA compliant

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Additional Product Information

SRCNX-ENCL

Custom Enclosure Includes: NEMA 1 rated enclosure 31″ x 31″ x 8″ with removable sub-panel, fuses and wiring harness; (1) 24 VDC 4A power supply for the SRCNX-R Reader Controller with (2) 12 VDC 12A hour gel cell batteries, (2) 24 VDC 10A power supplies for the Reader Interfaces, locks and peripheral devices with (4) 12 VDC 12A hour gel cell batteries. Clearly labeled terminal blocks for landing all field wiring are included. SRCNX Enclosure Houses: (1) SRCNX-R Reader Controller; up to (8) SRINX Reader Interfaces - factory installed.

Note: This unit can be used in conjunction with the SRINX enclosure (SRINX-ENCL) to expand reader capacity from 8 to 16 SRINX Reader Interfaces (sold separately).

SRINX-ENCL

Custom Enclosure Includes: NEMA 1 rated enclosure 31″ x 31″ x 8″ with removable sub-panel, fuses and wiring harness; (1) 24 VDC 10A power supply for lock power and peripheral devices with (2) 12 VDC 12A hour gel cell batteries. Clearly labeled terminal blocks for landing all field wiring are included. SRINX Enclosure Houses: up to (8) SRINX reader Interfaces in any combination - factory installed.

Note: This unit is used in conjunction with the SRCNX-R enclosure (SRCNX-ENCL) to expand reader capacity from 8 to 16 SRINX Reader Interfaces.

Specifications	
Enclosure dimensions	31" x 31" x 8"
Operating Temperature	32 to 120F
Power Input	120VAC/60Hz, 6 amp
Power Output	24VAC - Output power is power limited
External Power Requirements	One 115vac 15 amp dedicated breaker line
Cooling fans	2 per enclosure
Switch Block	Fail-safe/fail-secure
Battery Back-up	Automatic switch over to battery back-up with AC Fail LED indicator
Diode Block	Diode block prevents electrical back feed

ORDERING INFORMATION

SRCNX-ENCL - Pre-wired and pre-tested Custom Enclosure

SRINX-ENCL - Pre-wired and pre-tested Custom Enclosure Expansion

OPTIONS

SRCNX-16R – 16 channel Reader Controller Board

SRINX – Reader Interface

SIONX-8 – Input/Output Expansion Board

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CT5000
Offline Controller

Overview

The CT5000 is an offline single opening controller designed for applications where the security and convenience of offline electronic access control is desired, but an integrated electronic lock may not be practical. It is an ideal solution for narrow stile aluminum store front applications because it can work with a variety of readers as well as interface with peripheral devices such automatic operators, electric strikes, and electromagnetic locks.

The CT5000 supports up to two separate Wiegand reader inputs. It is compatible with many types of credential technologies. The CT5000 has three form C relay outputs, for strike, auxiliary and alarm. It also has three inputs that include door position and request-to-exit.

The CT5000 is compatible with many brands and types of credential technologies including Magnetic Stripe (tracks 1, 2, and 3), 125 kHz Proximity, and 13.56 MHz Smart Cards. It also supports a variety of card functions including: normal, toggle, freeze, pass through, construction, lockdown and Card + PIN applications.

The CT5000 offline controller has the unique ability to be programmed locally via keypad or via the Schlage Handheld Programming Device. The CT5000 is compatible with Schlage SMS Express, Premier or Enterprise access control software. The CT5000 compliments your facility's portfolio of CO-Series and AD-Series devices along with all of your other networked readers.

If networked functionality is required in the future, the CT5000 can be upgraded. With the addition of a networked communication board and upgraded firmware, the CT5000 becomes a wireless reader interface (WRI400). The WRI400 communicates via 900MHz wireless signals to an AD-Series PIM400 which connects to the networked access control system. The WRI400 eliminates the need to run additional wires to the door, saving you time and money on installation.

Features and Benefits

- Supports up to 5000 users and 5000 audits
- UL 294, Canada UL, FCC Part 15, Canada RSS-210, RoHs
- Includes 15 foot USB remote cable connector and decorative wall plate with USB input
- Supports up to two wiegand reader inputs
- Programmed using Schlage Handheld Device (HHD) via USB connection or compatible keypad
- Requires 2 Amp power supply, such as the Schlage PS902 (sold separately)
- Compatible with Schlage SMS Express, Select, Premier or Enterprise access control software
- Request-to-exit (remote release)
- LED visual indicators (including low battery and state of the relay)

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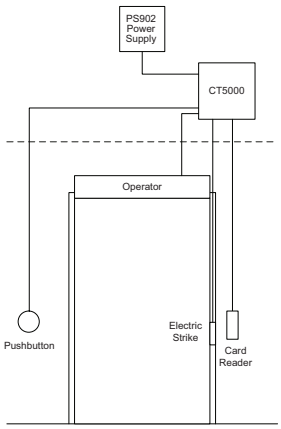
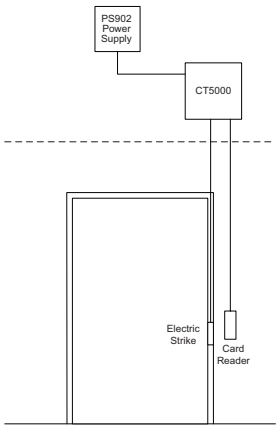
CT5000
Offline Controllers

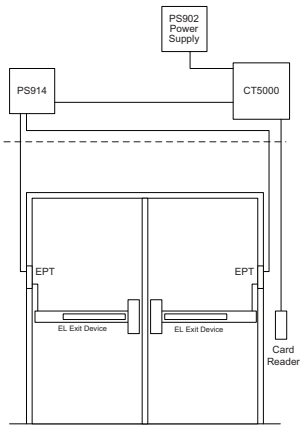
The CT5000 can be used for front door applications with an automatic operator, electric strike and card reader



For narrow stile applications the CT5000 can be used with an electric strike and card reader



The CT5000 and a card reader along with the Von Duprin 914 Power Supply can control two EL exit devices for double door applications



Note: PS902 and Von Duprin PS914 are sold separately.

CT5000 Offline Controller Specifications		
Users		Up to 5000
Audits		Up to 5000
Power Supply		12 VDC or 24 VDC (sold separately, must be UL 294 Class 2 listed power supply)
Voltage Range		9.5 VDC to 26 VDC
Connector Cable Specifications	**DC Power Input**	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 1000 ft (305 m)
	Credential Readers (x2)	Data Signals: 22AWG, 6 Conductor (Alpha 1296C or equivalent) up to 500 feet (152 meters) Reader Tamper Signals: 18AWG, Twisted Pair Shielded (Belden 8760 or equivalent) up to 500 feet (152 meters)
	Strike/ Aux Relay Outputs	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
Relay Output Tolerances	**Strike Output Relay**	Form C Relay; 6 Amps @ 24VDC or 6 Amps @ 20 VAC or 3 Amps @ 240 VAC
	Auxiliary Output Relay	Form C Relay; 6 Amps @ 24VDC or 6 Amps @ 20 VAC or 3 Amps @ 240 VAC
	Alarm Output Relay	Form C Relay; 6 Amps @ 24VDC or 6 Amps @ 20 VAC or 3 Amps @ 240 VAC
Operating Temperature		-31°F (-35°C) to 151°F (66°C)
Operating Humidity		0 - 100% condensing
Certifications		UL 294, Canada UL, FCC Part 15, Canada RSS-210, RoHs
Dimensions		10.43" x 7.28" x 3.79" 26.49 cm x 18.49 cm x 9.63 cm
Programming Method		Manually programmed via compatible keypad or computer programmed via SUS Software on the Schlage Handheld Programming Device (HHD)
Optional Accessories		125 foot USB remote cable connector, PS902, PS904, or Von Duprin PS914 (sold separately)

Credential Compatibility (software and reader dependent)	
Magnetic Stripe Card	Field configurable track 1, 2, or 3
125 kHz Proximity Card	Schlage, XceedID® (34X, 35X, 35C, 37X bit formats), HID®, GE/CASI ProxLite™ and AWID® 26 bit format
13.56 MHz Smart Card	aptiQ™ smart cards featuring MIFARE DESFire™ EV1 HID iCLASS® CSN only 26 bit format

The following readers are UL 294 listed for use with the CT5000:

- Essex Electronics model KTP-162
- Mercury Security models MR-5 and MR-20, XceedID models XF-1050, XF-1100, XF-1500, XF-1550 and XF-2100

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SPRC101

Single Sided Badge Printer

Overview

The SPRC101 is user friendly, offering such features as automatic cleaning ribbon cassette, quick change head and a rotating LCD display. The SPRC101 Printer offers brilliant images printed on CR80 cards with a thickness of 30 mils. The SPRC101 with its high quality design and reliability, makes this one of the most versatile single sided printers.

Features and Benefits

- Full color, single-sided, edge to edge printing
- USB 2.0 output
- Industry leading 24 bit continuous printing tone
- 150 cards per hour
- Single sided printing only
- ISO9001, ISO14001 Certifications
- Solution for Personal Identity Verification FIPS 201-1 directive

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Specifications	
Printing System	300dpi, 24-bit continuous tone printing, 16.7million colors
Printing Method	Thermal transfer dye-sublimation
Print Media	PVC or polyester cards with polished PVC finish
Media Size	CR-80: 3.375" x 2.125"
Media Thickness	30mil
Print Area	Single Sided Edge-to-Edge
Input Hopper	100 cards
Exit Hopper	30 cards
Image Memory	16MB with parallel processing, four memory modes
Display	LCD 16 Character 2-line display shows printer status and diagnostic prompts
Dimensions	7" H x 9" W x 13" D
Weight	14lbs. / 6.5kg
Operating Temp	35° to 85° F
Power Source	AC power source AC100/240v 50/60Hz auto-switching
Agency Listing	UL/CE/FCC
Drivers	Windows® compatible

ORDERING INFORMATION

SPRC101 - Standard Single Sided Printer

OPTIONS

SYMCKOPRC - Color Cartridge Ribbon (250 prints)

SBKPRC - Black Cartridge Ribbon (250 prints)

SCLEAN55 - Cleaning Kit

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SPR5300

Dual Sided Badge Printer

Overview

The SPR5350 Printer offers brilliant images printed on PVC cards with a thickness range from 20 to 50 mils. These high quality printers offer many add-on modules to make them one of the most versatile printers on the market. The add-on modules include magnetic stripe encoding, in-line over-lamination with full 1.0mil patch and thinfilm / foil edge to edge. Prints on both sides of a card in full color or black and white.

Features and Benefits

- Full color edge to edge printing
- Industry leading 24 bit continuous printing tone
- 100+ cards per hour
- Dual sided printing
- Dual sided lamination with alternating patch options
- Variable UV printing
- ISO9001 and ISO14001 Certifications
- High quality barcode printing
- High resolution graphics
- Holographic lamination available
- Encoder Options
- Laminator Options

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Specifications	
Printing System	300dpi, 24-bit continuous tone printing, 16.7million colors
Printing Method	Thermal transfer dye-sublimation
Print Media	PVC or polyester cards with polished PVC finish
Media Size	CR-80: 3.375" x 2.125" / 85.6 x 54mm CR-79: 3.303" x 2.051" / 83.9 x 52.1mm
Media Thickness	020" (20mil) to .050" (50mil) / .508mm to 1.72mm
Print Area	Edge-to-Edge
Input Hopper	100 cards
Exit Hopper	100 cards
Image Memory	SPR5310: 8MB / SPR5350: 16MB with parallel processing, four memory modes
System Memory	2.25MB
Display	LCD 16 Character 2-line display shows printer status and diagnostic prompts
Ribbon Types	SYMCKO-2 250 prints, SYMCKOK-2 210 prints, SYMCFK (Ultra Violet) 250 prints
Print Speed	SYMCO-2: 104 cards / hour, SYMCKOK-2: 66 cards / hour
Interface	USB 2.0, Parallel, or Micro SCSI II
Dimensions	16.57" H x 10.66" W x 13.03" D / 421 x 271 x 331mm
Weight	26.6lbs. / 13kg
Operating Temp	65 to 85° F / 18 to 27° C
Power Source	AC power source AC100/240v 50/60Hz auto-switching
Agency Listing	UL: UL1950: UL1950-1993: CE Class B: FCC A & B
Drivers	Windows® compatible

** Print speed indicates approximate multiple print job print speed and is measured from the time a card feeds into the printer to the time it ejects from the printer. Print speeds do not include encoding time or the time needed for the PC to process the image. Process time is dependant on the size of the file, the CPU, the amount of PC memory, the interface (SCSI, USB, Parallel), and the amount of resources at the time of the print job.*

ORDERING INFORMATION

SPR5350 - High Speed Dual Side Printer

Options

SPR5302A - In-line Laminator

SPR5361 - Magnetic Stripe Encoder

ACCESSORIES

SYMCKO-2 - 5 Panel Color Ribbon

SYMCKOK-2 - 6 Panel Color Ribbon (extra black panel)

SNCLEAR - Laminate Overlay

SCLEAN53 - Cleaning Kit

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SID450
License Scanner

Overview

The SID450 Driver's License/Business Card Scanner is easy to use and provides the user with an image of the ID card and the relevant text information in the appropriate database fields. Its compact footprint is perfect for any reception desk or office environment. The scanning process allows the user to chain-feed the items, while the image processing is done automatically in the background, resulting in a superb scan time of 3 seconds per card. When used in the SMS Guest Pass visitor management system, drivers licenses can be scanned into the database allowing for quick processing of visitors to a facility.

Features and Benefits

- Reduces human error by automating the archiving process
- USB Port – no additional power supply needed
- 2-3 seconds scan time per side
- Capable of scanning photographs, business cards, ID cards, plastic credit cards with embossed letters

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Specifications	
Image Sensor Type	Linear color CMOS
Optical Resolution	600dpi x1200 dpi
Interface	USB 2.0
Dimensions	LxWxH: 7.5″ x 2″ x 1.7″
Weight	8.4 oz
Power Consumption	0.2W on standby, 2.0W during scan
Scanning Area	LxW: 4.13" x 10″
System Requirements	Windows 7, Vista, XP, 2000
Cable Length	60 inches, detachable

ORDERING INFORMATION

SID450 - ScanShell Driver's License/Business Card Scanner and software

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SVCCD-USB
Live Video Camera

Overview

The SVCCD-USB ValCam Live Video Camera offers brilliant images that can be printed on PVC cards or adhesive labels. The SVCCD-USB with its high quality resolution and reliability, is one of the most versatile cameras on the market. The camera comes with a high intensity Photo Flash and a zoom lens. The picture is live in the software. It is not necessary to import files or download pictures from the camera. Package comes with a tripod.

Features and Benefits

- Real time subject setup and scene adjustments
- High resolution for high quality pictures
- Integrated Hi intensity Photo Flash synchronized with the Schlage Security Management System software control
- Complete USB interface hardware
- Auto focus lens
- Rapid Image Download compared to still image cameras
- Freeze Frame Perfection
- Cool white LED's replace offensive hot lights & last 100x longer
- Camera Supplied with Tripod
- TWAIN and Windows 7 compatible

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Specifications	
Interface	USB 2.0 Compliant
Supplied Hardware	USB cable
Ccd Chip	High resolution single chip CCD array (796x494)
Power Source	Supplied with power brick

ORDERING INFORMATION

SVCCD-USB - Live Viewing Camera, Integrated Flash, Zoom Lens, and Tripod

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S3842
Thermal Transfer Printer

Overview

The S3842 Zebra Thermal Transfer Printer offers high resolution images printed on labels. The S3842 will print crisp texts, logos, pictures, signatures and barcodes in just a few seconds. Its dual wall construction and compact design will withstand rough handling in your busy environment. It's the perfect solution for Guest Pass visitor management software.

Features and Benefits

- Provides direct thermal transfer printing - black only
- Prints widths up to 4.09 inches
- Prints two-dimensional bar codes
- One 4" labels per second
- The printer allows for automatic roll feed

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Specifications	
Resolution	300dpi
Label Types	Thermal Transfer Adhesive Badge and Hole-punched card
Print Area	4.09" wide and up to 11" long
Interface	USB 2.0, Parallel or Serial
Dimensions	6.8″ H x 7.8″ W x 9.4″ L
Weight	3.7 lbs
Operating Temp.	40 to 105°
Power Source	AC power source AC110/240v 50/60Hz

ORDERING INFORMATION

S3842 - Direct Thermal Transfer Printer

OPTIONS

S800540-250 - White Adhesive Labels

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SEVMS
Video Management System

Overview

Available with 16 or 32 camera inputs, Schlage Enterprise Video Management System (SEVMS) state-of-the-art video storage servers are network ready and can be remotely viewed from any workstation with the appropriate password protected access level.

These units provide the stability and longevity of a solid state system drive by utilizing a Windows XP Embedded OS and are capable of digitally recording high resolution MPEG4 or JPEG color video (streaming and recorded).

Depending on the model selected, the SEVMS will accept IP addressable and/or analog cameras. User-friendly software allows for on screen PTZ control, advanced search, playback and save capabilities, video motion detection by camera, individual camera settings, email by event and more. The SEVMS provides searchable indexed storage for instant access to stored video on a variety of criteria: day, time, camera, alarm etc.

- Fully integrates with Schlage Security Management System software packages and captures associated transactions and events
- Remote video management software included (no licensing required)
- Storage capability can be sized to fit any application
- Compatible with existing v6,7 & 8 SEVMS systems and v8 & 9 Maintenance Monitor/Video System Security (VSS)

Features and Benefits

- Two built-in network cards that support 10/100/1000 BaseT
- Scheduling 24/7 and Holiday profiles
- H.264, MPEG4, JPEG, AVI, and encrypted VFR recording for high quality playback
- Audio recording support for Axis IP cameras using MPEG-4 and H.264 compression
- High resolution Video Motion Detection with masking capabilities
- Alarms and Search on Video Motion Detection
- Solid State System Drive for Stability and Longevity
- Maintenance clients can monitor the health of SEVMS units on network
- User-friendly video security applications
- Virtual camera grouping across servers
- Advanced search, playback and save capabilities
- Multiple Video Remote (up to 32 cameras can be displayed per monitor)
- View 4 cameras simultaneously during playback
- Full PTZ functionality (presets, patrols, etc.)
- Sequencing capabilities
- Proprietary viewer software for viewing encrypted files
- Advanced security permissions
- Customizable pre and post recording upon an event
- Scalable configurations

(continued)

Features and Benefits

(continued)

- RAID5 Array & Hot Swappable configurations available (4U Case only)
- Independent Camera Audio - Audio per camera channel (Analog cameras only)
- Multiplex video analog output
- Independent alarms per channel
- Storage Calculator – Estimation Tool
- Database Back up and Recovery
- BAA compliant

Factory Installed Options

SEVMS-TB-1 Storage Expansion Includes (1) additional 1TB SATA hard drive

SEVMS-TB-2 Storage Expansion Includes (2) additional 1TB SATA hard drives

SEVMS-AUD 16-ch Analog Audio Option (hybrid units only) Provides (16) individual audio channels.

SEVMS-MIC Microphone Provides a microphone for one-way audio.

SEVMS-IO 16-ch Input/Output Module (hybrid units only) Provides (16) input and (16) relay output channels

SEVMS-KY16 16-ch IP Camera Key Expansion Provides (16) channel IP camera expansion. (Factory installation not required)

SEVMS-CKT 16-ch Analog Camera Key Expansion Includes 16-ch Analog Capture Card and Camera Key Expansion (4U case only).

SEVMS-RAID RAID5 Configuration with Hot Swap RAID Controller Card and (2) 750GB Hard Drives (4U case only)

SEVMS-UPG Upgrade from v.7.0 to v.9.0 (requires capture card)

SEVMS-XPF Full Windows XP option in lieu of Windows XP Embedded (compatible with Windows Domain systems)

Accessories:

SCMKM Monitor, Keyboard & Mouse – 22″ Flat Screen Monitor, 104-key Keyboard and Mouse

SMKMBK Monitor/Keyboard/Mouse Unit – Rack-mount Monitor, Keyboard & Mouse Unit

SMKMKVMBK Monitor/Keyboard/Mouse Unit with 8 Port KVM Switch – Rack-mount Monitor, Keyboard & Mouse Unit with built-in 8 Port KVM Switch.

SEVMSCBL Monitor/Keyboard/Mouse Cable (12 foot Connects one SEVMS unit to a rack mount Monitor, Keyboard & Mouse.

SEVMSSW4 4 Port KVM Switch – Connects a monitor up to a total of (4) SEVMS units.

SEVMSSW8 8 Port KVM Switch – Connects a monitor up to a total of (8) SEVMS units.

SEVMSSW16 16 Port KVM Switch – Connects a monitor up to a total of (16) SEVMS units.

SEVMSCNV485 Data Converter for PTZ Control – Data converter provides RS-485 control for Pan, Tilt & Zoom functions through the SEVMS unit.

SEVMSCNV422 Data Converter for PTZ Control – Data converter provides RS-422 control for Pan, Tilt & Zoom functions through the SEVMS unit.

Specifications	
Operating system	Windows XP Embedded SP3
System Drive	4GB Solid State
CPU	2.66GHz Intel Core 2 Quad Processor (Q9400)
RAM	2GB DDR2 RAM
Integrated VGA Video Card	
Video connectors	BNC Video Inputs / IP Network Connector (depending on model)
Input Voltage	120VAC or 240VAC
Operating temperature	50°F to 75°F
Video Management Client Software CD	
2U Rack Mount Dimensions	17" W x 17.5" D x 3.5" H
4U Rack Mount Dimensions	17.5" W x 20.25" D x 7" H

ORDERING INFORMATION

2U RACK MOUNT

SEVMS-16H2 - 16 Channel Hybrid DVR/NVR (1) 16-ch analog capture card, (1) 1TB SATA hard drive storage capacity

SEVMS-16N2 - 16 Channel NVR (1) 1TB SATA hard drive storage capacity

SEVMS-32N2 - 32 Channel NVR (2) 1TB SATA hard drive storage capacity

4U RACK MOUNT

SEVMS-16H4 - 16 Channel Hybrid DVR/NVR (1) 16-ch analog capture card, (2) 1TB SATA hard drive storage capacity

SEVMS-32H4 - 32 Channel Hybrid DVR/NVR (2) 16-ch analog capture cards, (2) 1TB SATA hard drive storage capacity

SEVMS-16N4 - 16 Channel NVR (2)1TB SATA hard drive storage capacity

SEVMS-32N4 - 32 Channel NVR (2) 1TB SATA hard drive storage capacity

MAINTENANCE

SEVMS-MTA Enterprise Video Management System Maintenance One year factory maintenance for existing 4 channel units

SEVMS-MTB Enterprise Video Management System Maintenance One year factory maintenance for the new and existing 16 & 32 channel units.

** Monitor, Keyboard and Mouse sold separately (refer to accessories).*

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SNVRSFT NVR
Software Solution

Overview

Our Schlage Enterprise Video Management System is now available in a software-only package. Perfect for those customers who want to supply their own remote storage, our NVR software solution provides up to 32 IP camera channels with an easy to use interface. Cameras can be remotely viewed from any workstation with the appropriate password protected access level.

The Schlage NVR software is compatible with Microsoft Windows XP Professional SP2 or Windows Server 2003 and is capable of digitally recording high resolution MPEG4 or Motion JPEG color video.
User-friendly software allows for on screen PTZ control, advanced search, playback and save capabilities, video motion detection by camera, individual camera settings, email by event and more.

The NVR software provides searchable indexed storage for instant access to stored video on a variety of criteria: day, time, camera, alarm etc.

- Fully integrates with Schlage Security Management System and bright blue Intelligent Access Management system software packages and captures associated transactions and events
- Can function as a stand-alone video management system
- Compatible with existing Schlage Enterprise Video Management System versions 6 through 9, and Maintenance Monitor/Video System Security (VSS) versions 8 & 9

Features and Benefits

- Scheduling 24/7 and Holiday profiles
- H.264, MPEG4, JPEG, AVI and encrypted VFR recording for high quality playback
- Audio recording support for Axis IP cameras using MPEG4 and H.264 compression
- High resolution Video Motion Detection with masking capabilities
- Alarms and Search on Video Motion Detection
- Maintenance clients can monitor the health of SEVMS units on network
- User-friendly video security applications
- Virtual camera grouping across servers
- Advanced search, playback and save capabilities
- Multiple Video Remote (up to 32 cameras can be displayed per monitor)
- View 4 cameras simultaneously during playback
- Full PTZ functionality (presets, patrols, etc.)
- Sequencing capabilities

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Features and Benefits
(continued)

- Proprietary viewer software for viewing encrypted files
- Advanced security permissions
- Customizable pre and post recording upon an event
- Independent alarms per channel
- Storage Calculator – Estimation Tool
- Database Backup and Recovery
- BAA compliant

Operating System Compatibility

- Microsoft Windows 7, Microsoft Windows XP Professional SP2 or Windows Server 2003
- See NVR Software Specification for storage and hardware requirements

ORDERING INFORMATION

SNVRSFT16 - Schlage Enterprise Video Management System NVR software for use with up to 16 IP cameras

SNVRSFT32 - Schlage Enterprise Video Management System NVR software for use with up to 32 IP cameras

OPTIONS

SVE-16 - 16-channel Analog to IP Encoder
Encoder supports (16) analog cameras and converts analog video to high performance digital video.

SEVMS-MTB - Enterprise Video Management System Maintenance.
One year factory maintenance for 16 & 32 channel software.

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SMKMBK

Monitor, Keyboard and Mouse

Overview

The Monitor, Keyboard and Mouse combination is a perfect space saver and can be rack-mounted only taking up 1U (1.75″). It is elegantly packaged in a protective laptop design. Included is a high resolution 15″ TFT panel, a full 83-key keyboard and a Glidepoint touchpad for cursor control. It can be used with any KVM switch or server, or can be ordered with a built in 8 port KVM switch and cables.

Features and Benefits

- Convenient, slim design can be closed and will slide into the rack to save space
- Offers protection to the flat monitor by closing like a laptop
- Selectable resolutions up to 1024x768
- Flat Panel Display / TFT active matrix
- 83-key keyboard
- Glidepoint touchpad for cursor control

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Specifications	
Interface	1 x VGA - 15 pin HD D-Sub (HD-15) 1 x mouse - 6 pin mini-DIN (PS/2 style) 1 x keyboard - 6 pin mini-DIN (PS/2 style)
Rack height	1U, 1.75"
Diagonal size	14.1"
Color	Black
Power source	AC power source AC120/230v 50/60Hz

ORDERING INFORMATION

SMKMBK - 15″ Flat Monitor, Keyboard and Touchpad Cursor Control

SEVMSCBL - 12′ cable used to connect one SEVMS unit to a rack mount monitor, keyboard and mouse.

SMKMKVMBK - 15″ Flat Monitor, Keyboard and Touchpad Cursor Control with 8 Port KVM

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SEVMS-SBB
bright blue® *Video*

Overview

Add video recording capabilities to your **bright blue**® Intelligent Access Management System and increase the security and ease with which you run your facility. Integrated video allows you to quickly search for video by cardholder name, ID number, transaction type and more.

The SEVMS-SBB comes standard with 4 IP camera channels and is compact and network ready. Options for analog and additional IP channels are available. Video can be viewed remotely from any workstation with the appropriate password-protected access level.

This unit provides the stability and longevity of a solid state system drive by utilizing a Windows XP Embedded OS and is capable of digitally recording high resolution MPEG4 or Motion JPEG color video (streaming and recording).

User-friendly software allows for on screen PTZ control, advanced search, playback and save capabilities, video motion detection by camera, individual camera settings, email by event and more.

Enjoy enhanced security and greater peace of mind with integrated video.

- Fully integrates to Schlage bright blue Intelligent Access Management system and Schlage Security Management software packages
- Remote multi-user video management software included (no licensing required)

Features and Benefits

- Built-in network card with 10/100/1000 BaseT support
- Solid State system drive for stability and longevity
- H.264, MPEG4, JPEG, AVI and encrypted VFR recording for high quality playback
- Supports IP and analog cameras
- Audio recording support for Axis IP cameras using MPEG4 and H.264 compression
- High resolution video motion detection with masking capabilities
- Alarms and search on video motion detection
- User-friendly video security applications
- Advanced search, playback and save capabilities
- View 4 cameras simultaneously during playback
- Full PTZ functionality (presets, patrols, etc.)
- Sequencing capabilities
- Proprietary viewer software for viewing encrypted files
- Customizable pre and post recording upon an event
- Scheduling 24/7 and Holiday Profiles
- BAA compliant

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Specifications	
Operating system	Windows XP Embedded SP3
System Drive	2GB Solid State 500GB SATA Hard Drive
CPU	1.6GHz Dual Core Intel Atom Processor
RAM	2GB DDR2 RAM Integrated VGA Video Card
Video connectors	IP Network Connector/BNC Video Inputs (depending on model)
Input Voltage	120VAC or 240VAC
Operating temperature	50F to 75F
Dimensions	2.63"H x 12.3"W x 8"D

ORDERING INFORMATION

SEVMS-SBB **4 Channel NVR.**
Will support up to (4) IP cameras; includes (1) 500GB SATA hard drive, Wall Mount Brackets and Video Management Client Software CD

OPTIONS*

SEVMS-ANX **Analog Capture Card**
Add a capture card for analog cameras (or use as a hybrid; 4 channels max).

SEVMS-IPX **IP Camera Expansion**
Add support for an additional 4 IP cameras (total of 8 IP channels).

SVE-16 **16-ch Analog to IP Encoder**
Encoder supports (16) analog cameras and converts analog video to high performance digital video.

SEVMSCNV485 **Data Converter for PTZ Control**
Data converter provides RS-485 control for Pan, Tilt & Zoom functions through the SEVMS unit.

SEVMSCNV422 **Data Converter for PTZ Control**
Data converter provides RS-422 control for Pan, Tilt & Zoom functions through the SEVMS unit.

•Monitor not included
*Options must be specified at time of order.

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SIPCAM100

Indoor Mini Dome IP Camera

Overview

Schlage IP color dome video cameras deliver quality MJPEG and MPEG-4 video compression and stream live video via digital packets across an IP network. View and manage cameras using Schlage Enterprise Video Management System (SEVMS) state-of-the-art video servers. Video can be remotely viewed from any workstation with the appropriate password protected access level. Schlage offers video surveillance solutions to fit any budget.

Features and Benefits

- H.264, MJPEG and MPEG-4 video compression (Dual Stream)
- Resolution D1, CIF, QCIF
- Compression FPS: at 25/30 FPS@D1
- 10/100 Base-T Network
- 12VDC Power
- Polycarbonate dome cover

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FUNCTION

Network
10 / 100 Base-T

Protocol
TCP/IP, UDP/IP, HTTP, RTSP, RTCP, RTP/UDP, RTP/TCP,

USB 2.0
SNTP, mDNS, UPnP, SMTP, SOCK, IGMP, DHCP,

SD Memory
FTP, DDNS, SSL v2/v3, IEEE 802.1X, SSH

Electrical Power Source
12V DC (DC Jack)

Power Consumption (Approx)
360 mA @ +12V

Specifications	
Camera Module	
Image Sensor	1/4" VGA CMOS
Effective Pixels	640 x 480
Scanning System	Progressive Scan
Horizontal Resolution	550 TVL
Minimum Illumination	3 Lux (Color), 0.1 Lux (DSS On)
Lens	3.6 mm F2.0, Board Type
Day & Night	S/W
Video	
Compression Format	H.264, MPEG-4, MJPEG
Number of Streams	Dual Stream, Configurable
Resolution	D1, CIF, QCIF
Compression FPS	25/30 fps@D1
Deinterlacing	Support (DSP)
Motion Detection	Support (DSP)
Burnt-in Text (Digital)	Support (DSP)

Environmental	
Operating Temperature	0° C to 50° C (32°F to 122°F)
Operating Humidity	Up to 85% RH (Non-condensing)
Scanning System	Progressive Scan
Mechanical	
Material	Polycarbonate
Color	Black
Dimension	124mm W x 124mm H x 101.5mm D
Weight (Approx)	280 g

ORDERING INFORMATION

SIPCAM100 - Indoor Mini Dome IP Camera

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Networked Locking

This section of the Electronic Access Control catalog covers networked AD-Series adaptable electronic locks and other devices and accessories that can be easily integrated into an access control system.

Overview

The AD-Series was built from the ground up to provide more options, more functionality and more compatibility than any other electronic locking solution on the market today. The AD-Series meets today's security needs while also easily adapting to future needs as they emerge. The AD-Series is designed on an open architecture platform to provide users with enhanced flexibility and scalability, resulting in an investment that's every bit as secure as your facility.

Features

The AD-Series simplifies installation by combining the electrified lock, reader, door position switch, request-to-exit, and other status monitors together. Panel interface options such as RS-485, Wiegand and Clock & Data ensure seamless, real-time communication with the access control system. The AD-Series is available with seven different credential reader options. For added convenience, security personnel can configure failure modes, card formats and other features in the field. The AD-Series is compatible with most popular models of standard, SFIC and FSIC cylinders. It is also compatible with popular exit devices with low current REX switches including Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on Metal doors only), Von Duprin 22/22F (Rim & SVR only) as well as Falcon 25 (Rim only).

The AD-Series is ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and is UL 294 Listed.

Benefits

The modular design of the AD-Series creates an easy and affordable way to expand a security system and integrate emerging technologies over time and when budgets permit. Customers can easily upgrade readers or networking options – all without having to remove the lock from the door. And the wireless technology gives you the option to install access control on doors that have traditionally been difficult to wire while providing real-time monitoring and centralized lockdown capabilities. The AD-Series was designed to be the right choice for today, and ready for whatever the future holds. With the AD-Series you can be assured that your investment is every bit as protected as your facility.

Lock Options:

AD-Series networked locks have several options to choose from including:

- **Class:** AD-300 Hardwired, AD-400 Wireless, AD-301 FIPS 201-1 Compliant*, AD-401 FIPS 201-1 Compliant.* Note: Choice of class may limit other available options.
- **Chassis:** Cylindrical, Mortise, Mortise Deadbolt, Exit Trim
- **Function******:** Classroom/Storeroom, Office, Privacy, Apartment
- **Readers******:** Keypad, magnetic stripe, and multi-technology (proximity 125 kHz and smart card 13.56 MHz). All card readers are available with + PIN option for added security.
- **Lever Style:** Sparta, Rhodes, Athens, Tubular (Tactile warning available)
- **Finishes:** 626 Satin Chrome, 605 Bright Brass, 606 Satin Brass, 612 Satin Bronze, 619 Satin Nickel, 625 Bright Chrome, 643e Aged Bronze, 626AM Satin Chrome with Antimicrobial

**Check with Access Control provider to verify support of reader/credential formats and lock functions.

Keyway/Cylinders:

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7 pin	SFIC 6 & 7 pin
Schlage	●		●	●
Falcon	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (includes Medeco 31 *0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options ⬟ = less cylinder, only with Sparta and Rhodes levers ▲ = less cylinder only

Note: See pricebook for specific configurations.

Exit Trim:

Compatibility		
Devices	**AD-300/AD-301**	**AD-400/AD-401**
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR‡/CVC‡/Mortise	X	X
Von Duprin 22/22F Rim/SVR	X	X
Falcon 25 Rim	X	X

‡ Metal Doors Only

Note: AD-300/301 and AD-400/401 exit trim is exclusively compatible with Von Duprin 98/99, 98/99XP (Rim, Mortise, and SVR. CVC and CVR on Metal doors only) and 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch: Von Duprin: 050281 | Falcon: 650359

*AD-Series FIPS 201-1 Compliant Solution:

The AD-Series is an ideal solution for applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 compliance. In order to meet requirements, both the AD-301 Hardwired lock as well as the AD-401 Wireless lock must be sold as a complete unit with the FMK Multi-Technology + Keypad Reader.

Extend the reach of access control with proven 900 MHz wireless technology

The Schlage AD-Series Wireless System allows users to extend the reach of access control to areas where running wires is difficult, expensive or virtually impossible. Installations on interior doors, remote doors, historic buildings, 24/7 facilities, elevators and parking gates are now made possible by eliminating the need to run wires directly to the access point. Options are available to accommodate Wiegand, Clock & Data as well as RS-485 connections to the access control system.

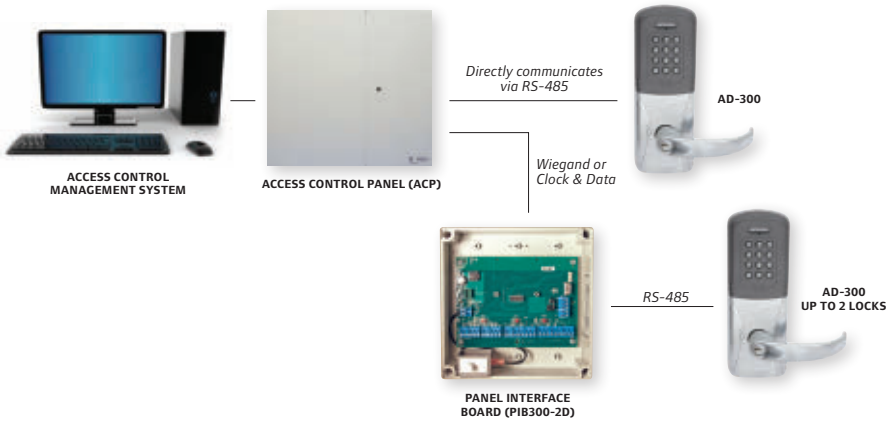
The AD-Series Wireless System communicates via 900 MHz frequency to a Panel Interface Module (PIM) which is then hardwired back to the access control panel. Each PIM can support up to 16 wireless devices within a 200' range in most facilities and up to 1000' with clear line of site. The 900 MHz band enables longer transmission ranges; wavelengths travel a greater distance and better penetrate typical building construction – allowing for simplified system design. And since 900 MHz operates on a different frequency versus WiFi, it won't burden existing IT infrastructure.

Secure and reliable wireless communication (heartbeat) from the PIM to the Access Control System occurs on a periodic basis and is field configurable; the factory default is set at 10 minutes. The AD-Series Wireless System utilizes patent-pending Wake-Up On Radio™ technology to deliver real-time activation at a remote wireless lock while maintaining up to a 2 year battery life. This feature, which is configurable from 10 seconds to as fast as 1 second, enables centralized emergency lockdown and unlock commands in applications where both speed and battery life are critical.

In addition to the AD-Series Locks, a variety of wireless devices are available to extend the reach of access control to applications which may be difficult to wire. These include wireless remote antennas (ANT400), wireless portable readers (WPR400/401), wireless reader interfaces (WRI400), wireless repeaters (REPTR400), wireless gate control kits (GCK400) and wireless elevator control kits (ECK400).

AD-300 Networked Hardwired Solution:

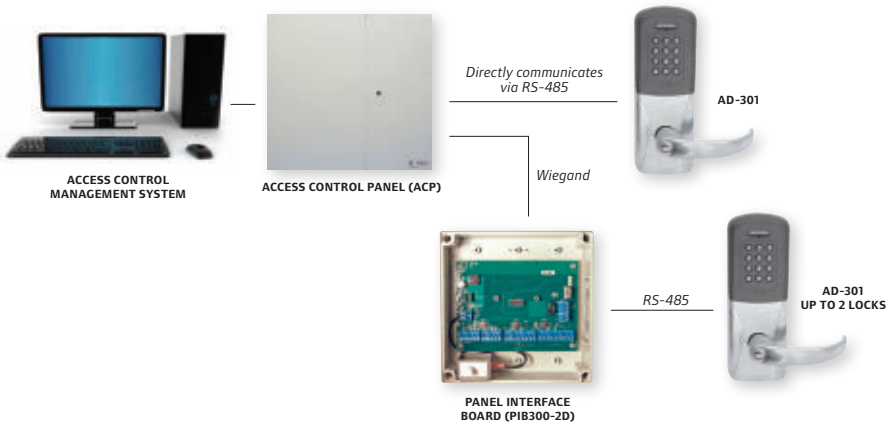
System Configuration



- Direct connection from lock to ACP via RS-485 with specific integrated access control software providers.
- PIB300-2D required for Wiegand or Clock and Data connection; supports up to 2 AD-300 devices.
- Utilize Relay/Dry Contact Board (RLBD) if supervised inputs are required in Wiegand systems.
- Verify requirements for Reader Interface or Gateway with your OEM Access Control Provider.

AD-301 Networked Hardwired FIPS 201-1 Compliant Solution:

System Configuration



- Must be purchased as a complete lock with FMK reader.
- Direct connection from lock to ACP via RS-485 with specific integrated access control software providers.
- PIB300-2D required for Wiegand connection; supports up to 2 AD-301 devices.
- Utilize Relay/Dry Contact Board (RLBD) if supervised inputs are required in Wiegand systems.
- Verify requirements for Reader Interface or Gateway with your OEM Access Control Provider.

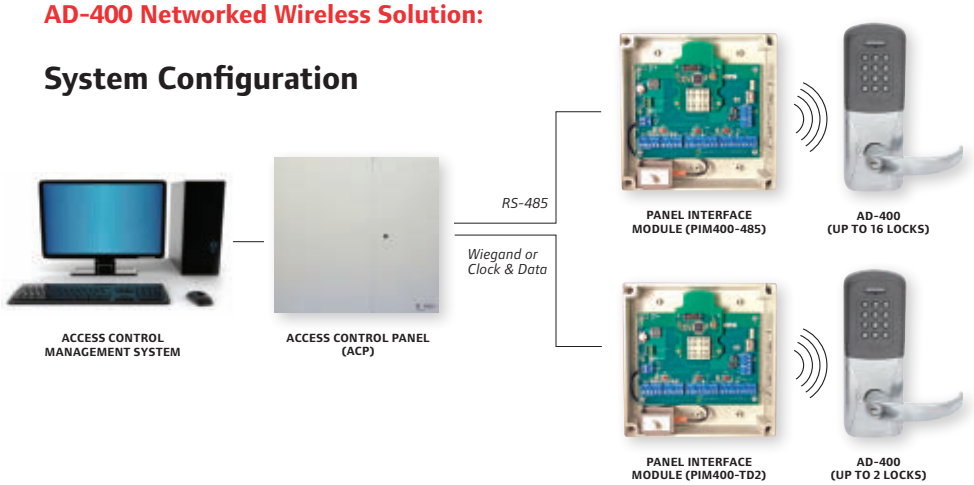
	Hardwired	Hardwired FIPS 201-1 Compliant	Hardwired	Hardwired FIPS 201-1 Compliant
	AD-300	**AD-301**	**AD-300**	**AD-301**
System Info - *Consult with OEM Access Control System Provider for Specific Requirements*				
Communication to/from Controller	Direct - RS-485		Wiegand or Clock & Data	
Panel Interface Module	N/A	N/A	PIB300-2D	
Number of Locks Per Panel Interface Module	N/A	N/A	Up to 2	
Relay/Dry Contact Board (RLBD)	N/A	N/A	Yes, if supervised inputs are required	
Reader Interface/Gateway	As required by OEM Access Control System			
Device Capacity				
Number of Users	As supported by OEM Access Control System			
Number of Audits				
Degraded Cache Mode in Lock**	Yes**			
Reader Options - *Consult with OEM Access Control System Provider for Credential Format Compatibility*				
Keypad Only	Yes, as supported by OEM Access Control System	No	Yes, as supported by OEM Access Control System	No
Magnetic Stripe Card		No		No
FIPS 201-1 Multi-Technology - 125 kHz and 13.56 MHz	No	Yes	No	Yes
Multi-Technology - 125 kHz and 13.56 MHz	Yes, as supported by OEM Access Control System	No	Yes, as supported by OEM Access Control System	No
PIV & PIV-I Compatible†		Yes		Yes
Card + PIN		Yes		Yes
Status Monitors - *Consult with OEM Access Control System Provider for Specific Support*				
Request to Exit	Yes, as supported by OEM Access Control System			
Door Position Switch				
Interior Tamper Guard				
Lock/Unlock Status Clutch Position	Yes, as supported by OEM Access Control System		No	
Mechanical Key Override (ATK)				
Request to Enter	Yes, as supported by OEM Access Control System			
Battery Status	N/A			
Battery Voltage Level				
Communication Status	Yes			
Remote Lockdown (from Host)				
Remote Unlock (from Host)				
Deadbolt Position	Yes, as supported by OEM Access Control System		No	
Interior Push Button				
Status Monitors - *Consult with OEM Access Control System Provider for Specific Support*				
Cylindrical	Yes			
Mortise				
Mortise Deadbolt	Yes, as supported by OEM Access Control System		No	
Exit Trim	Yes - See Exit Trim Compatibility Data Sheet for specifics			
Functions - *Consult with OEM Access Control System Provider for Specific Support*				
Classroom/Storeroom (70)	Yes - Classroom/Storeroom is not available with Mortise Deadbolt Chassis			
Privacy (40)	Yes - Classroom/Storeroom is not available with Mortise Deadbolt Chassis. Privacy, Office and Apartment as supported by OEM Access Control System		No	
Office (50)				
Apartment (60)				
Accessories - *Consult with OEM Access Control System Provider for Specific Support*				
HHD - Handheld Programming Device	Yes			

* If enabled, grants access to last 113 unique user ID's, option to expand to 1,000. Or, use facility/site codes instead of user ID's. No events are captured in audit trail when operating in cache mode.

† 75 bit output format default. Configurable to other output formats. Check with access control provider for specific support.

AD-400 Networked Wireless Solution:

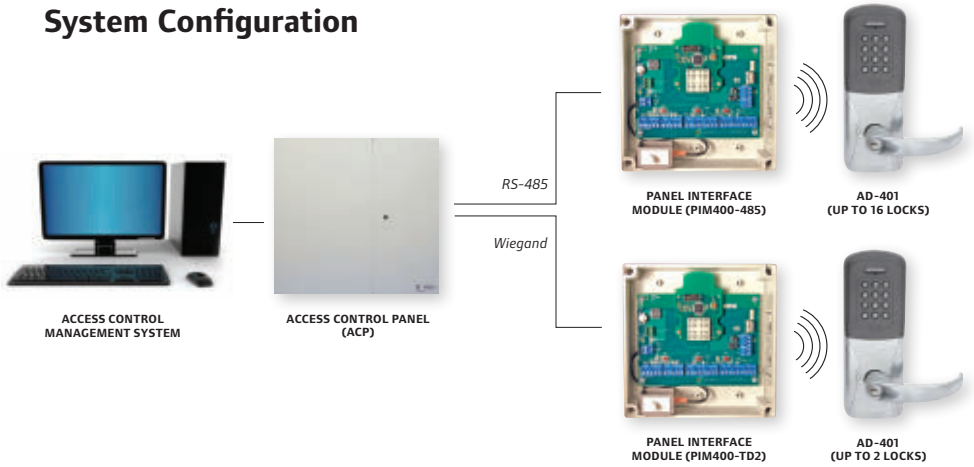
System Configuration



- PIM400-TD2 required for Wiegand or Clock and Data connections; supports up to 2 AD Series devices.
- PIM400-485, if supported by OEM provider, supports up to 16 AD-400 devices.
- Utilize Relay/Dry Contact Board (RLBD) if supervised inputs are required in Wiegand systems.
- Verify requirements for Reader Interface or Gateway with your OEM Access Control Provider.

AD-401 Networked Wireless FIPS201-1 Compliant Solution:

System Configuration



- Must be purchased as a complete lock with FMK reader.
- PIM400-485 required for RS-485 connection with integrated access control software providers; supports up to 16 AD-401 devices.
- PIM400-TD2 required for Wiegand connection; supports up to 2 AD-401 devices.
- Utilize Relay/Dry Contact Board (RLBD) if supervised inputs are required in Wiegand systems.
- Verify requirements for Reader Interface or Gateway with your OEM Access Control Provider.

	Hardwired	Hardwired FIPS 201-1 Compliant	Hardwired	Hardwired FIPS 201-1 Compliant
	AD-400	**AD-401**	**AD-400**	**AD-401**
System Info - *Consult with OEM Access Control System Provider for Specific Requirements*				
Communication to/from Controller	Direct - RS-485		Wiegand or Clock & Data	
Panel Interface Module	PIM400-485*		PIM400-TD2	
Number of Locks Per Panel Interface Module	Up to 16		Up to 2	
Relay/Dry Contact Board (RLBD)	No		Yes, if supervised inputs are required	
Reader Interface/Gateway	As required by OEM Access Control System			
Device Capacity				
Number of Users	As supported by OEM Access Control System			
Number of Audits				
Degraded Cache Mode in Lock**	Yes**			
Reader Options - *Consult with OEM Access Control System Provider for Credential Format Compatibility*				
Keypad Only	Yes, as supported by OEM Access Control System	No	Yes, as supported by OEM Access Control System	No
Magnetic Stripe Card		No		No
FIPS 201-1 Multi-Technology - 125 kHz and 13.56 MHz	No	Yes	No	Yes
Multi-Technology - 125 kHz and 13.56 MHz	Yes, as supported by OEM Access Control System	No	Yes, as supported by OEM Access Control System	No
PIV & PIV-I Compatible†		Yes		Yes
Card + PIN		Yes		Yes
Status Monitors - *Consult with OEM Access Control System Provider for Specific Support*				
Request to Exit	Yes, as supported by OEM Access Control System			
Door Position Switch				
Interior Tamper Guard				
Lock/Unlock Status Clutch Position	Yes, as supported by OEM Access Control System		No	
Mechanical Key Override (ATK)				
Request to Enter	Yes, as supported by OEM Access Control System			
Battery Status				
Battery Voltage Level	Yes, as supported by OEM Access Control System		No	
Communication Status	Yes			
Remote Lockdown (from Host)	Yes, as supported by OEM Access Control System		Yes, requires configuration at PIM via HHD	
Remote Unlock (from Host)				
Deadbolt Position			No	
Interior Push Button				
Status Monitors - *Consult with OEM Access Control System Provider for Specific Support*				
Cylindrical	Yes			
Mortise				
Mortise Deadbolt	Yes, as supported by OEM Access Control System		No	
Exit Trim	Yes - See Exit Trim Compatibility Data Sheet for specifics			
Functions - *Consult with OEM Access Control System Provider for Specific Support*				
Classroom/Storeroom (70)	Yes - Classroom/Storeroom is not available with Mortise Deadbolt Chassis			
Privacy (40)	Yes - Classroom/Storeroom is not available with Mortise Deadbolt Chassis. Privacy, Office and Apartment as supported by OEM Access Control System		No	
Office (50)				
Apartment (60)				
Accessories - *Consult with OEM Access Control System Provider for Specific Support*				
HHD - Handheld Programming Device	Yes, as supported by OEM Access Control System			
Wireles Portable Reader (WPR400/401)				
Wireless Reader Interface (WRI400)				
Wireless Repeater (REPTR400)				
Wireless Antenna (ANT400)				
Wireless Signal Test Kit (TK400)				
Wireless Gate Kit (GCK400)				
Wireless Elevator Kit (ECK400)				

*PIM400-485 sold exclusively through OEM providers.

**If enabled, grants access to last 113 unique user ID's, option to expand to 1,000. Or, use facility/site codes instead of user ID's. No events are captured in audit trail when operating in cache mode.

†75 bit output format default. Configurable to other output formats. Check with access control provider for specific support.

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AD-400

Networked Wireless Electronic Lock

Overview

AD-Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patent-pending modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

Factory orderable options include choices of credential readers, chassis type, network configurations, locking functions, power options, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

To simplify installation, the AD-Series combines all the hardware components required at the door for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and -enter sensors, door position switch, tamper guard and more.

The AD-400 wireless networked lock gives you many of the key benefits of a hardwired access control system — without the wires. This allows you to secure doors that were traditionally difficult to run wires to in the past—and increase the security throughout your facility.

The AD-400 has a number of features built in that are configurable in the field and a long list of items that can be monitored by access control software. Please consult your access control software partner for details on the integration of specific features.

Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your system
- Non-invasive installations for historic buildings and sensitive areas
- Secure encrypted data transmission
- Unique communication protocols that won't interfere with other wireless networks
- Patent-pending wireless feature that enables efficient centralized lockdown in less than 10 seconds while still optimizing battery life up to 2 years
- Available in cylindrical, mortise, mortise with deadbolt and exit trim
- Compatible with major brands of master key systems
- Wireless accessories available for remote, gate, elevator and portable (mustering) applications
- AD-Series with multi-technology readers are NFC compatible
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS

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Reliable Communications

Secure and reliable wireless communication with the Panel Interface Module (PIM) is accomplished using 900 MHz frequency. 900 MHz band enables longer transmission ranges because signal propagation with longer wavelengths travels a greater distance and better penetrates typical building construction – allowing for simplified system design.

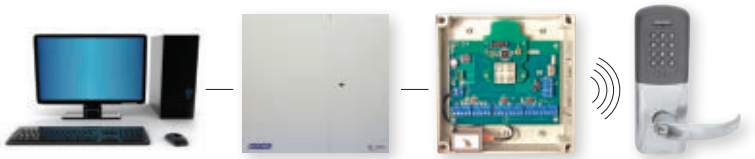
Wake-Up On Radio

This feature enables implementation of wireless locks in applications where centralized lockdown or unlock is required. 'Wake Up on Radio' utilizes patent-pending technology to enable real-time activation at a remote battery-powered wireless lock. The technology is configurable from 10 to 1 second increments. When Wake-Up On Radio is used in critical applications Dynamic Channel Switching should also be enabled.

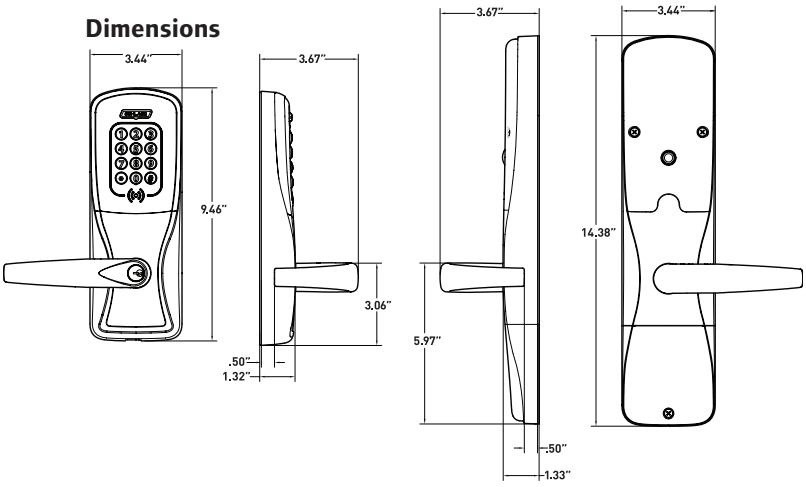
Panel Interface Module (PIM400)

The PIM400 (sold seperately) is required for communication between the AD-400 wireless lock and the access control panel, and can support up to 16 locks depending on your access control system.

System Configuration



Dimensions



AD-400 Electronic Lock Specifications	
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Frequency Range	902-928 MHz
Transmission/Encryption	AES-128 bit Key
Credential Verification Time	< 1 second*
Wake-up on Radio	Responds to lock/unlock command from host in less than 10 seconds in battery powered applications (per field configuration)
Communication Range	Up to 200 ft w/ obstructions (normal building construction), up to 1000 ft clear line of site
RF Interference Avoidance	Configurable Dynamic Channel Switching
Data Rate	RF: 40 kbps
Visual/Audible Communications	Tri-colored LED's & audible indicators (field configurable)
System Interface	RS-485, Wiegand, or Clock & Data via PIM400 to host
Power Supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage Range	4 VDC to 26 VDC
Max Current Requirement	Up to 250 mA
Battery Life	Up to 2 yrs with 4AA (8AA option recommended for smart card and multi-technology options)
Operating Temperature/Exterior	-31° to 151°F (-35° to 66°C)
Operating Temperature/Interior	32° to 120°F (0° to 49°C) (battery)
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Panel Interface Module (PIM400), Handheld Device (HHD), Remote antennas for PIM400 to extend range, Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

* Lock requires less than 100 msec, response time does not include latency time of ACP.

** Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when linked via PIM400-485.

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch position unless monitored on RS-485** connection.

Functions

- *Classroom/Storeroom*
- *Office***
- *Privacy***
- *Apartment***

Note: BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/Storeroom and Office function not available with Mortise Deadbolt option.

Available Status Signals

- *Lock/Unlock Status†*
- *Request-to-Exit*
- *Door Position*
- *Mechanical Key Override***
- *Deadbolt Position***
- *Interior Push Button***
- *Interior Cover Tamper Guard***
- *Battery Status*
- *Communication Status***
- *Request-to-Enter***

Mechanical Specifications

Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard, 3/4″ throw optional	3/4″ throw with anti-friction tongue standard, **1″ throw deadbolt on Mortise Deadbolt option***
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest C123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

AD-300 and AD-400 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on Metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch:
- *Von Duprin: 050281*
- *Falcon: 650359*

Multi-Technology Reader Specification

Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25″ on 125 kHz proximity, up to 0.75″ on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iClass® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible Schlage Credentials	125 kHz Clamshell (SXF7410), 125 kHz ISO Card (SXF7510), 125 kHz ISO Card w/Magnetic Stripe (SXF7510MS)
13.56 MHz Compatible Schlage Credentials	13.56 MHz MIFARE Clamshell (SXF9420), 13.56 MHz MIFARE ISO Printable (SXF9520, SXF9551, SXF9558), 13.56 MHz MIFARE Key Tag (SXF9651), 13.56 MHz MIFARE PVC Patch (SXF9751), aptiQ™ Smart Cards using MIFARE DESFire™ EV1 (SXF9000 Series)
Certifications/Standards	FCC, RSS210, UL 294, Listed, ISO Standard 15693, and ISO Standard 14443
Style/Layout	Option for 12 button, 3x4 matrix backlit keypad

Notes:

** *FIPS 201-1 Compliant Option Available: The AD-Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 Compliance. Specific components are required, please see the AD-401 data sheet or AD-301 data sheet for complete details.*

† *75 bit output format default. Configurable to other output formats*

Benefits of AD-Series Multi-Technology Readers:

- Reads multiple brand of both proximity (125 kHz) and smart (13.56 MHz) technologies with single device
- AD-Series multi-technology readers are NFC compatible
- Allows end user to migrate to more secure credentials over time and as budgets permit

Additional Readers

Magnetic Stripe
- Now available with choice of Insertion or Swipe style readers
- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Reader can be cleaned without removing lock from door
- Option for 12 button, 3x4 matrix backlit keypad

Keypad
- Backlit keypad
- 12 button, 3x4 matrix

Available AD-Series Reader Modules

- **Multi-Technology**
  - Proximity
  - Smart Card

  + KEYPAD

- **Multi-Technology**
  - Proximity
  - Smart Card

- **Magnetic Stripe** (Insertion)

  + KEYPAD

- **Magnetic Stripe** (Insertion)

- **Magnetic Stripe** (Swipe)

  + KEYPAD

- **Magnetic Stripe** (Swipe)

- **Keypad**

Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA options available

AD	400	CY	70	MG	SPA	626	PD	C123	RH	4B	13-049	10-025	1-3/4
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Battery	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVC/CVR
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit

4 Function

70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment

Lock function capabilities are determined by users access control system

5 Reader

KP	Keypad
MG	Magnetic Stripe (Insertion)
MGK	Magnetic Stripe + Keypad (Insertion)
MS	Magnetic Stripe (Swipe)
MSK	Magnetic Stripe + Keypad (Swipe)
MT	Multi-Technology (125 kHz and 13.56 MHz
MTK	Multi-Technology + Keypad (125 kHz and 13.56 MHz
DT	Dummy Trim

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 **Everest**

See price book for other available keyway options including master keying

10 Handing

RH **Right Handed**
LH Left Handed

Field reversible

11 Battery

4B **4AA**
8B 8AA

12 Backset & Latch or Armor Front

Cylindrical
13-049 **2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"**
Mortise
09-663 **Armor Front, 1-1/4" Wide, Square Corner**

See price book for mortise deadbolt and other backset and latch options or armor front options

13 Strike

Cylindrical
10-025 **1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"**
Mortise
10-072 **1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box**

See price book for other available strikes

14 Door Thickness

1-3/4"
Other thicknesses available between 1-3/8" and 2-3/4"
See price book for detail

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605 Bright Brass

606 Satin Brass

612 Satin Bronze

643e Aged Bronze

Cool tone finishes

619 Satin Nickel

625 Bright Chrome

626 Satin Chrome

626AM Satin Chrome with Antimicrobial

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Security Technologies

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SCHLAGE

AD-401

FIPS 201-1 Compliant Networked Wireless Multi-Technology & Keypad Reader

Networked Locking Solutions
AD-401 FIPS 201-1 Compliant Wireless

Overview

AD-Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patent-pending modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

The AD-401 is an ideal solution for applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201 Compliance. The AD-401 electronic integrated lock with FMK multi-technology reader + keypad is FIPS 201-1 compliant for use in U.S. Federal Agency Buildings using smart card technology. The AD-401 lock with an FMK reader allows both a Wiegand and RS-485 solution.

Factory orderable options include choices of chassis type, network configurations, locking functions, power options, lever styles and finishes. It also offers a selection of features that can be configured in the field to customize your openings.

To simplify installation, the AD-Series combines all the hardware components required at the door for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and -enter sensors, door position switch, tamper guard and more.

The AD-401 wireless networked lock gives you many of the key benefits of a hardwired access control system — without the wires. This allows you to secure doors that were traditionally difficult to run wires to in the past—and increase the security throughout your facility.

The AD-401 has a number of features built in that are configurable in the field and a long list of items that can be monitored by access control software. Please consult your access control software partner for details on the integration of specific features.

Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your system:
  - AD-401 with integrated RS-485 software providers will require the use of a PIM400-485 Panel Interface Module which can support up to 16 AD-401 devices
  - AD-401 in Wiegand systems will require the use of a PIM400-TD2 Panel Interface Module which can support up to 2 AD-401 devices and may require the optional dry-contact relay board (RLBD)
- Non-invasive installations for historic buildings and sensitive areas
- Secure encrypted data transmission
- Unique communication protocols that won't interfere with other wireless networks
- Patent-pending wireless feature that enables efficient centralized lockdown in less than 10 seconds while still optimizing battery life up to 2 years
- Available in cylindrical, mortise, mortise with deadbolt and exit trim
- Compatible with major brands of master key systems
- Wireless accessories available for remote, gate, elevator and portable (mustering) applications
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS, FIPS 201-1

IR Ingersoll Rand
Security Technologies

Reliable Communications

Secure and reliable wireless communication with the Panel Interface Module (PIM) is accomplished using 900 MHz frequency. 900 MHz band enables longer transmission ranges because signal propagation with longer wavelengths travels a greater distance and better penetrates typical building construction – allowing for simplified system design.

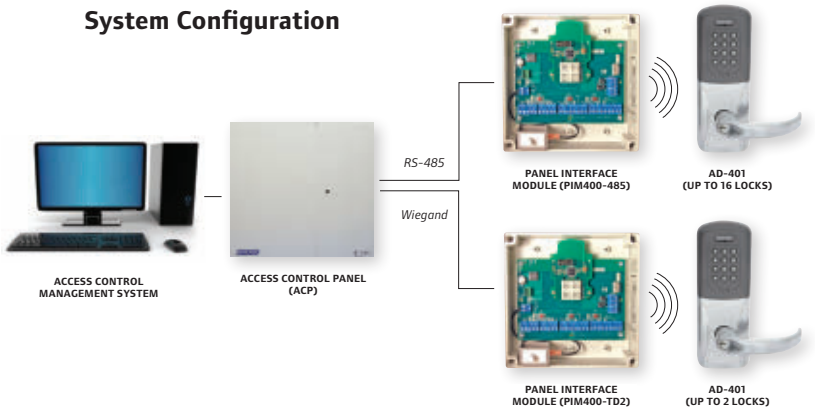
Wake-Up On Radio

This feature enables implementation of wireless locks in applications where centralized lockdown or unlock is required. 'Wake Up on Radio' utilizes patent-pending technology to enable real-time activation at a remote battery-powered wireless lock. The technology is configurable from 10 to 1 second increments. When Wake-Up On Radio is used in critical applications Dynamic Channel Switching should also be enabled.

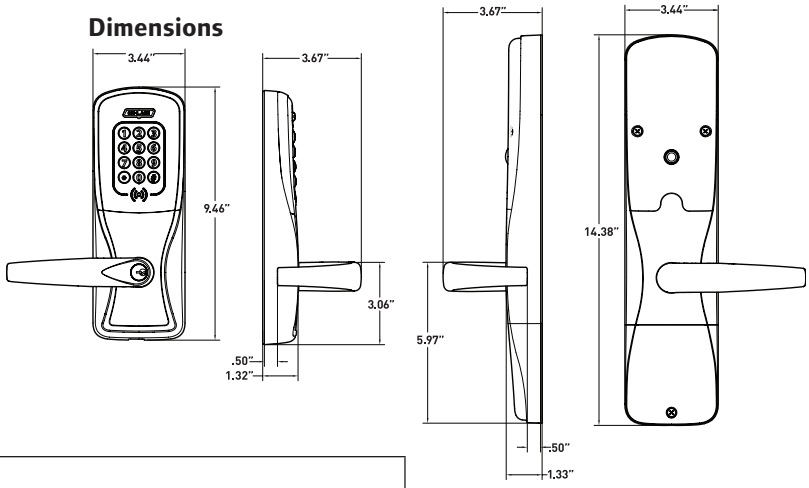
Panel Interface Module (PIM400)

The PIM400 (sold seperately) is required for communication between the AD-401 wireless lock and the access control panel, and can support up to 16 locks depending on your access control system.

System Configuration



Dimensions



AD-401 Electronic Lock Specifications	
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Frequency Range	902-928 MHz
Transmission/Encryption	AES-128 bit Key
Credential Verification Time	< 1 second*
Wake-up on Radio	Responds to lock/unlock command from host in less than 10 seconds in battery powered applications (per field configuration)
Communication Range	Up to 200 ft w/ obstructions (normal building construction), up to 1000 ft clear line of site
RF Interference Avoidance	Configurable Dynamic Channel Switching
Data Rate	RF: 40 kbps
Visual/Audible Communications	Tri-colored LED's & audible indicators (field configurable)
System Interface	RS-485, Wiegand, or Clock & Data via PIM400 to host
Power Supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage Range	4 VDC to 26 VDC
Max Current Requirement	Up to 250 mA
Battery Life	Up to 2 yrs with 4AA (8AA option recommended for smart card and multi-technology options)
Operating Temperature/Exterior	-31° to 151°F (-35° to 66°C)
Operating Temperature/Interior	32° to 120°F (0° to 49°C) (battery)
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10 C, FCC Part 15, ADA, RoHS, FIPS 201-1
Accessories	Panel Interface Module (PIM400), Handheld Device (HHD), Remote antennas for PIM400 to extend range, Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

* Lock requires less than 100 msec, response time does not include latency time of ACP.

** Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when linked via PIM400-485.

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch position unless monitored on RS-485** connection.

Functions

- *Classroom/Storeroom*
- *Office***
- *Privacy***
- *Apartment***

Note: BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/Storeroom and Office function not available with Mortise Deadbolt option.

Available Status Signals

- *Lock/Unlock Status†*
- *Request-to-Exit*
- *Door Position*
- *Mechanical Key Override***
- *Deadbolt Position***
- *Interior Push Button**
- *Interior Cover Tamper Guard**
- *Battery Status*
- *Communication Status**
- *Request-to-Enter**

Mechanical Specifications

Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard, 3/4″ throw optional	3/4″ throw with anti-friction tongue standard, **1″ throw deadbolt on Mortise Deadbolt option***
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest C123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

AD-301 and AD-401 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch:
- *Von Duprin: 050281*
- *Falcon: 650359*

FMK Multi-Technology Reader Specification

Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25″ on 125 kHz proximity, up to 0.75″ on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iClass® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible Schlage Credentials	125 kHz Clamshell (SXF7410), 125 kHz ISO Card (SXF7510), 125 kHz ISO Card w/Magnetic Stripe (SXF7510MS)
13.56 MHz Compatible Schlage Credentials	13.56 MHz MIFARE Clamshell (SXF9420), 13.56 MHz MIFARE ISO Printable (SXF9520, SXF9551, SXF9558), 13.56 MHz MIFARE Key Tag (SXF9651), 13.56 MHz MIFARE PVC Patch (SXF9751), aptiQ™ Smart Cards using MIFARE DESFire™ EV1 (SXF9000 Series)
Certifications/Standards	FCC, RSS210, UL 294, Listed, ISO Standard 15693, and ISO Standard 14443, FIPS 201-1
Style/Layout	12 button, 3x4 matrix backlit keypad

Notes:

** *The AD-Series FIPS 201-1 Compliant Option can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 Compliance.*

† *75 bit output format default. Configurable to other output formats*

AD-Series FMK Reader Module

- **FIPS 201-1 Compliant Multi-Technology**
  - FMK reader required for FIPS 201-1 Compliant multi-technology & keypad reader supporting both proximity and smart cards

+ KEYPAD

Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA options available

AD-	401-	CY-	70-	FMK-	SPA-	626-	PD-	C123-	RH-	4B-	13-049-	10-025-	1-3/4
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Battery	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVC/CVR
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit

4 Function

70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment

Lock function capabilities are determined by users access control system

5 Reader

FMK	FIPS 201-1 Multi-Technology + Keypad (125 kHz and 13.56 MHz

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 **Everest**

See price book for other available keyway options including master keying

10 Handing

RH **Right Handed**
LH Left Handed

Field reversible

11 Battery

4B **4AA**
8B 8AA

12 Backset & Latch or Armor Front

Cylindrical
13-049 **2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"**
Mortise
09-663 **Armor Front, 1-1/4" Wide, Square Corner**

See price book for mortise deadbolt and other backset and latch options or armor front options

13 Strike

Cylindrical
10-025 **1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"**
Mortise
10-072 **1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box**

See price book for other available strikes

14 Door Thickness

1-3/4"
Other thicknesses available between 1-3/8" and 2-3/4"
See price book for detail

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605 Bright Brass

606 Satin Brass

612 Satin Bronze

643e Aged Bronze

Cool tone finishes

619 Satin Nickel

625 Bright Chrome

626 Satin Chrome

626AM Satin Chrome with Antimicrobial

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AD-300

Networked Hardwired Electronic Lock

Overview

AD-Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patent-pending modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

Factory orderable options include choices of credential readers, chassis type, network configurations, locking functions, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

To simplify installation, the AD-Series combines all the hardware components required at the door for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and -enter sensors, door position switch, tamper switch and more.

The AD-300 has a number of features built in that are configurable in the field and a long list of items that can be monitored by access control software. Please consult your access control software partner for details on the integration of specific features.

Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your system
- Real-time communication between access control system and lock
- Field configurable Fail Safe/Fail Secure and other capabilities per code
- Available in cylindrical, mortise, mortise with deadbolt and exit trim
- Compatible with major brands of master key systems
- A wide selection of credential readers and networking options to choose from
- AD-Series with multi-technology readers are NFC compatible
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS

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Security Technologies

AD-300 Electronic Lock Specifications	
Credential Verification Time	< 1 second
Data Rate	RS-485 : 9.6 kbps
Visual/Audible Communications	Tri-colored LED's & audible indicators (field configurable)
System Interface	Wiegand or Clock & Data via PIB300, or RS-485 directly
Power Supply	12 VDC or 24 VDC
Voltage Range	4 VDC to 26 VDC
Max Current Requirement	Up to 250 mA
Cable Specifications for Power	18AWG, 2 Conductor (Belden 8760 or equivalent)
Cable Distance for Power	AD-300 to Power Supply: up to 1000 ft (303 m)
Cable Specifications for Data	24AWG, 2 or 4 Conductor Shielded (Belden 9841, 9842 or equivalent)
Cabling Distance for Data	AD-300 to PIB300 or ACP, RS-485: up to 4000 ft (1219 m)
Operating Temperature	-31° to 151°F (-35° to 66°C)
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Panel Interface Board (PIB300), Handheld Device (HHD), Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch positions unless monitored on RS-485* connection

Functions

- *Classroom/Storeroom*
- *Office**
- *Privacy**
- *Apartment**

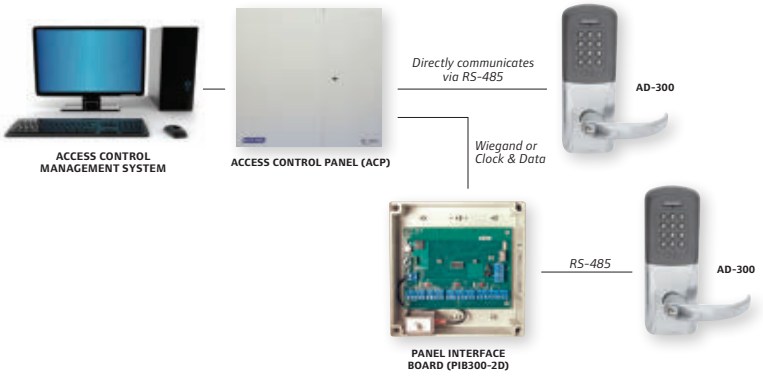
Note: BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/ Storeroom and Office function not available with Mortise Deadbolt option.

Available Status Signals

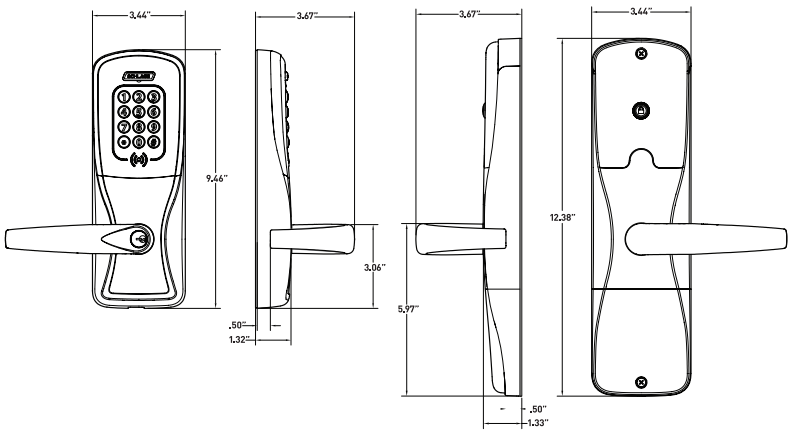
- *Lock/Unlock Status*†
- *Request-to-Exit*
- *Door Position*
- *Mechanical Key Override**
- *Deadbolt Position**
- *Interior Cover Tamper Guard**
- *Communication Status**
- *Interior Push Button**
- *Request-to-Enter**

* Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when linked via PIM400-485.

System Configuration



Dimensions



Panel Interface Board (PIB300-2D)

If the system requires Wiegand or Clock & Data protocol (rather than a direct RS-485 connection), the AD-Series open architecture platform connects up to two AD-300 locks to the Panel Interface Board (PIB300 - sold separately, if required) that seamlessly connects to an access control panel or reader interface board. All monitoring is captured at the remote monitoring station.

PIB300-2D Specifications	
Communication Range	**PIB300 to Lock**, RS-485: up to 4000′ **PIB300 to ACP**, Wiegand or Clock & Data: up to 500′
Visual/Audible	13 LEDs for Status Indicators
System Interface	Wiegand or Clock & Data
Voltage Range	9.5 VDC to 26 VDC
Power Supply	12 VDC or 24 VDC
Max Current Requirements	Up to 250 mA
Operating Temperature	-31° to 151°F (-35° to 66°C)
Dimensions (HWD)	7.1″ x 7.1″ x 3.0″ (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.57 kg)
Cable Specifications (PIB300 to ACP)	22AWG, 8 Conductor Shielded (Alpha 1298C or equivalent)
Certifications	NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; RoHS

Mechanical Specifications

Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard, 3/4″ throw optional	3/4″ throw with anti-friction tongue standard, **1″ throw deadbolt on Mortise Deadbolt option***
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest C123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

**Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

AD-300 and AD-400 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch:
- *Von Duprin: 050281*
- *Falcon: 650359*

Multi-Technology Reader Specification

Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25″ on 125 kHz proximity, up to 0.75″ on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iClass® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible Schlage Credentials	125 kHz Clamshell (SXF7410), 125 kHz ISO Card (SXF7510), 125 kHz ISO Card w/Magnetic Stripe (SXF7510MS)
13.56 MHz Compatible Schlage Credentials	13.56 MHz MIFARE Clamshell (SXF9420), 13.56 MHz MIFARE ISO Printable (SXF9520, SXF9551, SXF9558), 13.56 MHz MIFARE Key Tag (SXF9651), 13.56 MHz MIFARE PVC Patch (SXF9751), aptiQ™ Smart Cards using MIFARE DESFire™ EV1 (SXF9000 Series)
Certifications/Standards	FCC, RSS210, UL 294, Listed, ISO Standard 15693, and ISO Standard 14443
Style/Layout	Option for 12 button, 3x4 matrix backlit keypad

Notes:

** *FIPS 201-1 Compliant Option Available: The AD-Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 Compliance. Specific components are required, please see the AD-401 data sheet or AD-301 data sheet for complete details.*

† *75 bit output format default. Configurable to other output formats*

Benefits of AD-Series Multi-Technology Readers:

- Reads multiple brands of both proximity (125 kHz) and smart (13.56 MHz) technologies with single device
- AD-Series multi-technology readers are NFC compatible
- Allows end user to migrate to more secure credentials over time and as budgets permit

Additional Readers

Magnetic Stripe
- Now available with choice of Insertion or Swipe style readers
- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Reader can be cleaned without removing lock from door
- Option for 12 button, 3x4 matrix backlit keypad

Keypad
- Backlit keypad
- 12 button, 3x4 matrix

Available AD-Series Reader Modules

- **Multi-Technology**
  - Proximity
  - Smart Card

+ **KEYPAD**

- **Multi-Technology**
  - Proximity
  - Smart Card

- **Magnetic Stripe** (Insertion)

+ **KEYPAD**

- **Magnetic Stripe** (Insertion)

- **Magnetic Stripe** (Swipe)

+ **KEYPAD**

- **Magnetic Stripe** (Swipe)

- **Keypad**

Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA Options Available

AD-	300-	CY-	70-	MG-	SPA-	626-	PD-	C123-	RH-	13-049-	10-025-	1-3/4
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit

4 Function

70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment

Lock function capabilities are determined by users access control system

5 Reader

KP	Keypad
MG	Magnetic Stripe (Insertion)
MGK	Magnetic Stripe + Keypad (Insertion)
MS	Magnetic Stripe (Swipe)
MSK	Magnetic Stripe + Keypad (Swipe)
MT	Multi-Technology (125 kHz and 13.56 MHz)
MTK	Multi-Technology + Keypad (125 kHz and 13.56 MHz)
DT	Dummy Trim

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 **Everest**

See price book for other available keyway options including master keying

10 Handing

RH **Right Handed**
LH Left Handed

Field reversible

11 Backset & Latch or Armor Front

Cylindrical
13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
Mortise
09-663 Armor Front, 1-1/4" Wide, Square Corner

See price book for mortise deadbolt and other backset and latch options or armor front options

12 Strike

Cylindrical
10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
Mortise
10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box

See price book for other available strikes

13 Door Thickness

1-3/4"
Other thicknesses available between 1-3/8" and 2-3/4

See price book for detail.

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605
Bright Brass

606
Satin Brass

612
Satin Bronze

643e
Aged Bronze

Cool tone finishes

619
Satin Nickel

625
Bright Chrome

626
Satin Chrome

626AM
Satin Chrome with Antimicrobial

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Ingersoll Rand
Security Technologies

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AD-301

FIPS 201-1 Compliant Networked Hardwired Multi-Technology & Keypad Reader

Overview

AD-Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patent-pending modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

The AD-301 is an ideal solution for applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 Compliance. The AD-301 electronic integrated lock with FMK multi-technology reader + keypad is FIPS 201-1 compliant for use in U.S. Federal Agency Buildings using smart card technology. The AD-301 lock with an FMK reader allows both a Wiegand and RS-485 solution.

Factory orderable options include choices of chassis type, network configurations, locking functions, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

To simplify installation, the AD-Series combines all the hardware components required at the door for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and -enter sensors, door position switch, tamper switch and more.

The AD-301 has a number of features built in that are configurable in the field and a long list of items that can be monitored by access control software. Please consult your access control software partner for details on the integration of specific features.

Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your system:
  - AD-301 locks can wire directly into the RS-485 partners access control panel.
  - AD-301 in Wiegand solutions will require the use of a PIB300-2D Panel Interface Board which can support up to 2 AD-301 devices and may require the optional dry-contact relay board (RLBD).
- Real-time communication between access control system and lock
- Field configurable Fail Safe/Fail Secure and other capabilities per code
- Available in cylindrical, mortise, mortise with deadbolt and exit trim
- Compatible with major brands of master key systems
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS, FIPS 201-1

Ingersoll Rand
Security Technologies

AD-301 Electronic Lock Specifications	
Credential Verification Time	< 1 second
Data Rate	RS-485 : 9.6 kbps
Visual/Audible Communications	Tri-colored LED's & audible indicators (field configurable)
System Interface	Wiegand or Clock & Data via PIB300, or RS-485 directly
Power Supply	12 VDC or 24 VDC
Voltage Range	4 VDC to 26 VDC
Max Current Requirement	Up to 250 mA
Cable Specifications for Power	18AWG, 2 Conductor (Belden 8760 or equivalent)
Cable Distance for Power	AD-301 to Power Supply: up to 1000 ft (303 m)
Cable Specifications for Data	24AWG, 2 or 4 Conductor Shielded (Belden 9841, 9842 or equivalent)
Cabling Distance for Data	AD-301 to PIB300 or ACP, RS-485: up to 4000 ft (1219 m)
Operating Temperature	-31° to 151°F (-35° to 66°C)
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10 C, FCC Part 15, ADA, RoHS, FIPS 201-1
Accessories	Panel Interface Board (PIB300), Handheld Device (HHD), Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch positions unless monitored on RS-485* connection

Functions

- *Classroom/Storeroom*
- *Office**
- *Privacy**
- *Apartment**

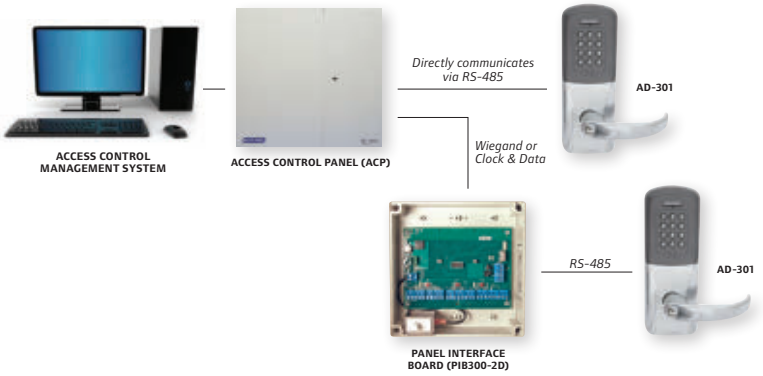
Note: BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/ Storeroom and Office function not available with Mortise Deadbolt option.

Available Status Signals

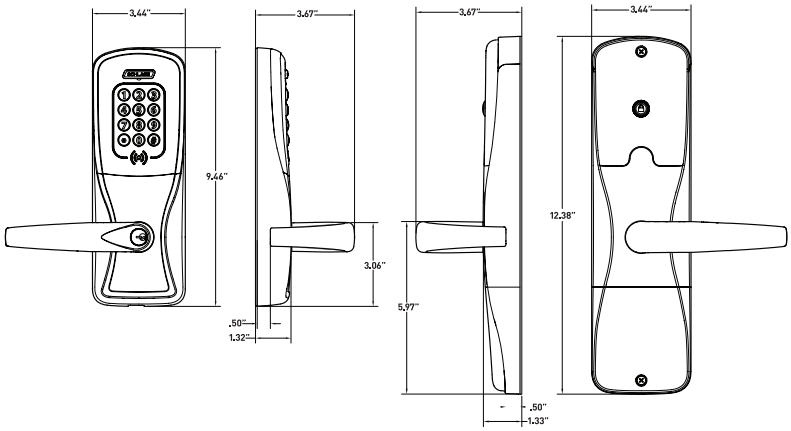
- *Lock/Unlock Status*†
- *Request-to-Exit*
- *Door Position*
- *Mechanical Key Override**
- *Deadbolt Position**
- *Interior Cover Tamper Guard**
- *Communication Status**
- *Interior Push Button**
- *Request-to-Enter**

* Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when connected via RS-485.

System Configuration



Dimensions



Panel Interface Board (PIB300-2D)

If the system requires Wiegand or Clock & Data protocol (rather than a direct RS-485 connection), the AD-Series open architecture platform connects up to two AD-301 locks to the Panel Interface Board (PIB300 - sold separately, if required) that seamlessly connects to an access control panel or reader interface board. All monitoring is captured at the remote monitoring station.

PIB300-2D Specifications	
Communication Range	**PIB300 to Lock**, RS485: up to 4000′ **PIB300 to ACP**, Wiegand or Clock & Data: up to 500′
Visual/Audible	13 LEDs for Status Indicators
System Interface	Wiegand or Clock & Data
Voltage Range	9.5 VDC to 26 VDC
Power Supply	12 VDC or 24 VDC
Max Current Requirements	Up to 250 mA
Operating Temperature	-31° to 151°F (-35° to 66°C)
Dimensions (HWD)	7.1″ x 7.1″ x 3.0″ (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.57 kg)
Cable Specifications (PIB300 to ACP)	22AWG, 8 Conductor Shielded (Alpha 1298C or equivalent)
Certifications	NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; RoHS, FIPS 201-1

Mechanical Specifications

Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard, 3/4″ throw optional	3/4″ throw with anti-friction tongue standard, **1″ throw deadbolt on Mortise Deadbolt option***
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest C123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

AD-301 and AD-401 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch:
- *Von Duprin: 050281*
- *Falcon: 650359*

FMK Multi-Technology Reader Specification

Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25″ on 125 kHz proximity, up to 0.75″ on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iClass® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible Schlage Credentials	125 kHz Clamshell (SXF7410), 125 kHz ISO Card (SXF7510), 125 kHz ISO Card w/Magnetic Stripe (SXF7510MS)
13.56 MHz Compatible Schlage Credentials	13.56 MHz MIFARE Clamshell (SXF9420), 13.56 MHz MIFARE ISO Printable (SXF9520, SXF9551, SXF9558), 13.56 MHz MIFARE Key Tag (SXF9651), 13.56 MHz MIFARE PVC Patch (SXF9751), aptiQ™ Smart Cards using MIFARE DESFire™ EV1 (SXF9000 Series)
Certifications/Standards	FCC, RSS210, UL 294, Listed, ISO Standard 15693, and ISO Standard 14443, FIPS 201-1
Style/Layout	12 button, 3x4 matrix backlit keypad

Notes:

** *The AD-Series FIPS 201-1 Compliant Option can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1.*

† *75 bit output format default. Configurable to other output formats*

AD-Series FMK Reader Module

- **FIPS 201-1 Compliant Multi-Technology**
  - FMK reader required for FIPS 201-1 Compliant multi-technology & keypad reader supporting both proximity and smart cards

+ KEYPAD

Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA Options Available

AD-	301-	CY-	70-	FMK-	SPA-	626-	PD-	C123-	RH-	13-049-	10-025-	1-3/4
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit

4 Function

70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment

Lock function capabilities are determined by users access control system

5 Reader

FMK	FIPS 201-1 Compliant Multi-Technology + Keypad (125 kHz and 13.56 MHz)

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 Everest

See price book for other available keyway options including master keying

10 Handing

RH Right Handed
LH Left Handed

Field reversible

11 Backset & Latch or Armor Front

Cylindrical
13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
Mortise
09-663 Armor Front, 1-1/4" Wide, Square Corner

See price book for mortise deadbolt and other backset and latch options or armor front options

12 Strike

Cylindrical
10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
Mortise
10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box

See price book for other available strikes

13 Door Thickness

1-3/4"
Other thicknesses available between 1-3/8" and 2-3/4

See price book for detail.

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605
Bright Brass

606
Satin Brass

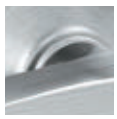
612
Satin Bronze

643e
Aged Bronze

Cool tone finishes

619
Satin Nickel

625
Bright Chrome



626
Satin Chrome

626AM
Satin Chrome with Antimicrobial

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AD-Series
Exit Trim Compatibility

Overview

The AD-Series Electronic Lock is available in 993 Exit Trim for use on openings that require exit devices for either retrofit or new construction applications. Offline and networked solutions are available.

The 993 Exit Trim was designed to suite with AD-Series cylindrical and mortise locksets to ensure that the facility remains aesthetically consistent.

The AD-Series 993 Exit Trim utilizes universal hardware to simplify installation of offline trim to a variety of exit devices, including Rim style from Von Duprin, Falcon, Sargent®, Precision™ Corbin Russwin®, Dorma®, and Yale®.

Available Exit Trim Styles:

- 993R – Rim, Concealed Vertical Cable or Concealed Vertical Rod (CVC* and CVR for metal doors only)
- 993S – Surface Vertical Rod
- 993M – Mortise

Compatibility			
Devices	**AD-200/250**	**AD-300/301**	**AD-400/401**
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR*/ CVC*/Mortise	X	X	X
Von Duprin 22/22F Rim/SVR	X	X	X
Falcon 25 Rim	X	X	X
Sargent® 80 Rim	X		
Precision™ 21 Rim (2100 converts to 21 with Precision's BP21 kit)	X		
Yale® 7000 Rim	X		
Corbin Russwin® 5000 Rim	X		
Dorma® 9300 Rim	X		

The proper low current request to exit switch (RX-LC) is required for AD-300/301 and AD-400/401.

Part Numbers for Request to Exit Switch:

- Von Duprin: 050281
- Falcon: 650359

Features and Benefits

- Multiple Credential Reader Options
- Offline and Networked Communication Options
- A wide variety of finishes and lever styles
- Power options that include hardwired (12 VDC or 24 VDC) or batteries (4AA or 8AA)
- Compatible with most Standard, FSIC or SFIC keyways from major brands of master key systems including Schlage, Sargent®, Corbin®, Medeco® and Yale®

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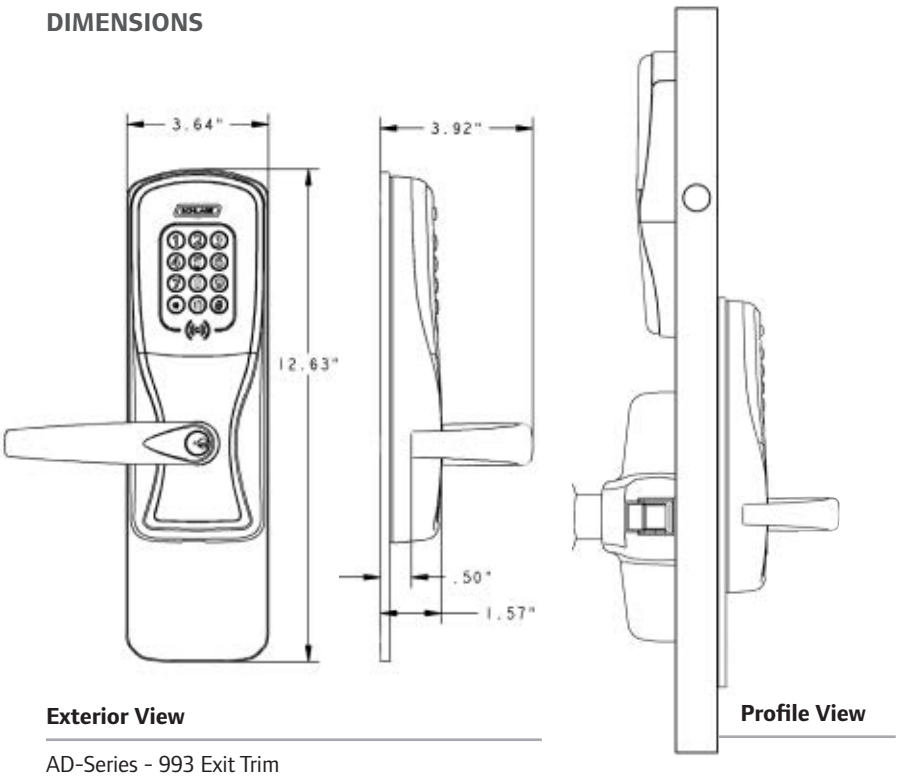
DIMENSIONS



Exterior View | **Profile View**

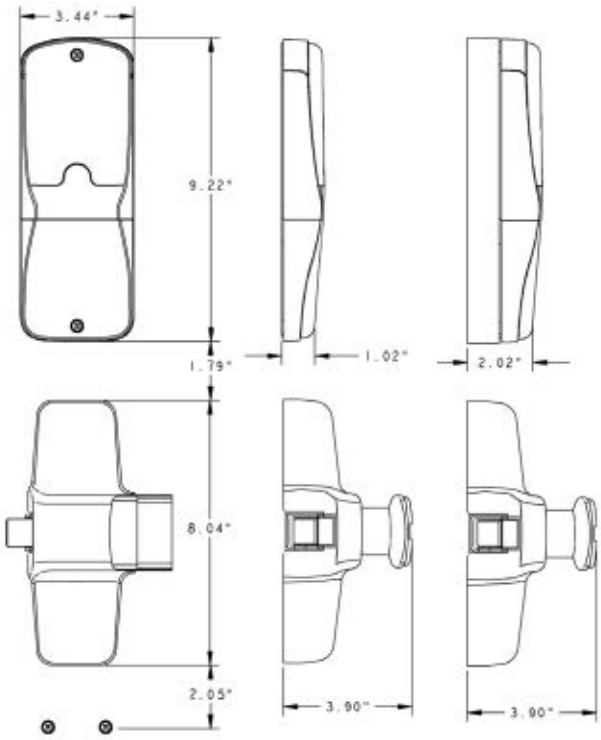
AD-Series - 993 Exit Trim

Available AD-Series Reader Modules

- Multi-Technology (125 kHz proximity and 13.56 MHz smart card)
- FIPS 201-1 Compliant Multi-Technology (125 kHz proximity and 13.56 MHz smart card) sold complete with AD-301 and AD-401 only
- Magnetic Stripe
- Keypad Only
- All credential readers available + Keypad
  - * unlike other AD-Series chassis styles, upgrading reader modules on the 993 Exit Trim requires the exterior escutcheon to be removed from the door

Available Communication Options

- AD-400: Networked Wireless Locks
- AD-401: Networked Wireless Locks - FIPS 201-1 compliant
- AD-300: Networked Hardwired Locks
- AD-301: Networked Hardwired Locks - FIPS 201-1 compliant
- AD-250: Offline, access rights stored on the magnetic stripe credential
- AD-200: Offline, access rights stored on the lock

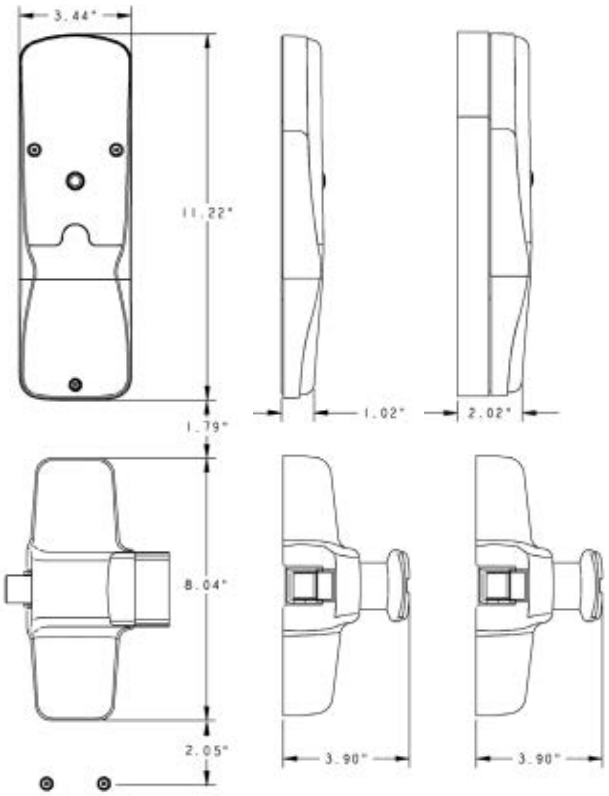


Interior View | **Side View** | **Side View**

AD-200/250/300*/301* - all styles

AD-200/250/300*/301* - RIM/CVR/CVC or Mortise

AD-200/250/300*/301* SVR



Interior View | **Side View** | **Side View**

AD-400/401 all styles

AD-400/401 RIM/CVR/CVC or Mortise

AD-400/401 SVR

** AD-300/301 includes LED indicator*

Note: (2) #7 fasteners with decorative washers located 11.88" below bottom edge of lock

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AD Software Compatibility Matrix

Offline Locks	AD-200			AD-250
Feature	**SMS Express**		**SMS S/P/E**	**SMS S/P/E**
System Capacity at Lock				
*Number of Users or Audits/Locks	2,000 users/audits 50 lock max.	1,000 users/audits 100 lock max.	5,000	Users: Unlimited Audits: 10,000
Holidays	16		32	32
1st Person In	Yes		Yes	Yes
Time Zones	8		16	16
Auto Unlocks	8		8	8
Reader				
Keypad Only	Yes		Yes	No
Magnetic Stripe Card	Yes		Yes	Yes
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card	Yes (aptiQ™ Smart Cards)		Yes	No
Card + PIN	3-6 digit PIN		3-6 digit PIN	3-8 digit PIN
Status Monitor				
Mechanical Key Override (ATK)	Yes		Yes	Yes
Battery Status	Yes		Yes	Yes
Lock Functions				
Classroom/Storeroom	Yes		Yes	Yes
Office/Toggle	Yes		Yes	Yes
Privacy	Yes		Yes	Yes
Apartment	Yes		Yes	Yes
Credential Attributes				
Normal Credential	Yes		Yes	Yes
Toggle Credential	Yes		Yes	Yes
Pass Thru Credential	Yes		Yes	Yes
Visitor/One Time Use Credential	Yes		Yes	No
Freeze Credential	Yes		Yes	Yes
Lock Down Credential	No		No	No

NOTE: Shaded boxes indicate features that are only available in the upgraded versions of software: SMS Express v4.0, bright blue® v2.1 and SMS v5.3.5 or higher.
Previous versions (SMS Express 3.5.7 and older) support 1000 Users/Audits and 100 locks, and do not include AD-Series and CO-Series software labels.

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Networked Hardwired and Wireless Locks	AD-300 & AD-400	
Feature	**bright blue®**	**SMS P/E**
System Capacity at Lock		
Number of User	5,000	Unlimited
Holidays	100	Unlimited
1st Person In	Yes	Yes
Time Zones	100	Unlimited
** Degraded Cache Mode	Yes	Yes
Reader		
Keypad Only	Yes	Yes
Magnetic Stripe Card	Yes	Yes
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card	Yes	Yes
Card + PIN	Up to 4 digit PIN	Up to 4 digit PIN
Status Monitor		
Request to Exit	Yes	Yes
Door Position Switch	Yes	Yes
Interior Cover Tamper Guard	Yes	Yes
Lock/Unlock Status Clutch Position	Yes	Yes
Mechanical Key Override (ATK)	Yes	Yes
Request to Enter	Yes (AD-400 only)	Yes (AD-400 only)
Deadbolt Position	Yes	Yes
Battery Status	Yes	Yes
Communication Status	Yes	Yes
*** Wake-up On Radio Lockdown	Yes (AD-400 only)	Yes AD-400 only)
Lock Functions		
Classroom/Storeroom	Yes	Yes
Office/Toggle	Yes, w/RS485 connection to host	No
Privacy	No	No
Apartment	No	No
Credential Attributes		
Normal Credential	Yes	Yes
Toggle Credential	Yes	No
Pass Thru Credential	Yes	No
Visitor/One Time Use Credential	No	No
Freeze Credential	No	No
Lock Down Credential	Yes	No

NOTE: Shaded boxes indicate features that are only available in the upgraded versions of software: SMS Express v4.0, bright blue® v2.1 and SMS v5.3.5 or higher

* *Larger systems should consider SMS Select for better database manageability.*

** *If enabled, grants access to last 113 unique user IDs, option to expand to 1,000. Or, use facility/site codes instead of user IDs. No events are captured in audit trail when operating in cache mode.*

*** *Wake-up on Radio over PIM400-485 on up to 16 doors requires implementation of specific RSI commands. Also available on PIM400-TD2.*

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PIM400-485

Panel Interface Module For RS-485 Communication

Overview

The PIM400-485 seamlessly integrates to select access control panels via RS-485, eliminating the need for reader interface modules. Each PIM400-485 supports up to 16 wireless access devices such as AD-400/401 locks.

Reliability

Reliable communications result from several technological advances and incorporated features. 900 MHz spread spectrum technology enables high transmission power in a license-free band. Error detection algorithm maintains data integrity on each transmission and redundant transmissions ensure communication success. Periodic "heartbeat" signals provide supervision and assure reliable RF communications are maintained. Lastly, Dynamic Channel Switching (DCS) can be enabled to overcome harsh RF environments by automatically changing channels to avoid potential interference.

Security

Used extensively by government and military organizations, spread spectrum technology provides significant security advantages over conventional transmission methods. Wireless access devices utilize spread spectrum transmissions, which are encrypted with AES 128-bit keys, to yield a system that is virtually uncompromisable. In addition, scalability is virtually unlimited as each AD-Series wireless access module has nearly a million addresses to choose from during the linking process.

Centralized Lock/Unlock Command in 10 Seconds or Less

Patent-pending Wake-up On Radio (WOR) feature drives communication from the PIM400 to any or all linked wireless devices in 10 seconds or less. This innovative feature works efficiently in parallel with periodic "heartbeat" to maintain up to 2 year battery life on wireless devices such as the AD-400/401 locks. Response rate can be field configured down to 1 second with consideration of battery life. When Wake-up On Radio is used in critical applications Dynamic Channel Switching should also be enabled.

Features and Benefits

- 900 MHz Spread Spectrum RF technology for long range, reliable communications
- Automatic linking to remote wireless access points with 10 channel frequencies to select from enables easy commissioning
- AES-128 bit Encrypted Spread Spectrum transmissions
- 5 visual indicators to quickly pinpoint and display status
- Flash memory for easy firmware upgrades
- Certifications
  - NEMA 1, 4, 4X, 6
  - UL 294
  - FCC Part 15
  - RoHS

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ADDITIONAL FEATURES

Reliable Communications

900 MHz band enables longer transmission ranges. In general, signal propagation with longer wavelengths travel a greater distance and penetrate through, and around objects better than signals with shorter wavelengths.

Online Communications (Heartbeat)

Regular communications between the AD-Series wireless a ccess module and PIM400 monitor transmission presence and integrity. Online communications enable the PIM400 to download information or instructions such as unlock and relock.

Auto Addressing (Linking)

One of the final steps in the installation process is called "linking". Linking ties a specific wireless access module to a selected PIM400 and assigns a unique address. There are over 65,000 unique addresses available per channel, providing nearly a million combinations for virtually unlimited scalability.

Assured Communications

A Packet-Error-Rate-Test (PERT) is performed during linking at reduced power levels to ensure reliable communication during operation.

Encoded Transmissions

Each RF transmission is encrypted with AES-128 bit keys to provide virtually uncompromisable security.

Tamper

The PIM400 cover is monitored by a tamper switch.

Visual Indications

- Power on
- Microprocessor running
- Linking status
- PIM receiving RF data
- PIM transmitting RF data
- PIM receiving RS-485 data
- PIM transmitting RS-485 data
- PIM firmware version
- PIM tamper status

Access Point Status Available Through RS-485 Connection

- Card and Keypad Data
- Door position
- Loss of RF communication
- Request-to-Exit
- Request-to-Enter
- Low battery
- PIM tamper
- Mechanical Key override
- Deadbolt position
- Interior Cover tamper guard
- Lock/Unlock status
- Interior push button

Configurable Items from PIM400-485

- Wake up On Radio (WOR)
- Heartbeat frequency
- Relock parameters
- Card data format conversion
- Extended unlock
- Fail Safe/Fail Secure/Fail As-Is
- Door held pre-alarm
- Cache memory parameters
- Dynamic channel switching (DCS)
- Reader Configuration
- Keypad Configuration
- Inside pushbutton configuration
- User interface configuration

PIM400-485 Specifications	
Frequency Range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
RF Interference Avoidance	Optional Dynamic Channel Switching
Transmission/Encryption	AES-128 bit Key (optional)
Credential Verification Time	< 1 second*
Communication Range	Up to 200 ft (61 m) with obstructions Up to 1000 ft (305 m) clear line of site Up to 2000 ft (609 m) line of site with high gain antenna on PIM400 Up to 4000 ft (1219 m) line of site with high gain antennas on PIM400 and WRI400
Visual/Audible Communications	5 LEDs for Status Indicators
System Interface	RS-485
Power Supply	12 VDC or 24 VDC
Voltage Range	9.5 VDC to 26 VDC
Max Current Requirement	Up to 250 mA
Operating Temperature	-31° to 151°F (-35° to 66°C)
Operating Humidity	0 - 100% condensing
Dimensions (HWD)	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.56 kg)
Cable Specifications	DC Power Input: 18AWG, 2 Conductor (Belden 8760 or equivalent) up to 1000 ft (305 m) PIM400-485 to ACP: 24AWG, 2 or 4 Conductor Shielded (Belden 9842, 9841 or equivalent) up to 4000 ft (1219 m)
Data Rate	RF: 40 kbps; RS-485: 9.6 kbps
Certifications	NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; Canada RSS 210, RoHS

*Dependant on latency time of access control panel.

ORDERING INFORMATION

PIM400-485 – Panel Interface Module with outdoor enclosure standard. Supports up to 16 access points via RS-485 with select brands of access control panels.

Optional Accessories

- **ANT400-REM-I/O** – Omni-directional remote indoor/ outdoor antenna module. Requires available Grounding Kit (MGB+MCA5) for outdoor installations
- **ANT400-REM-I/O+6DB** – Directional, flat panel, remote indoor/ outdoor antenna with 6db of gain. Requires available Grounding Kit (MGB+MCA5) for outdoor installations
- **MGB+MCA5** – Grounding Kit for outdoor installations
- **ANT400-REM-Ceiling** – Omni-directional ceiling mount indoor remote antenna
- **ANT400-REM-Hall** – Bi-directional indoor hall application remote antenna
- **HHD KIT** – Handheld Device with SUS installed and HH-USB cable
- **593PI-12DC** – 12 VDC power supply

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PIM400-TD2

Panel Interface Module Wiegand or Clock & Data Communication

Overview

The PIM400-TD2 seamlessly integrates to virtually any access control panel and their reader interface modules via Wiegand or Clock & Data protocols. Each PIM400-TD2 supports up to two wireless access devices such as AD-400/401 series locks.

Reliability

Reliable communications result from several technological advances and incorporated features. 900 MHz spread spectrum technology enables high transmission power in a license-free band. Error detection algorithm maintains data integrity on each transmission and redundant transmissions ensure communication success. Periodic "heartbeat" signals provide supervision and assure reliable RF communications are maintained. Lastly, Dynamic Channel Switching (DCS) can be enabled to overcome harsh RF environments by automatically changing channels to avoid potential interference.

Security

Used extensively by government and military organizations, spread spectrum technology provides significant security advantages over conventional transmission methods. Wireless access devices utilize spread spectrum transmissions, which are encrypted with AES-128 bit keys, to yield a system that is virtually uncompromisable. In addition, scalability is virtually unlimited as each AD-Series wireless access module has nearly a million addresses to choose from during the linking process.

Centralized Lock/Unlock Command in 10 Seconds or Less

Patent-pending Wake-up On Radio (WOR) feature drives communication from the PIM400 to any or all linked wireless devices in 10 seconds or less. This innovative feature works efficiently in parallel with periodic "heartbeat" to maintain up to 2 year battery life on wireless devices such as the AD-400/401 locks. Response rate can be field configured down to 1 second with consideration of battery life. When Wake-up On Radio is used in critical applications Dynamic Channel Switching should also be enabled.

Features and Benefits

- 900 MHz spread spectrum RF technology for long range, reliable communications
- Supports up to two AD-Series wireless devices
- Automatic linking to remote wireless access points with 10 channel frequencies to select from enables easy commissioning
- AES-128 bit encrypted spread spectrum transmissions
- 13 visual indicators to quickly verify operation and troubleshoot
- Flash memory for easy software upgrades
- Certifications:
  - NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; RoHS

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ADDITIONAL FEATURES

Reliable Communications
900 MHz band enables longer transmission ranges. In general, signal propagation with longer wavelengths travel a greater distance and penetrate through, and around objects better than signals with shorter wavelengths.

Online Communications (Heartbeat)
Regular communications between the AD-Series wireless access module and PIM400 monitor transmission presence and integrity. Online communications enable the PIM400 to download information or instructions such as unlock and relock.

Auto Addressing (Linking)
One of the final steps in the installation process is called "linking". Linking ties a specific wireless access module to a selected PIM400 and assigns a unique address. There are over 65,000 unique addresses available per channel, providing nearly a million combinations for virtually unlimited scalability.

Assured Communications
A Packet-Error-Rate-Test (PERT) is performed during linking at reduced power levels to ensure reliable communication during operation.

Encoded Transmissions
Each RF transmission is encrypted with AES-128 bit keys to provide virtually uncompromisable security.

Tamper
The PIM400 cover is monitored by a tamper switch.

Visual LED Indications
- Power on
- Microprocessor running
- Linking status to WAPM
- PIM transmitting RF data
- PIM receiving RF data
- PIM receiving data
- PIM transmitting data
- Door Position
- PIM tamper status
- PIM firmware version
- Wiegand and Clock & Data Status 1 & 2
- Door Status 1 & 2
- Trouble 1 & 2

Standard Open Collector Contacts
- Configurable for Normally Open or Normally Closed
- Door Position
- Request-to-Exit
- Request-to-Enter
- Trouble

Optional Relay Board (RLBD) to achieve Dry Contact
- Configurable for Normally Open or Normally Closed
- Door Position
- Request-to-Exit
- Request-to- Enter
- Trouble

Access Point Status Available Through PIM400-TD2
- Wiegand or Magnetic Stripe Card Data
- Door Position
- Request-to-Exit
- Request-to-Enter (optional)
- Trouble
  - loss of RF communication
  - low battery
  - PIM tamper
  - reader tamper

Configurable Items from PIM400-TD2
- Wake up On Radio (WOR)
- Heartbeat frequency
- Relock parameters
- Card data format conversion
- Extended unlock
- Fail Safe/Fail Secure/Fail As-Is
- Door held pre-alarm
- Cache memory parameters
- Dynamic channel switching (DCS)
- Reader Configuration
- Keypad Configuration
- User interface configuration

PIM400-TD2 Specifications	
Frequency Range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
RF Interference Avoidance	Optional Dynamic Channel Switching
Transmission/Encryption	AES-128 bit Key (optional)
Credential Verification Time	< 1 second*
Communication Range	Up to 200 ft (61 m) with obstructions Up to 1000 ft (305 m) clear line of site Up to 2000 ft (609 m) line of site with high gain antenna on PIM400 Up to 4000 ft (1219 m) line of site with high gain antennas on PIM400 and WRI400
Visual/Audible Communications	13 LEDs for Status Indicators
System Interface	Wiegand (data1/data0) or Magnetic Stripe (Clock & Data)
Power Supply	12 VDC or 24 VDC
Voltage Range	9.5 VDC to 26 VDC
Max Current Requirement	Up to 250 mA
Operating Temperature	-31° to 151°F (-35° to 66°C)
Operating Humidity	0 - 100% condensing
Dimensions (HWD)	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.56 kg)
Cable Specifications	DC Power Input: 18AWG, 2 Conductor (Belden 8760 or equivalent) up to 1000 ft (303 m) PIM400-TD2 to ACP: 22AWG, 8 Conductor Shielded (Alpha 1298C or equivalent) up to 500 ft (152 m)
Data Rate	RF: 40 kbps
Certifications	NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; RoHS

*Dependant on latency time of access control panel.

ORDERING INFORMATION

PIM400-TD2 – Panel Interface Module with outdoor enclosure standard. Supports up to two access points via Wiegand or Clock & Data with virtually any access control panel.

Optional Accessories

- **ANT400-REM-I/O** – Omni-directional remote indoor/ outdoor antenna module. Requires available Grounding Kit (MGB+MCA5) for outdoor installations
- **ANT400-REM-I/O+6DB** – Directional, flat panel, remote indoor/outdoor antenna with 6db of gain. Requires available Grounding Kit (MGB+MCA5) for outdoor installations
- **MGB+MCA5** – Grounding Kit for outdoor installations
- **ANT400-REM-Ceiling** – Omni-directional ceiling mount indoor remote antenna
- **ANT400-REM-Hall** – Bi-directional indoor hall application remote antenna
- **HHD KIT** – Handheld Device with SUS installed and HH-USB cable
- **593PI-12DC** – 12 VDC power supply

Available through one of our GSA Schedule 84 approved distributors

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TK400

AD-Series Wireless Test Kit

Overview

The Schlage AD-Series TK400 wireless test kit can help you evaluate system design on new AD-400 wireless networked systems prior to installation. The TK400 can also be used to diagnose communication strength on existing AD-400 wireless applications. AD-400 locks and devices including the Wireless Reader Interface (WRI400), Wireless Portable Reader (WPR400) and Wireless Status Monitor (WSM400) communicate via 900 MHz frequency to the Panel Interface Module (PIM400); the PIM400 is required for communication between the AD-400 devices and the access control panel.

The TK400 wireless test kit contains a wireless portable signal tester (WPR400-DT), a panel interface module (PIM400-TD2), a PIM400 power supply, rechargeable batteries, charger and a convenient carrying case. The WPR400-DT operates on rechargeable batteries making it economical and easy to use on job sites.

The wireless portable signal tester (WPR400-DT) is used to communicate to the PIM400 as an access control module. LED lights provide intuitive feedback about the quality of the signal.

The communication range of the AD-400 to the PIM400 is up to 200 ft with normal building construction and up to 1000 ft with clear line of site. The TK400 can be used to determine the proper location of each panel interface module to optimize system design. When installed properly, an AD-400 wireless solution is an extremely reliable and cost effective alternative to a hard-wired networked system.

Features and Benefits

- Allows you to test the range of 900 MHz signals between AD-400 devices and PIM400 to ensure proper location prior to installation of complete system.
- Can be used to test existing installations for signal strength
- LED light feedback for signal strength communication; green for strong connection, red for weak connection
- Kit Comes Complete with:
  - Wireless Portable Signal Tester (WPR400-DT)
  - Panel Interface Module (PIM400-TD2)
  - Power Supply for PIM400-TD2
  - Rechargeable Batteries
  - Battery Charger
  - Carrying Case
- WPR400-DT Certifications: FCC Part 15, Canada RSS 210, RoHS
- PIM400-TD2 Certifications: NEMA 1, 4, 4X, 6; UL 294, FCC Part 15, Canada RSS 210. RoHS

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Wireless Portable Signal Tester	
Frequency Range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Communication	Up to 200 ft w/ obstructions (normal building); up to 1000 ft clear line of site
Operating Temperature	0°C (32°F) to 49°C (120°F)
Humidity	0% to 100% condensing
Battery Type	Removable, NiMH
Battery Recharge Time	4-6 hours
Dimensions (HWD)	2.375″ x 5.0″ x 6.25″ (6.03 cm x 12.7 cm 15.88 cm)
Weight	1.5 lb (0.68 kg)
Certifications	• FCC Part 15 • Canada RSS 210 • RoHS

Visual LED Indications

- Wireless Signal Quality
- Low Battery
- Battery Charge Complete

PIM400-TD2	
Frequency Range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Communication	Up to 200 ft w/ obstructions (normal building); up to 1000 ft clear line of site
Operating Temperature	-31° to 151°F (-35° to 66°C)
Humidity	0% to 100% condensing
Power Supply	12 VDC or 24VDC (12 VDC power supply included)
Dimensions (HWD)	7.1″ x 7.1″ x 3.0″ (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.56 kg)
Certifications	• NEMA 1, 4, 4X, 6 • UL 294 • FCC Part 15 • Canada RSS 210 • RoHS

Visual LED Indications

- Power On
- Linking Status to AD-400 Devices
- PIM Transmitting/Receiving RF Data

Available through one of our GSA Schedule 84 approved distributors

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WPR400

AD-Series Wireless Portable Reader

Overview

The Schlage AD-Series Wireless Portable Reader (WPR400) was designed to extend a facility's access control to remote locations, at a moment's notice.

The WPR400 is a portable device that utilizes the same credential reader module as an AD-Series electronic lock. The WPR400 can be held by hand or placed in a convenient temporary location to allow for credential verification. Whether it is at a temporary check point or bus load registration, the WPR400 will provide simple, intuitive feedback to the user if the credential being presented is valid or invalid via real time connectivity to the access control system.

The WPR400, as well as other AD-400 locks and devices, communicate via 900 MHz frequency to the Panel Interface Module (PIM400); the PIM400 is required for communication between the AD-400 devices and the access control panel .

The WPR400 was designed to be intuitive to use and easy to set-up, which is critical in situations where there is a need for remote credential verification. At power-on and within range, the WPR400 is ready to accept its first credential within moments of powering up and reconnecting to the previously paired PIM400. After the credential has been authenticated by the access control system, the WPR400 provides intuitive LED light feedback.

The WPR400 also has the ability to be configured to Cache Mode. When enabled, the WPR400 keeps a local database of valid access grants. Upon moving the WPR400 to an offline location away from the PIM400, credentials can be verified for the last 1,000 valid users.

Finally, the WPR400 can be manually configured to operate as a wireless portable tester. In Wireless Test Mode, the device can be used to evaluate the location of PIM400s and AD-400 devices within a specific environment, or the existing reader module can remain installed on the WPR400.

Features and Benefits

- Fully compatible with Schlage AD-Series Credential Reader Modules & Panel Interface Modules
- Reader options include multi-technology (reads both 13.56 MHz smart card and 125 kHz proximity, magnetic stripe and keypad
- WPR401 with FIPS 201-1 compliant multi-technology reader is available and must be ordered as a complete unit
- Card reader options available with keypad for multi-factor authentication
- Rechargeable battery and charger (included)
- Cache Mode option for offline applications
- Field configurable to work as a Wireless Portable Signal Tester
- Configured with Schlage Hand Held Device (HHD)
- LED indicators communicate valid (green) and invalid (red) credential status
- Communicates to access control system via PIM400
- FCC Part 15, Canada RSS 210, RoHS

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Reliability

Secure and reliable wireless communication with the Panel Interface Module (PIM400) is accomplished using 900 MHz frequency. 900 MHz band enables longer transmission ranges because signal propagation with longer wavelengths travels a greater distance and better penetrates typical building construction – allowing for simplified system design.

Panel Interface Module (PIM400)

The PIM400 (sold separately) is required for communication between the WPR400/401 and the access control panel, and can support up to 16 AD-400 devices depending on your access control system.

Included with WPR400

- AD-Series Credential Reader Module Specified at Ordering
- WPR400/TK400 Battery Charger

Modes of Operation

- Reader Mode (default)
- Wireless Test Mode (field configurable)

Wireless Portable Reader Specifications	
Modulation / Encryption	900 MHz spread spectrum, direct sequence, 10 channels, AES-128 bit Key
Frequency Range	902-928 MHz
Credential Verification Time*	< 1 second*
Communication Range	Up to 200 ft w/ obstructions (normal building); up to 1000 ft clear line of site
RF Interference Avoidance	Configurable Dynamic Channel Switching
Data Rate	40 kbps
Operating Temperature	0ºC (32ºF) to 49ºC (120ºF)
Humidity	0% to 100% condensing
Battery Type	Rechargeable, Removable, NiMH
Battery Life (fully charged)	100,000 card reads or PIN codes
Battery Recharge Time	4-6 hours
Dimensions – (HWD, less reader)	3.375″ x 5.0″ x 6.25″ (8.57 cm x 12.7 cm 15.88 cm)
Weight – (less reader)	1.5 lb (0.68 kg)
Certifications	FCC Part 15, Canada RSS 210, RoHS
Additional Accessories	Panel Interface Module (PIM400), Handheld Device (HHD)

**WPR requires less than 100 msec, response time does not include latency time of ACP.*

Available AD-Series Reader Modules

Multi-Technology
- Proximity
- Smart Card

+ KEYPAD

FIPS 201-1 Compliant Multi-Technology
- Proximity
- Smart Card

+ KEYPAD

Multi-Technology
- Proximity
- Smart Card

Magnetic Stripe

+ KEYPAD

Magnetic Stripe

Magnetic Stripe (Swipe)

Magnetic Stripe (Swipe)

+ KEYPAD

Keypad

Dummy Trim Reader Module also available. Please see AD-Series Data sheets for more details on credential reader modules.

ORDERING INFORMATION:

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WRI400
Wireless Reader Interface

Overview

The WRI400 is a networked access point controller designed to provide wireless connectivity to traditional electronic access control components including credential readers, door position and request to exit switches.

The WRI400 wireless reader interface provides local termination points for your wall or mullion mounted reader, door position switch, request to exit (RX) and reader tamper. The WRI400 communicates data via 900 MHz back to either a PIM400-485 or PIM400-TD2 which are hardwired to the Access Control Panel (ACP) where all access and specific reporting decisions are made and recorded.

The WRI400 is designed to be compatible with most of the popular Wiegand or Clock and Data format readers that exist in the market today. Utilizing the two Form C relays on board expands the capability at the door to control electronic locking hardware as well as other devices such as automatic operators.

The WRI400 allows you to extend the reach of your access control system to openings that are hard to reach with network wiring. Ideal applications include remote doors, historic buildings, gates and elevators. Since the WRI400 is built on an open architecture platform it is designed for seamless integration with most access control systems.

Features and Benefits

Visual LED Indications
- WRI400 cover is monitored by a tamper switch

Encryption
- Each RF transmission is encrypted with AES-128 bit keys

Reader Interfaces Support
- Wiegand (data1/data0) up to 255bits
- Magnetic Stripe (clock & data) up to 255bits

Form C Relay Outputs
- Strike Relay
- Auxiliary Output Relay

Signal Inputs
- Request-to-Enter
- Request-to-Exit
- Door Position Switch
- Reader Tamper 1
- Reader Tamper 2

Certification:
- NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; Canada RSS 210, RoHS

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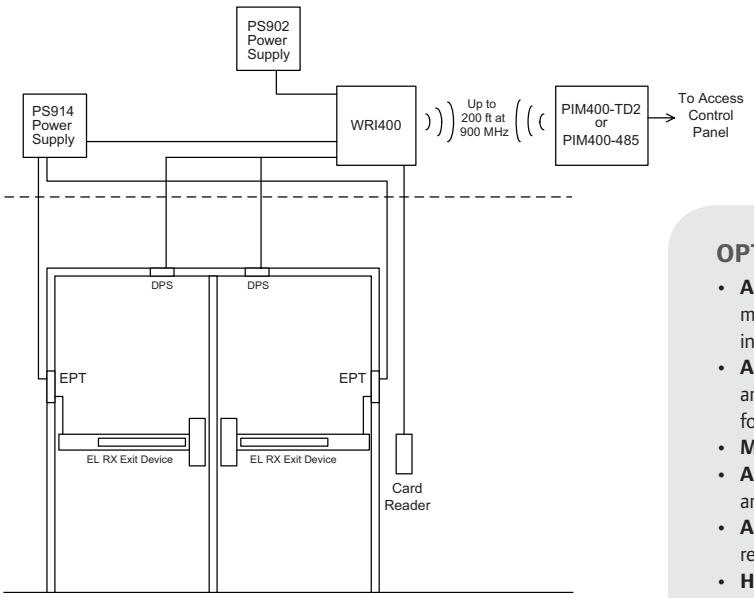
WRI400 Specifications		
Frequency Range		902-928 MHz
Modulation		900 MHz spread spectrum, direct sequence, 10 channels
RF Interference Avoidance		Optional Dynamic Channel Switching
Transmission/encryption		AES-128 bit Key
Data rate		RF: 40 kbps
Credential Verification time		< 1 second*
Communication range		Up to 200 ft (61 m) with obstructions; Up to 1000 ft (305 m) clear line of site (See ANT400-REM data sheet for increasing distance)
Power Supply Requirements		12 VDC or 24 VDC; 500 mA maximum current
Connector Cable Specifications	**DC Power Input**	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 1000 ft (305 m)
	Credential Readers (x2)	Data Signals: 22AWG, 6 Conductor (Alpha 1296C or equivalent) up to 500 feet (152 meters) Reader Tamper Signals: 18AWG, Twisted Pair Shielded (Beldon 8760 or equivalent) up to up to 500 feet (152 meters)
	Strike/Aux Relay Outputs	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
	Request-to-Enter & -Exit Inputs	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
Relay Output Tolerances	**Strike Output Relay**	Form C Relay; 6 Amps at 24 VDC or 6 Amps at 120 VAC or 3 Amps at 240 VAC
	Auxiliary Output Relay	Form C Relay; 2 Amps at 24 VDC or 0.5 Amps at 120 VAC
Operating Temperature		-31°F (-35°C) to 151°F (66°C)
Operating Humidity		0 - 100% condensing
Dimensions (HWD)		10.43" x 7.28" x 3.79" (26.49 cm x 18.49 cm x 9.63 cm)
Certifications		NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; Canada RSS 210, RoHS

Remote Door Application

For hard to reach openings, the WRI400 can extend your access control system saving you time and money by reducing wiring to the door from the panel.



ADDITIONAL FEATURES

Reliable Communications
900 MHz band enables longer transmission ranges. In general, signal propagation with longer wavelengths travel a greater distance and penetrate through, and around objects better than signals with shorter wavelengths.

Online Communications (Heartbeat)
Regular communications between the WRI400 and PIM400 monitor transmission presence and integrity. Online communications enable the WRI400 to download information or instructions such as unlock and relock.

OPTIONAL ACCESSORIES

- **ANT400-REM-I/O** – Omni-directional remote indoor/ outdoor antenna module. Requires available Grounding Kit (MGB+MCA5) for outdoor installations
- **ANT400-REM-I/O+6DB** – Directional, flat panel, remote indoor/outdoor antenna with 6db of gain. Requires available Grounding Kit (MGB+MCA5) for outdoor installations
- **MGB+MCA5** – Grounding Kit for outdoor installations
- **ANT400-REM-Ceiling** – Omni-directional ceiling mount indoor remote antenna
- **ANT400-REM-Hall** – Bi-directional indoor hall application remote antenna
- **HHD KIT** – Handheld Device with SUS installed and HH-USB cable
- **593PI-12DC** – 12 VDC power supply

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SCHLAGE

Networked Locking Solutions
Wireless Gate & Elevator Control Kits

GCK400 & ECK400

Wireless Gate Control Kits and Elevator Control Kits

Overview

The gate control kit (GCK400) and the elevator control kit (ECK400) complement and expand the AD-Series platform by bringing wireless access control to applications that are difficult to reach with a traditional wired approach.

The GCK400 and the ECK400 are kits comprised of the wireless reader interface (WRI400), the panel interface module (PIM400-TD2) a remote antenna (ANT-REM I/O) and a power supply (593PI-12DC). The GCK400 kit also includes an antenna grounding kit (MGB+MCA5).

The wireless reader interface (WRI400) is compatible with most popular Wiegand or Clock & Data format credential readers on the market today. The WRI400 communicates via 900MHz to the PIM400-TD2 within a range of up to 1000 feet with a clear line of site. The PIM400-TD2 is hardwired to the access control panel where decisions are validated and recorded.

The GCK400 kit eliminates the need for trenching in gate applications, driving a significant reduction of installation time and cost. The gate kit is ideal for parking lots, airports, military bases and garages. Roadways, parking lots and landscape are left intact since the need to run wires underground is eliminated.

The ECK400 eliminates the need for traveling cables to elevators applications simplifying installation. Access control can be applied to elevators at a much faster rate, reducing downtime and disruption within the facility.

Features and Benefits

- Real time access control
- Reduced installation time
- Eliminates trenching to gates
- Eliminates traveling cables in elevators
- 2 reader inputs
- Supports all Wiegand (data1/data0) and magnetic stripe (clock/data) reader technologies

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GCK400 Contents	
Qty	**Description**
1	ANT400-REM-I/O
1	WRI400
1	PIM400-TD2
1	593PI-12
1	MGB-MCA5

ECK400 Contents	
Qty	**Description**
1	ANT400-REM-I/O
1	WRI400
1	PIM400-TD2
1	593PI-12

PIM400 - TD2 Specification	
Frequescy Range	902 - 928 MHz
Transmission / Encryption	AES - 128 Bit (optional)
Communication Range	Up to 200ft (61m) with obstructions
	Up to 1000ft (305m) clear line of site
	Up to 2000ft (609m) line of site with high gain antenna on PIM400
	Up to 4000ft (1219m) line of site with high gain antennas on PIM400 and WRI400
Dimensions (HWD)	7.1" X 7.1" X 3.0" (18.0 cm X 18.0 cm X 7.6 cm)

WRI400 Specification	
Frequency Range	902 - 928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
RF Interference Avoidance	Optional Dynamic Channel Switching
Data Rate	RF: 40 kbps
Power Supply Requirements	12 VDC or 24 VDC
Dimensions (HWD)	10.43" X 7.28" X 3.79" (26.49cm X 18.49cm X 9.63cm)
Operating Temperatures	- 31°F (-35°C) to 151°F (66°C)
Strike Output Relay	Form C Relay: 6 Amps at 24 VDC or 6 Amps at 120 VAC or 3 Amps at 240 VAC
Auxillary Output Relay	Form C Relay: 2 Amps at 24 VDC or 0.5 Amps at 120 VAC
Dimensions (Overall):	8.7in x 6.94in x 4.5in (220mm x 176mm x 140mm)
Weight	4.2 oz. (120 grams)

ORDERING INFORMATION

GCK400 Wireless Gate Control Kit

ECK400 Wireless Elevator Control Kit

OPTIONAL ACCESSORIES

ANT400 Hall - Bi-directional indoor antenna ceiling mount

ANT400 –REM – I/O + 6 DB - Directional, flat panel remote indoor/outdoor antenna with 6 DB gain.

MGB + MCA5 - Antenna Grounding Kit for Outdoor Applications

ANT400 – REM-I/O - Omni directional, Flat Panel, Remote Indoor/Outdoor Antenna with Adjustable Mount

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ANT400-REM

AD-Series Remote Antennas for Wireless System

Note: Images not to scale

Overview

The Schlage ANT400-REM optional remote antennas are designed for use with the AD-400 Series devices. They increase installation flexibility of wireless products, extend the range of wireless communication in certain directions and expand the range of applications of AD-Series solution.

A remote antenna is used to improve signal communication strength for wireless communications through an obstruction. A typical application would be when a remote device down a hallway requires a few extra feet of signal strength to reach the PIM400 which is sometimes located around a corner or behind a wire mesh or thick brick construction material.

When increased wireless communication range is required, the ANT400-REM-I/O+6dB model can up to double the range in the line of sight that it is aimed. This "gain antenna" increases the signal strength by focusing the energy a single direction instead of broadcasting in all directions.

AD-Series Remote Antennas are important components to environments with limited installation flexibility. The connected PIM400 can be up to 15ft away from the remote antenna via the included coaxial cable. The outdoor rated antennas create new applications that allow a PIM400 to communicate to external remote access points such as gates or remote buildings without the need to trench cables.

Features and Benefits

- Use with PIM400, WRI400 and WSM400
- Increase installation flexibility
- Optimize installation location
- Extend communication range with high-gain antenna
- Directional, bi-directional or omni-directional
- Indoor and Outdoor options

Included In:

- ECK400 Wireless Elevator Kit
- GCK400 Wireless Gate Control Kit

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Remote Antenna Models

Model			Description
ANT400-REM-I/O	**Type**	Omni-directional, unity gain	**Intended Use:** An omni-directional flat-panel antenna for use with indoor or outdoor applications. To be mounted vertically on a wall or post. **Included:** antenna, 15ft coax cable, coax whip, articulated wall/post mounting bracket. *Requires Grounding Kit (MGB+MCA5) for outdoor installations.*
	Communication Range Extension	15ft due to cable length	
	Location	Indoor/Outdoor	
	Dimensions (HxWxD):	9.1″ x 8.4″ x 1.2″	
	Weight:	0.5kg	
	Temperature Range:	-40º C to +65ºC(-40ºF to +150ºF)	
ANT400-REM-I/O+6dB	**Type**	Directional, high gain	**Intended Use:** A high gain, directional flat-panel antenna for use with indoor or outdoor applications. To be mounted vertically on a wall or post. **Included:** antenna, 15ft coax cable, coax whip, articulated wall/post mounting bracket. *Requires Grounding Kit (MGB+MCA5) for outdoor installations.*
	Range Extension	Up to x2 the original range without antenna (single direction), plus 15ft due to cable length	
	Location	Indoor/Outdoor	
	Dimensions (HxWxD):	9.1″ x 8.4″ x 1.2″	
	Weight:	0.5kg	
	Temperature Range:	-40º C to +65ºC(-40ºF to +150ºF)	
ANT400-REM-CEILING	**Type**	Omni-directional, unity gain	**Intended Use:** An omni-directional antenna for use with indoor applications. To be mounted horizontally on ceiling. **Included:** antenna, 15ft coax cable, and coax whip.
	Communication Range Extension	15ft due to cable length	
	Location	Indoor	
	Dimensions (HxWxD):	3.5″(height) x 8.1″(diameter)	
	Weight:	0.22kg	
	Temperature Range:	-40º C to +65ºC(-40ºF to +150ºF)	
ANT400-REM-HALL	**Type**	Bi-directional, unity gain	**Intended Use:** An bi-directional antenna for use with indoor applications. To be mounted on wall or ceiling. **Included:** antenna, 15ft coax cable, and coax whip.
	Communication Range Extension	15ft due to cable length	
	Location	Indoor	
	Dimensions (HxWxD):	7.2″ x 3.9″ x 4.9″	
	Weight:	0.24kg	
	Temperature Range:	-10º C to + 65ºC (14º F to + 150º F)	

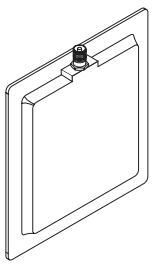
ACCESSORIES

MGB+MCA5 Grounding Kit

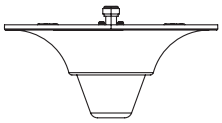
- The National Electrical Code (NEC) requires that any outdoor antenna be properly grounded.
- The Schlage remote antenna grounding kit is compatible with all models of remote antenna.

CERTIFICATION

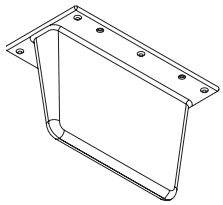
- FCC Part 15



ANT400-REM-IO
ANT400-REM-IO+6db



ANT400-REM-CEILING



ANT400-REM-HALL

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Note: These are the only remote antennas that have been approved by FCC for use with Ingersoll Rand AD-Series 900MHz Communication Modules. Any other antenna with an Ingersoll Rand AD-Series 900MHz Communication Modules would be in violation of FCC regulation.

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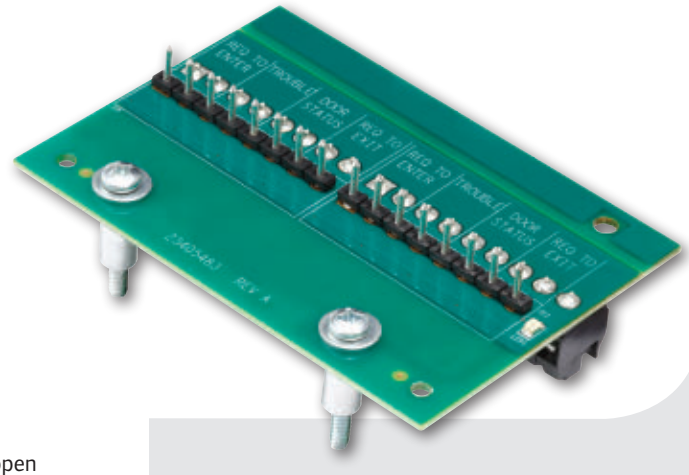
RLBD

AD-Series Dry Contact Relay Board



Overview

The Schlage AD-Series Relay Board (RLBD) supports the open architecture of AD-Series by building a bridge between Schlage technology and third party access control systems that use mechanical, relay-based communication.

The RLBD relay board is used to extend the existing access point status signals on PIM400-TD2 (for AD-400 applications) or PIB300-2D (for AD-300 applications) devices for each access point controlled by the Interface Module.

The optional RLBD relay board removes the need for custom wired relays which can be cumbersome to source, complicated to install, and difficult to troubleshoot. The use of this board over custom wired solutions increases system reliability and reduces installation labor.

The RLBD is not required for integration with Schlage **bright blue**® or other access control systems that use signal based communication such as RS485 & Wiegand.

Note: The RLBD does not use mechanical relays which may have different electrical tolerances. Please consider RLBD electrical specifications when implementing this device with another system.

Features and Benefits

- Use with PIM400-TD2 or PIB300-2D
- Red LED light indicates power status
- Longer cycle lifetime than traditional mechanical-based relay solutions

Access Point Status Signals

- Request-to-Enter
- Request-to-Exit
- Door Position/Status
- Tamper Switch

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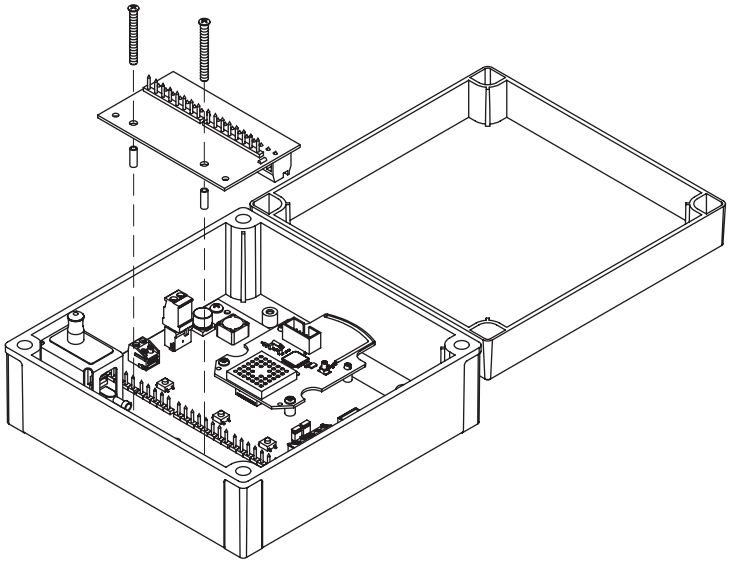
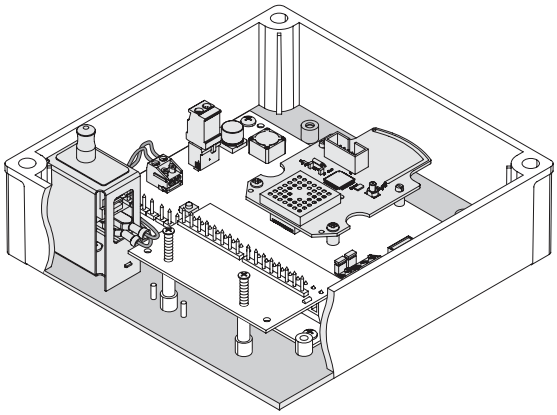
RLBD Specifications	
Voltage Maximum (contact-to-contact)	28V
Input Current Maximum	400mA
"Open" State Resistance	5 mega-ohms
"Closed" State Resistance	2 ohms
Dimensions (HWD)	2.1" x 3.5" x 1.0" (5.33 cm x 8.89cm x 2.54 cm)
Weight	0.125 lb (56.7 g)
Operating Temperature	-31°F to 151°F (-35°C to 66°C)
Operating Humidity	0-100% condensing



Installation of RLBD in a PIM400-TD2



RLBD Installed in PIM400-TD2

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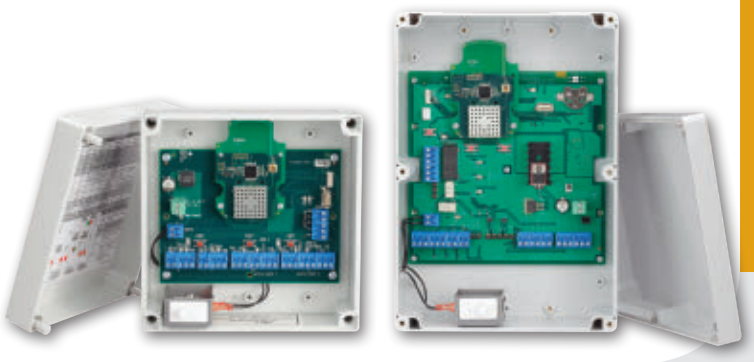
REPTR400
Wireless Repeater Kit



Overview

The Schlage REPTR400 Wireless Repeater Kit is a simple, all in one package solution for access control applications that require an extended wireless range. The Schlage REPTR400 includes an AD-Series Panel Interface Module (PIM400-TD2) and an AD-Series Wireless Reader Interface (WRI400). The PIM400-TD2 interfaces with most access control systems. The WRI400 gathers signals from around the door components and wirelessly transmits them back to the PIM400-TD2.

The REPTR400 extends the wireless range by receiving information on one radio frequency (RF) channel and retransmits it on another RF channel. Each REPTR400 can extend the wireless range of your access control system by up to 200 feet indoors or up to 1000 feet, line of site.

Use of the REPTR400 allows you to extend the reach of your access control system to remote locations without running wires, thus saving you time and money on installation.

For example, the REPTR400 can be used for gate applications. The PIM400 is located inside of a building up to 500 feet from the access control panel. A remote antenna (sold separately) can be wired into the PIM400 and installed on the exterior of the building. The REPTR400 can be installed at the gate up to 1000 feet away with a clear line of site, connecting the card reader and locking hardware to the WRI400. This solution eliminates the need for considerable trenching and the installation of an access control system at the gate location, while giving the access control system real-time information at the remote gate.

Features and Benefits

- Convenient kit includes the WRI400 & PIM400-TD2
- Extends the reach of your access control system to remote locations without running wires

WRI400

- 2 form C relay outputs –strike & auxiliary
- Each RF transmission is encrypted with AES-128 bit keys
- Reader Interfaces Support– Wiegand (data1/data0) up to 255bits & Magnetic Stripe (clock & data) up to 255bits
- UL 294 certified

PIM400-TD2

- 900 MHz spread spectrum RF technology for long range, reliable communications
- Supports up to two AD-Series wireless devices
- Automatic linking to remote wireless access points with 10 channel frequencies to select from enables easy commissioning
- AES-128 bit encrypted spread spectrum transmissions
- UL 294 certified

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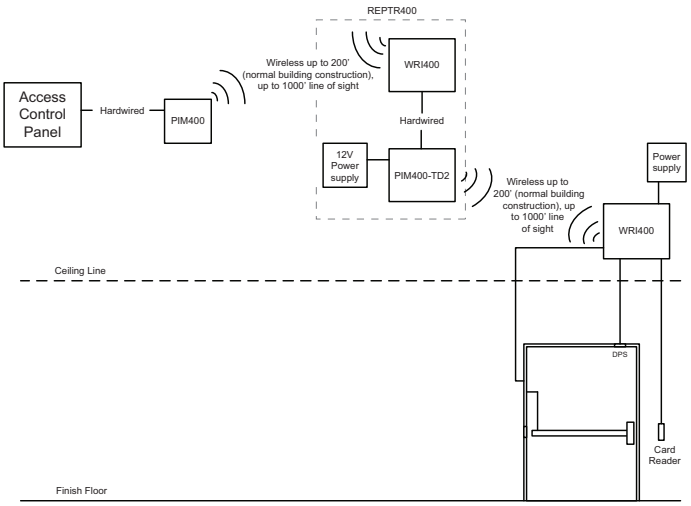

Note: There are many other applications that use different wireless access points; this is one example of how a REPTR400 can be used.

PIM400-TD2 Specifications

Frequency Range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Communication	Up to 200 ft w/ obstructions (normal building); up to 1000 ft clear line of site
Operating Temperature	-31° to 151°F (-35° to 66°C)
Humidity	0 - 100% condensing
Power Supply	12 VDC or 24VDC (12 VDC power supply included)
Dimensions (HWD)	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.56 kg)
Certifications	• NEMA 1, 4, 4X, 6 • UL 294 • FCC Part 15 • Canada RSS 210 • RoHS

WRI400 Specifications

Frequency Range		902-928 MHz
Modulation		900 MHz spread spectrum, direct sequence, 10 channels
RF Interference Avoidance		Optional Dynamic Channel Switching
Transmission/encryption		AES-128 bit Key (optional)
Data rate		RF: 40 kbps
Credential Verification time		< 1 second*
Communication range		Up to 200 ft (61 m) with obstructions Up to 1000 ft (305 m) clear line of site (See ANT400-REM data sheet for increasing distance)
Power Supply Requirements		12 VDC or 24 VDC; 500 mA maximum current
Connector Cable Specifications	**DC Power Input**	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 1000 ft (305 m)
	Credential Readers (x2)	Data Signals: 22AWG, 6 Conductor (Alpha 1296C or equivalent) up to 500 feet (152 meters) Reader Tamper Signals: 18AWG, Twisted Pair Shielded (Beldon 8760 or equivalent) up to up to 500 feet (152 meters)
	Strike/Aux Relay Outputs	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
	Request-to-Enter & -Exit Inputs	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
Relay Output Tolerances	**Strike Output Relay**	Form C Relay; 6 Amps at 24 VDC or 6 Amps at 120 VAC or 3 Amps at 240 VAC
	Auxiliary Output Relay	Form C Relay; 2 Amps at 24 VDC or 0.5 Amps at 120 VAC
Operating Temperature		-31ºF (-35ºC) to 151ºF (66ºC)
Operating Humidity		0 - 100% condensing
Dimensions (HWD)		10.43" x 7.28" x 3.79" (26.49 cm x 18.49 cm x 9.63 cm)
Certifications		NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; Canada RSS 210, RoHS

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Schlage Utility Software (SUS)
on the Handheld Device (HHD)

Overview

Schlage Utility Software (SUS) is designed specifically for use on the Handheld Device (HHD) as the link between your access control management software and Schlage electronic offline and networked locks and accessories.

This solution consolidates and simplifies programming and managing your access control system. The SUS and HHD is used to initialize, configure and test product operation, and also provides an easy way to manage people, audits, locks and other network panel interface devices for simple access control. The intuitive screen layout for the SUS provides easy navigation during use.

For offline products the SUS is utilized to transfer access control data, such as authorized user lists, via the HHD to the locks. The SUS is also utilized to download audit trail information from offline devices to the HHD and then transfer that data to the access control management software.

In addition the SUS can configure other networked electronic devices (including PIM and PIB) and update firmware revision updates to the devices as desired.

The HHD connects with Schlage AD-Series electronic locks and accessories via a USB interface and utilizes Active Synch or Win Mobile Device Manager to communicate with your PC via the USB port. The HHD is also able to connect to the SPED, KC2, CM, CL, CT500, CT1000, CL Controller and WA-Series PIMs via a serial cable connection.

Features and Benefits

- Handheld Device with Schlage Utility Software installed
- Touch Screen operation
- Initialize Lock and Accessories with SUS
- Configure and Test Devices

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FEATURES AND SPECIFICATIONS

Schlage Utility Software

- Initialize Lock and Accessories
- Field Configure Devices
  - Credential Reader Formats
  - Lock Function
  - Unlock Period
  - Failure Mode
  - Audible Alarm ON/OFF
- Offline Devices
  - Manage up to 100 unique door files
  - Retrieve Audit trails from up to 100 devices
- Networked Devices
  - Communication Settings
  - Validate Status Monitor
- Service & Diagnostics
  - Battery Status
  - Validate hardware and software revision
  - Troubleshooting Status Signals
  - Firmware Upgrades

HHD Specifications

- 3.5 in LCD display
- Touch Screen with Backlit Keypad
- 32-bit processor
- Operating System: Windows Mobile 5.0
- Memory: 128 MB RAM / 256 MB ROM
- Battery: Rechargeable 3.7 V, 1,230mAH, Li-ion
- Dimensions (HWD): 5.3″ X 2.9″ X 0.7″ (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

How-To-Videos

- Specially formatted How-To-Videos for the HHD are available
- They can be downloaded from www.schlage.com/support
- If additional storage is needed, a standard mini SD memory card can be used
- Videos should be saved on the SD card or in a new folder on the device rather than in the shared sync folder or root directory

HHD Compatible Devices and Required Cable and Adaptors

Devices	Cable and Adaptors
AD-Series and CO-Series Locks PIM400, WRI400, ECK400, GCK400, WPR400, TK400 and CT5000 controller	HH-USB (included in HHD-Kit)
BE367, KC-2, CM, CL, CT500, CT1000, CL-Controller	HH-Serial + CIP
WA-Series PIM	HH-Serial + PIMWA-CV

ORDERING INFORMATION

HHD KIT – Handheld Device with SUS installed and HH-USB cable

HH-USB – USB Cable

HH-SERIAL – Serial Cable used to connect HHD to CIP

PIMWA-CV – Converter used to connect HH-SERIAL to WA-Series PIM

P512112 – CIP, utilized with HH-SERIAL to connect to CM, CL and KC-2 locks

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Standalone Locking

This section of the Electronic Access Control catalog covers standalone locks, controllers and accessories including the AD-Series, CO-Series and CT5000.

Overview

Standalone access control solutions provide added security, convenience and efficiency for openings that do not require real-time monitoring. They allow you to reduce rekeying costs by issuing electronic credentials which can easily be added or deleted at any time. Audit trails tell you who requested access and when. You can also save time and money by setting automatic lock and unlock schedules for specific time zones and holidays.

Schlage AD-Series and CO-Series are the first electronic locks to achieve UL 294 certification which is the standard for safety of access control units. Both models feature a robust integrated design which incorporates many of the components typically found around the door including the lockset, credential reader and door position switch. They also offer a choice of chassis, credential reader, lever and finish options to meet the needs of a variety of applications and facilities.

The AD-Series:

Features

The AD-Series is a flexible, adaptable and scalable solution that provides you with an extended breadth of options as well as a migration path to future technologies. It is ideal for applications with more advanced security needs.

Two different classifications are offered in the AD-Series for standalone applications. The AD-200 is a computer managed system where user access rights are stored in the lock. Modifications to user access privileges as well as audits are transferred between the access control software and the lock with the handheld programming device (HHD).

The AD-250 is a computer managed system where user access rights are stored on magnetic stripe cards. The AD-250 is often used in campus-like environments with a large number of users and offline openings.

The AD-Series offers keypad, magnetic stripe, and multi-technology readers (reads both 125 kHz proximity and 13.56 MHz smart). All AD-Series card readers are all available with dual authentication for added security (card + PIN).

Benefits

The AD-Series can be customized to meet the specific needs of each opening in a facility with a wide variety of factory orderable and field configurable options. The innovative modular design of the AD-Series allows you to upgrade from standalone to networked if your needs change in the future. The AD-Series also allows you to upgrade credential readers, for example, from magnetic stripe to multi-technology.

Options*

The AD-Series has several options to choose from including:

Class: AD-200, AD-250 (For AD-300 and AD-400 Networked Options, see the Networked Locking Introduction pages of this catalog)

Chassis: Cylindrical, Mortise, Mortise Deadbolt, Exit Trim

Function*: Classroom/Storeroom, Office, Privacy, and Apartment

Readers*: Keypad, magnetic stripe and multi-technology readers (reads both 125 kHz proximity and 13.56 MHz smart). All card readers are available with + PIN option for added security.

Lever Style: Sparta, Rhodes, Athens, Tubular (Tactile warning available)

Finishes: 626 Satin Chrome, 605 Bright Brass, 606 Satin Brass, 612 Satin Bronze, 619 Satin Nickel, 625 Bright Chrome, 643e Aged Bronze, 626AM Satin Chrome with Antimicrobial

*Some options are dependent upon choice class and chassis; see price book for complete details

The CO-Series:

Features

The CO-Series is a reliable, compatible and proven solution backed by extensive testing and certification and the strong mechanical heritage of Schlage. It is ideal for applications that desire a cost effective solution for basic security needs.

Three different classifications are offered in the CO-Series for standalone applications. The CO-100 is a manually programmed keypad only lock which allows up to 500 unique PIN codes for user access. The CO-200 can be manually programmed or computer managed in which case user access rights are stored in the lock. Modifications to user access privileges as well as audits are transferred between the access control software to the lock with a handheld programming device (HHD). The CO-250 is a computer managed system where user access rights are stored on magnetic stripe cards.

The CO-250 is often used in campus-like environments with a large number of users and offline openings.

The CO-Series offers keypad, magnetic stripe and proximity readers (125 kHz); CO-Series readers are all available with dual authentication for added security (card + PIN). The CO-Series is an excellent choice if the needs of the facility are not expected to change in the future.

Benefits

The CO-Series provides the added security and convenience of electronic access control without the cost or complexity of a networked system. By providing electronic credentials you can minimize the number of mechanical keys issued which protects the integrity of key systems. Choose from basic PIN code access for a small number of users or a card based system to serve a larger population of users.

Options*

The CO-Series has several options to choose from including:

Class: CO-100, CO-200, CO-250

Chassis: Cylindrical, Mortise, Mortise Deadbolt, Exit Trim

Function*: Classroom/Storeroom, Office, and Privacy

Readers*: Keypad, magnetic stripe, proximity (125 kHz); all card readers are available with + PIN option for added security*.

Lever Style: Sparta, Rhodes, Athens, Tubular (Tactile warning available)

Finishes: 626 Satin Chrome, 605 Bright Brass, 606 Satin Brass, 612 Satin Bronze, 619 Satin Nickel, 625 Bright Chrome, 643e Aged Bronze, 626AM Satin Chrome with Antimicrobial

AD-Series & CO-Series Compatibility

Keyway/Cylinders:

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7 pin	FSIC 6 & 7 pin
Schlage	●		●	●
Falcon	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (includes Medeco 31 *0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options ⬟ = less cylinder, only with Sparta and Rhodes levers ▲ = less cylinder only

Note: See pricebook for specific configurations.

Exit Trim:

Compatibility	
Devices	**AD-Series (AD-200 & AD-250) and CO-Series**
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR†/CVC†)/Mortise	X
Von Duprin 22/22F Rim/SVR	X
Falcon 25 Rim	X
Sargent 80 Rim	X
Precision® 21 Rim (2100 converts to 21 with Precision's BP21 kit)	X
Yale 7000 Rim	X
Corbin Russwin 5000 Rim	X
Dorma® 9300 Rim	X

*Options may be limited by your choice of class.

†Metal door only

	CO-100	CO-200	CO-250	AD-200	AD-250
System Info	n/a	Consult with OEM Access Control System Provider for Specific Requirements			
Communication to/from Controller	n/a	Standalone: HHD is the link to the Access Control Software			
Device Capacity					
Number of Users	500	2000*	Unlimited*	5000*	Unlimited*
Number of Audits	n/a	2000*	4000*	5000*	10000*
Reader Options	n/a	Consult with OEM Access Control System Provider for Credential Format Compatibility			
Keypad Only	Yes	Yes	No	Yes	No
Magnetic Stripe Card	No		Yes		Yes
125 kHz Proximity Card			No	No	No
Multi-Technology - 125 kHz proximity and 13.56 MHz smart		No		Yes	
PIV & PIV-I Card Compatible				Yes*†	
Card + PIN		Yes			
Status Monitors					
Request to Exit	No			Yes**	
Door Position Switch					
Interior Cover Tamper Guard					
Lock/Unlock Status Clutch Position					
Mechanical Key Override (ATK)			Yes		
Request to Enter			No		
Battery Status			Yes		
Battery Voltage Level	No			No	
Communication Status					
Remote Lockdown (from host)					
Remote Unlock (from host)					
Deadbolt Position					
Interior Push Button					
Chassis Options					
Cylindrical	Yes				
Mortise					
Mortise Deadbolt	No	Yes			
Exit Trim	Yes				
Functions	n/a	Consult with OEM Access Control Provider for Specific Support			
Classroom/Storeroom (70)	Yes				
Privacy (40)	No	Yes			
Office (50)	Yes				
Apartment (60)	No			Yes	
Accessories	n/a	Consult with OEM Access Control Provider for Specific Support			
HHD - Handheld Programming Device	No	Yes			

*Depending on your access control software

**Built in status signals available to enable migration to networked, not monitored in standalone application

†75 bit output format default. Configurable to other output formats. Check with access control provider for specific support

Accessories:

A variety of accessories are available for use with AD-Series and CO-Series standalone locks including:

- The Schlage Utility Software (SUS) on the Handheld Programming Device (HHD) provides an easy way to retrieve audits and transfer information between your access control software and electronic locks.
- The combo proximity keyfobs with iButton® option is available which allows you to manage proximity and iButton® technologies in the same facility.
- Decorative plates are available for retrofit applications where the new lock does not completely cover the existing door prep

The CT5000 Offline Controller:

Features

The CT5000 offline single opening controller is also available for standalone applications. The CT5000 can support up to two separate Wiegand readers as well as interface with peripheral devices such as automatic operators, electric strikes, and electromagnetic locks.

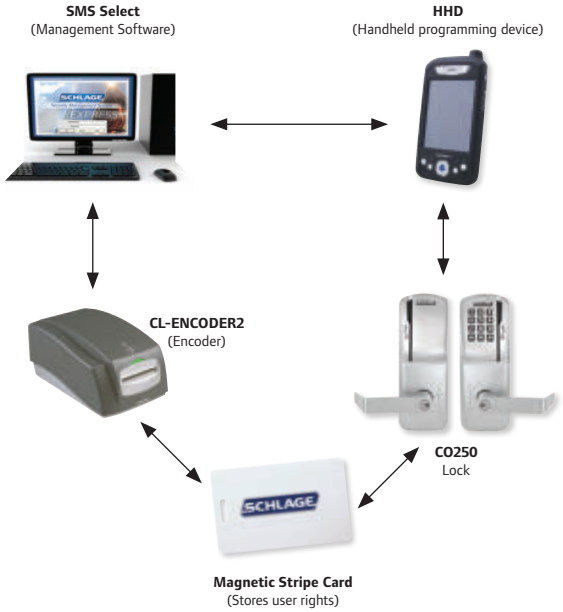
Benefits

The CT5000 offline single opening controller is an ideal solution for narrow stile store front and exit door applications. The CT5000 can operate in the same system as the AD-Series and CO-Series electronic locks. If networked functionality is required in the future, the CT5000 can be easily upgraded to a networked WRI400 wireless reader interface.

System Diagrams

Manually Programmable Keypad Only
CO-100

Computer Programmable User Rights on the Magnetic Stripe Credential
CO-250 / AD-250



Computer Programmable User Rights on the Lock
CO-200 / AD-200 / CT5000

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AD-200
Standalone Electronic Lock

AD-Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patent-pending modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

Factory orderable options include choices of credential readers, chassis type, locking functions, power options, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

The AD-200 is a simple, economical solution if no access control system currently exists in facility, or for openings that don't require the control of a networked solution. The AD-200 is easily upgradable to a networked lock if requirements change in the future.

On all AD-Series standalone/offline locks, Schlage has built in many of the incremental features needed in a networked system such as request-to-exit and -enter sensors, interior cover tamper guard, as well as the door position switch. This way, if the customer chooses to network this opening in the future, all the components will be there to make the transition an easy one.

Features and Benefits

- Security that's more intelligent and convenient than traditional mechanical locking devices
- Audit trail reports that allow you to track usage and events
- Update users and access rights at the lock using the keypad or handheld device
- The ability to upgrade to a networked solution without removing the lock from the door
- Available in cylindrical, mortise, mortise with deadbolt and exit trim
- Compatible with major brands of master key systems and exit devices
- Now available with Magnetic Swipe Reader
- AD-Series with multi-technology readers are NFC compatible
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294,UL10C, FCC Part 15, ADA, RoHS

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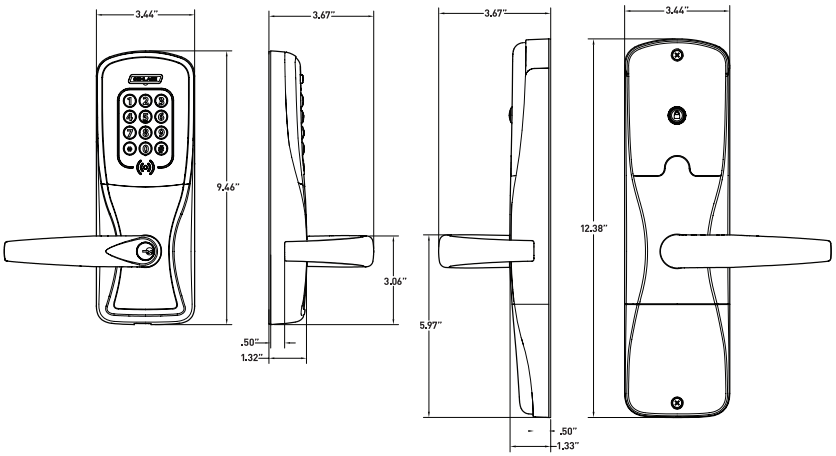
AD-200 Electronic Lock Specifications	
Users	Up to 5,000
Audits	Up to 5,000
Credential Verification Time	≤ 1 second*
Visual/Audible Communications	Tri-colored LED's & audible indicators (field configurable)
System Interface	Handheld Device
Power Supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage Range	4 VDC to 26 VDC
Max Current Requirement	Up to 250 mA
Battery Life	Up to 2 yrs with 4AA (8AA option available for extended battery life, and recommended for smart card and multi-technology options)
Operating Temperature - Exterior	-31° to 151°F (-35° to 66°C)
Operating Temperature - Interior	32° to 120°F (0° to 49°C) (battery)
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Handheld Device (HHD)

* Verification time is dependent on size of user base

Dimensions



Functions

- *Classroom/Storeroom*
- *Office*
- *Privacy*
- *Apartment*

Note: Classroom/Storeroom and Office function not available with Mortise Deadbolt option. To ensure safety, all functions always allow for free egress.

Standard Status Signals

- *Lock/Unlock Status*
- *Mechanical Key Override*
- *Battery Status*

Schlage Utility Software on Handheld Device

The Schlage Utility Software (SUS) on the Handheld Device (HHD) provides an easy way to manage people, audits and locks for simple access control management.

Schlage Utility Software

- Initialize Lock and Accessories
- Field Configure Devices
  - Credential Reader Formats
  - Lock Function
  - Unlock Period
  - Failure Mode
  - Audible Alarm ON/OFF
- Service & Diagnostics
  - Battery Status
  - Validate hardware and software revision
  - Troubleshooting Status Signals

HHD

- 3.5 in LCD display
- Touch Screen/Keypad Backlit
- 32-bit processor
- OS: Windows Mobile 5.0
- Memory: 128 MB RAM/256 MB ROM
- Battery: Rechargeable 3.7 v, 1,230 mAH, Li-ion
- Dimensions: 5.3″ x 2.9″ x 0.7″ (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs. (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

HHD is also compatible with CM, CL, VIP, WA and KC2 Series locks in a serial cable connection.

The HHD connects with AD-Series and CO-Series locks and accessories via the USB interface

Mechanical Specifications

Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard 3/4″ throw optional	3/4″ throw with anti-friction tongue standard **1″ throw deadbolt on Mortise Deadbolt option***
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest C123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

The AD-Series Exit Trim (installed with a universal mounting plate) is compatible with the following exit devices:

Von Duprin 98/99 & 98/99XP*
Rim, Surface Vertical Rod, Mortise. Concealed Vertical Cable and Consealed Vertical Rod on metal doors only.

Von Duprin 22/22F*
Rim, Surface Vertical Rod

Falcon 25* - Rim

Sargent® 80 Series - Rim

Precision™ 21 Rim
2100 converts to 21 with Precision's BP21 kit

Corbin Russwin® 5000 Series - Rim

Yale® 7000 - Rim

Dorma® 9300 - Rim

* Request-to-Exit Switch optional for future network migration.

Multi-Technology Reader Specification

Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25″ on 125 kHz proximity, up to 0.75″ on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iClass® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible Schlage Credentials	125 kHz Clamshell (SXF7410), 125 kHz ISO Card (SXF7510), 125 kHz ISO Card w/Magnetic Stripe (SXF7510MS)
13.56 MHz Compatible Schlage Credentials	13.56 MHz MIFARE Clamshell (SXF9420), 13.56 MHz MIFARE ISO Printable (SXF9520, SXF9551, SXF9558), 13.56 MHz MIFARE Key Tag (SXF9651), 13.56 MHz MIFARE PVC Patch (SXF9751), aptiQ™ Smart Cards using MIFARE DESFire™ EV1 (SXF9000 Series)
Certifications/Standards	FCC, UL 294, Listed, ISO Standard 15693, and ISO Standard 14443
Style/Layout	Option for 12 button, 3x4 matrix backlit keypad

† 75 bit output format default. Configurable to other output formats. Check with access control provider for specific support.

* Smart card functionality dependant on access control software.

Benefits of AD-Series Multi-Technology Readers:

- Reads both proximity (125 kHz) and smart (13.56 MHz) technologies with single device
- AD-Series multi-technology readers are NFC compatible
- Allows end user to migrate to more secure credentials over time and as budgets permit

Additional Readers

Magnetic Stripe

- Now available with choice of Insertion or Swipe style readers
- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Reader can be cleaned without removing lock from door
- Option for 12 button, 3x4 matrix backlit keypad

Keypad

- Backlit keypad
- 12 button, 3x4 matrix

Available AD-Series Reader Modules

- **Multi-Technology**
  - Proximity
  - Smart Card

+ **KEYPAD**

- **Multi-Technology**
  - Proximity
  - Smart Card

- **Magnetic Stripe** (Insertion)

+ **KEYPAD**

- **Magnetic Stripe** (Insertion)

- **Magnetic Stripe** (Swipe)

+ **KEYPAD**

- **Magnetic Stripe** (Swipe)

- **Keypad**

Ordering Information

Available through one of our GSA Schedule 84 approved distributors, BAA options available

AD-	200-	CY-	70-	MG-	SPA-	626-	PD-	C123-	RH-	4B-	13-049-	10-025-	1-3/4
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Battery	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit

4 Function

70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment

5 Reader

KP	Keypad
MG	Magnetic Stripe (Insertion)
MGK	Magnetic Stripe + Keypad (Insertion)
MS	Magnetic Stripe (Swipe)
MSK	Magnetic Stripe + Keypad (Swipe)
MT	Multi-Technology
MTK	Multi-Technology + Keypad
DT	Dummy Trim Reader Cover

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 **Everest**

See price book for other available keyway options including master keying

10 Handing

RH **Right Handed**
LH Left Handed

Field reversible

11 Battery

4B **4AA**
8B 8AA

12 Backset & Latch or Armor Front

Cylindrical
13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
Mortise
09-663 Armor Front, 1-1/4" Wide, Square Corner

See price book for mortise deadbolt and other backset and latch options or armor front options

13 Strike

Cylindrical
10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
Mortise
10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box

See price book for other available strikes

14 Door Thickness

1-3/4"
Other thicknesses available between 1-3/8" and 2-3/4"
See price book for detail

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605
Bright Brass

606
Satin Brass

612
Satin Bronze

643e
Aged Bronze

Cool tone finishes

619
Satin Nickel

625
Bright Chrome

626
Satin Chrome

626AM
Satin Chrome with Antimicrobial

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AD-250
Standalone Electronic Lock

AD-Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patent-pending modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

Factory orderable options include choices of magnetic stripe credential readers, chassis type, locking functions, power options, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

The AD-250 is a unique solution in which the credential, not the lock, carries access rights on a magnetic stripe card. This allows dynamic rights management on the card without reprogramming each lock in the facility. And the lock still maintains an audit trail of events at the door. This makes it a smart and economical solution for campus-like environments with a large number of users and offline openings.

On all AD-Series standalone/offline locks, Schlage has built in many of the incremental features needed in a networked system such as request-to-exit and -enter sensors, interior cover tamper guard, as well as the door position switch. This way, if the customer chooses to network this opening in the future, all the components will be there to make the transition an easy one.

Features and Benefits

- Security that's more intelligent and convenient than traditional mechanical locking devices
- Audit trail reports that allow you to track usage
- Update users and access rights using credentials instead of having to visit each lock
- The ability to upgrade to a networked solution without removing the lock from the door
- Available in cylindrical, mortise, mortise with deadbolt and exit trim
- Compatible with major brands of master key systems and exit devices
- Now available with Magnetic Swipe Reader
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS

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AD-250 Electronic Lock Specifications	
Users	Unlimited, dependant on software
Audits	Up to 10,000
Credential Verification Time	≤ 1 second
Visual/Audible Communications	Tri-colored LED's & audible indicators (field configurable)
System Interface	Handheld Device
Power Supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage Range	4 VDC to 26 VDC
Max Current Requirement	Up to 250 mA
Battery Life	Up to 2 yrs with 4AA (8AA option available for extended battery life)
Operating Temperature - Exterior	-31° to 151°F (-35° to 66°C)
Operating Temperature - Interior	32° to 120°F (0° to 49°C) (battery)
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Handheld Device (HHD), Magnetic Stripe Credential Encoder (CL-Encoder 2)

Functions

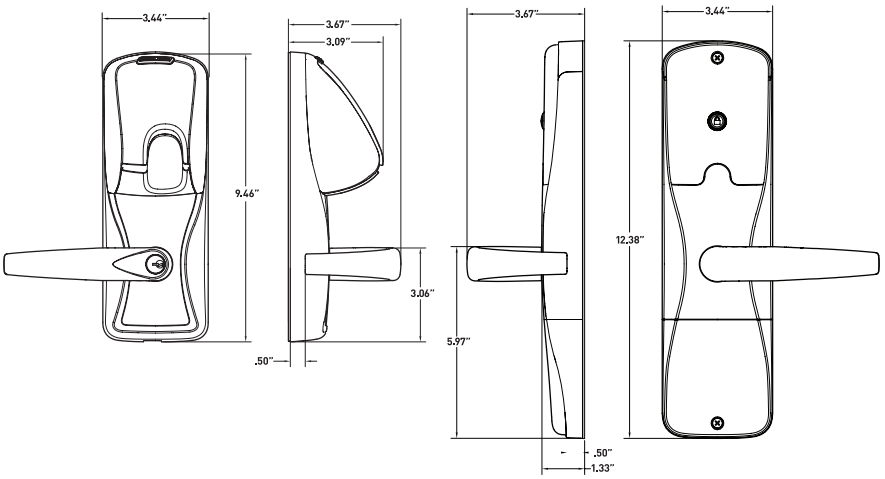
- *Classroom/Storeroom*
- *Office*
- *Privacy*
- *Apartment*

Note: Classroom/Storeroom and Office function not available with Mortise Deadbolt option. To ensure safety, all functions always allow for free egress.

Standard Status Signals

- *Lock/Unlock Status*
- *Mechanical Key Override*
- *Battery Status*

Dimensions



AD-Series Exit Trim

The AD-Series Exit Trim (installed with a universal mounting plate) is compatible with the following exit devices:

Von Duprin 98/99 & 98/99XP* Rim, Surface Vertical Rod, Mortise. Concealed Vertical Cable and Concealed Vertical Rod on metal doors only.

Von Duprin 22/22F* Rim, Surface Vertical Rod

Falcon 25* - Rim

Sargent® 80 Series - Rim

Precision™ 21 Rim 2100 converts to 21 with Precision's BP21 kit

Corbin Russwin® 5000 Series - Rim

Yale® 7000 - Rim

Dorma® 9300 - Rim

* Request-to-Exit Switch optional for future network migration.

Schlage Utility Software on Handheld Device

The Schlage Utility Software (SUS) on the Handheld Device (HHD) provides an easy way to manage people, audits and locks for simple access control management.

Schlage Utility Software

- Initialize Lock and Accessories
- Field Configure Devices
  - Credential Reader Formats
  - Lock Function
  - Unlock Period
  - Failure Mode
  - Audible Alarm ON/OFF
- Service & Diagnostics
  - Battery Status
  - Validate hardware and software revision
  - Troubleshooting Status Signals

HHD

- 3.5 in LCD display
- Touch Screen/Keypad Backlit
- 32-bit processor
- OS: Windows Mobile 5.0
- Memory: 128 MB RAM/256 MB ROM
- Battery: Rechargeable 3.7 v, 1,230 mAH, Li-ion
- Dimensions: 5.3″ x 2.9″ x 0.7″ (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs. (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

HHD is also compatible with CM, CL, VIP, WA and KC2 Series locks via a serial cable connection.

The HHD connects with AD-Series and CO-Series locks and accessories via the USB interface

Mechanical Specifications

Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard 3/4″ throw optional	3/4″ throw with anti-friction tongue standard **1″ throw deadbolt on Mortise Deadbolt option***
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest C123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

Reader Specifications and Modules

Magnetic Stripe (Swipe) + KEYPAD

Magnetic Stripe (Swipe)

Magnetic Stripe (Insertion) + KEYPAD

- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Reader can be cleaned without removing lock from door
- 12 button, 3x4 matrix backlit keypad

Magnetic Stripe (Insertion)

- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Reader can be cleaned without removing lock from door

Ordering Information

Available through one of our GSA Schedule 84 approved distributors, BAA options available

AD	250	CY	70	MG	SPA	626	PD	C123	RH	4B	13-049	10-025	1-3/4
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Battery	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit

4 Function

70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment

5 Reader

MG	Magnetic Stripe (Insertion)
MGK	Magnetic Stripe + Keypad (Insertion)
MS	Magnetic Stripe (Swipe)
MSK	Magnetic Stripe + Keypad (Swipe)
DT	Dummy Trim

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 **Everest**

See price book for other available keyway options including master keying

10 Handing

RH **Right Handed**
LH Left Handed

Field reversible

11 Battery

4B **4AA**
8B 8AA

12 Backset & Latch or Armor Front

Cylindrical
13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
Mortise
09-663 Armor Front, 1-1/4" Wide, Square Corner

See price book for mortise deadbolt and other backset and latch options or armor front options

13 Strike

Cylindrical
10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
Mortise
10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box

See price book for other available strikes

14 Door Thickness

1-3/4"
Other thicknesses available between 1-3/8" and 2-3/4

See price book for detail.

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605
Bright Brass

606
Satin Brass

612
Satin Bronze

643e
Aged Bronze

Cool tone finishes

619
Satin Nickel

625
Bright Chrome

626
Satin Chrome

626AM
Satin Chrome with Antimicrobial

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AD-Series
Exit Trim Compatibility

Overview

The AD-Series Electronic Lock is available in 993 Exit Trim for use on openings that require exit devices for either retrofit or new construction applications. Offline and networked solutions are available.

The 993 Exit Trim was designed to suite with AD-Series cylindrical and mortise locksets to ensure that the facility remains aesthetically consistent.

The AD-Series 993 Exit Trim utilizes universal hardware to simplify installation of offline trim to a variety of exit devices, including Rim style from Von Duprin, Falcon, Sargent®, Precision™ Corbin Russwin®, Dorma®, and Yale®.

Available Exit Trim Styles:

- 993R – Rim, Concealed Vertical Cable or Concealed Vertical Rod (CVC* and CVR for metal doors only)
- 993S – Surface Vertical Rod
- 993M – Mortise

Compatibility			
Devices	**AD-200/250**	**AD-300/301**	**AD-400/401**
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR*/ CVC*/Mortise	X	X	X
Von Duprin 22/22F Rim/SVR	X	X	X
Falcon 25 Rim	X	X	X
Sargent® 80 Rim	X		
Precision™ 21 Rim (2100 converts to 21 with Precision's BP21 kit)	X		
Yale® 7000 Rim	X		
Corbin Russwin® 5000 Rim	X		
Dorma® 9300 Rim	X		

The proper low current request to exit switch (RX-LC) is required for AD-300/301 and AD-400/401.

Part Numbers for Request to Exit Switch:

- Von Duprin: 050281
- Falcon: 650359

Features and Benefits

- Multiple Credential Reader Options
- Offline and Networked Communication Options
- A wide variety of finishes and lever styles
- Power options that include hardwired (12 VDC or 24 VDC) or batteries (4AA or 8AA)
- Compatible with most Standard, FSIC or SFIC keyways from major brands of master key systems including Schlage, Sargent®, Corbin®, Medeco® and Yale®

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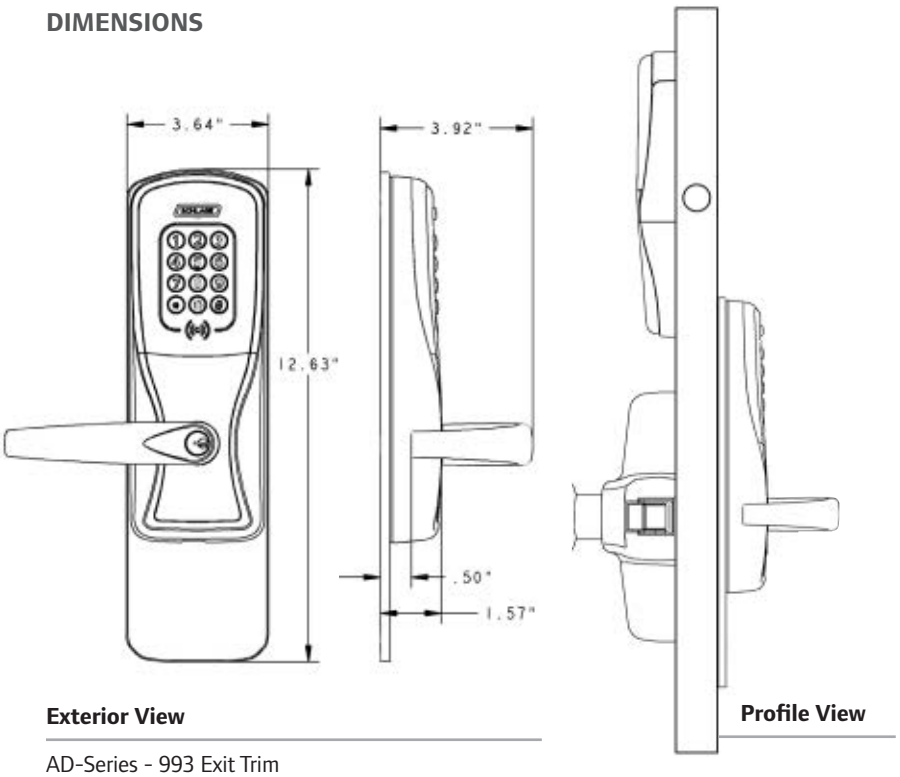
DIMENSIONS



Exterior View | **Profile View**

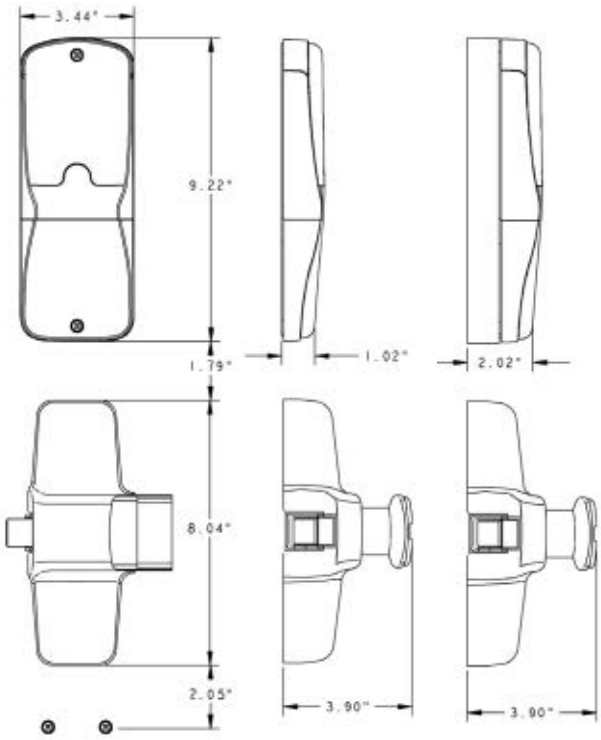
AD-Series - 993 Exit Trim

Available AD-Series Reader Modules

- Multi-Technology (125 kHz proximity and 13.56 MHz smart card)
- FIPS 201-1 Compliant Multi-Technology (125 kHz proximity and 13.56 MHz smart card) sold complete with AD-301 and AD-401 only
- Magnetic Stripe
- Keypad Only
- All credential readers available + Keypad
  - * unlike other AD-Series chassis styles, upgrading reader modules on the 993 Exit Trim requires the exterior escutcheon to be removed from the door

Available Communication Options

- AD-400: Networked Wireless Locks
- AD-401: Networked Wireless Locks - FIPS 201-1 compliant
- AD-300: Networked Hardwired Locks
- AD-301: Networked Hardwired Locks - FIPS 201-1 compliant
- AD-250: Offline, access rights stored on the magnetic stripe credential
- AD-200: Offline, access rights stored on the lock

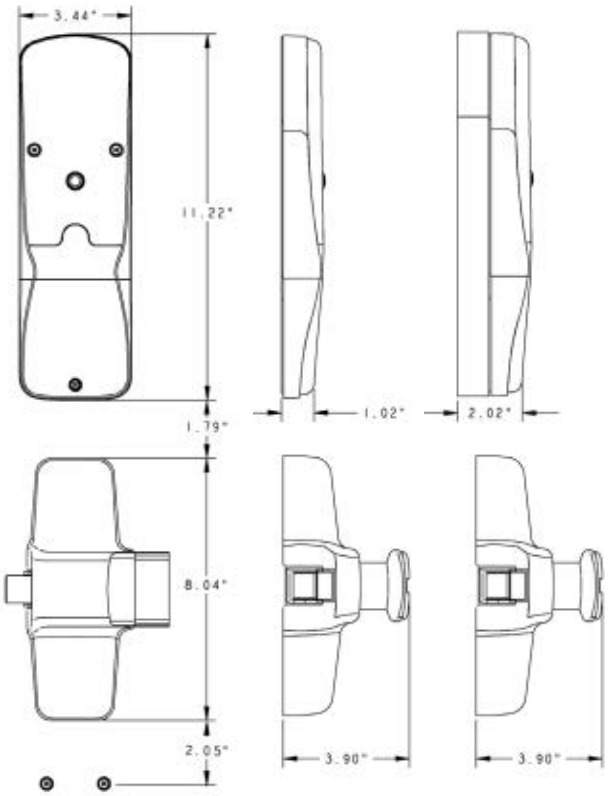


Interior View | **Side View** | **Side View**

AD-200/250/300*/301* - all styles

AD-200/250/300*/301* - RIM/CVR/CVC or Mortise

AD-200/250/300*/301* SVR



Interior View | **Side View** | **Side View**

AD-400/401 all styles

AD-400/401 RIM/CVR/CVC or Mortise

AD-400/401 SVR

** AD-300/301 includes LED indicator*

Note: (2) #7 fasteners with decorative washers located 11.88" below bottom edge of lock

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Images shown are not to scale.

CO-100

Standalone Electronic Lock

The CO-Series is the ideal solution for customers seeking the added security and convenience of electronic access control without the cost or complexity of a fully networked system.

The CO-100 is a standalone lock that is manually programmable. User rights for the CO-100 are stored on the lock. Unique PIN codes can be assigned to each user. This minimizes the number of mechanical keys issued which protects the integrity of your key system. PIN codes can be easily added or deleted at anytime right at the door.

The CO-100 from Schlage offers you many choices. Cylindrical, mortise, and exit trim chassis options are available as well as a wide variety of finishes and levers to suite with your existing hardware.

Mechanical key override is standard and compatible with multiple cylinder types. The CO-Series is also compatible with many popular brands of exit devices.

The CO-Series has been tested the highest standards in the industry to ensure quality and reliability you have come to expect from Schlage. The CO-Series is ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed.

Features and Benefits

- Manually Programmable
- Up to 500 unique 3-6 digit PIN codes stored on the lock
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed
- Classroom/Storeroom function and Office function available
- Chassis options include cylindrical, mortise, and exit trim
- Compatible with most major brands of key systems and exit devices
- Normal, toggle, pass through, and freeze credential attributes available

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Specifications

CO-100 Electronic Lock Specifications	
Users	500
Credential Verification Time (Keypad Only)	≤ 1 second
Visual/Audible Communications	Tri-colored LED's & audible indicators
Power Supply	4 AA batteries (standard off the shelf: included)
Battery Life	Up to 2 yrs with 4 AA batteries
Operating Temperature - Exterior	-31° to 151°F (-35° to 66°C)
Operating Temperature - Interior	32° to 120°F (0° to 49°C) due to battery
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10 C, FCC Part 15, ADA and RoHS

Functions

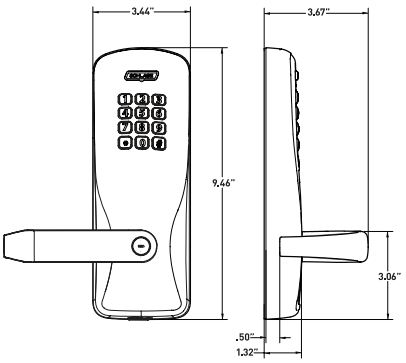
- *Classroom/Storeroom*
- *Office*

Standard Status Signals

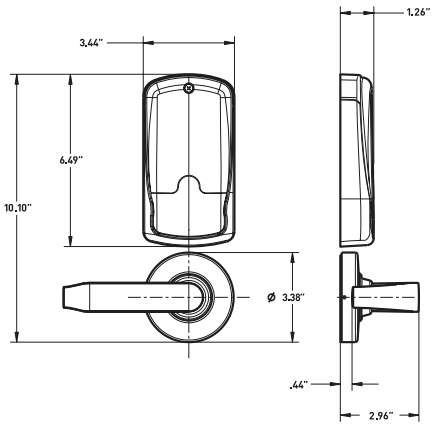
- *Battery Status* - indicated by blinking lights

Dimensions

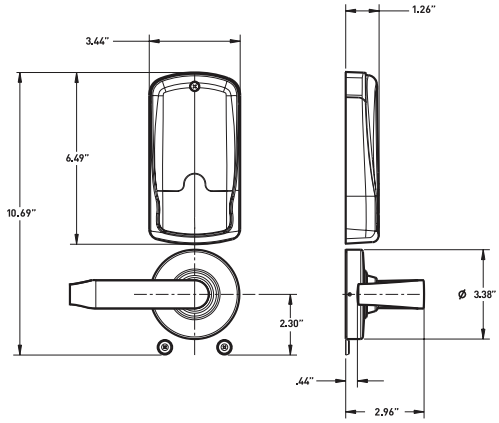
Exterior of the Lock



Interior of the Lock
Cylindrical



Mortise



Manually Programmable Options	
Credential Type	**Function**
Programming*	Used to enable programming of the lock. Does not unlock the lock.
Normal Use*	Unlocks the lock momentarily when in a normally secured state.
Toggle*	Changes the state of the lock unless in Freeze state.
Freeze*	Maintains the lock in current state until Freeze PIN is entered again.
Pass-through*	Unlocks a lock momentarily, regardless of state.

*Credentials can be 3-6 digits in length.

Mechanical Specifications		
Chassis	**Cylindrical** (Based on Schlage ND-Series)	**Mortise** (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard 3/4″ throw optional	3/4″ throw with anti-friction tongue standard
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available

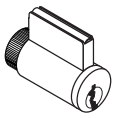
Compatibility

Exit Device Compatibility		Rim	SVR	CVR/CVC	Mortise
Von Duprin	98/99 and 98/99 XP	✓	✓	✓*	✓
Von Duprin	22/22F	✓	✓		
Falcon	25	✓			
Corbin Russwin®	5000	✓			
Precision™ 21 Rim 2100 converts to 21 with Precision's BP21 kit		✓			
Yale®	7000	✓			
Dorma®	9300	✓			
Sargent®	80	✓			

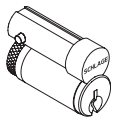
* Metal door only

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7pin	SFIC 6 & 7pin
Schlage	●		●	●
Falcon	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options
⬟ = less cylinder, only with Sparta and Rhodes levers
▲ = less cylinder only
Note: See pricebook for specific configurations.



Full Cylinder



Full Size Interchangeable Core

Small Format Interchangeable Core

Ordering Information

Available through one of our GSA Schedule 84 approved distributors

Required Fields | Factory Defaults & Options

CO - 100 - CY - 70 - KP - SPA - 626 - PD - C123 - RH - 13-049 - 10-025 - 1-3/4

Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Exit Dummy Trim

4 Function

70	Classroom/Storeroom
50	Office

5 Reader

KP	Keypad

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 Everest

See price book for other available keyway options including master keying

10 Handing

RH	**Right Handed**
RHR	Right Handed Reverse
LH	Left Handed
LHR	Left Handed Reverse

Field reversible

11 Backset & Latch or Armor Front

Cylindrical

13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"

Mortise

09-663 Armor Front, 1-1/4" Wide, Square Corner

12 Strike

Cylindrical

10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"

Mortise

10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box

See price book for other available strikes

13 Door Thickness

1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4"

See price book for details

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605 Bright Brass

606 Satin Brass

612 Satin Bronze

643e Aged Bronze

Cool tone finishes

619 Satin Nickel

625 Bright Chrome

626 Satin Chrome

626AM Satin Chrome Antimicrobial

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CO-200

Standalone Electronic Lock

Images shown are not to scale.

The CO-Series is the ideal solution for customers seeking the added security and convenience of electronic access control without the cost or complexity of a fully networked system.

The CO-200 is computer or manually programmable with users rights stored on the lock. The Handheld Device (HHD) used in conjunction with your access control software, allows you to easily add or delete users and retrieve audits.

By issuing electronic credentials you can minimize the number of mechanical keys issued which protects the integrity of your key system. A variety of credential readers are also available including: keypad only, magnetic stripe, and proximity. The magnetic stripe and proximity readers are also available with keypad for the added security of dual authentication.

Cylindrical, mortise, mortise deadbolt, and exit trim chassis options are available as well as a wide variety of finishes and levers to suite with your existing hardware.

Mechanical key override is standard and compatible with multiple cylinder types. The CO-Series is also compatible with many popular brands and types of exit devices.

The CO-Series has been tested the highest standards in the industry to ensure quality and reliability you have come to expect from Schlage. The CO-Series is ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed.

Features and Benefits

- Computer programmable with audit trail
- Up to 2000 users & up to 2000 audits*
- Up to 32 holidays & 16 time zones*
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed
- User rights stored on the lock
- The ability to add and delete users at the lock
- Available in cylindrical, mortise, mortise deadbolt, and exit trim
- Compatible with major brands of key systems and exit devices
- Classroom/Storeroom, Office, and Privacy functions available

*Depending on access control software.

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Specifications

CO-200 Electronic Lock Specifications	
Users	Up to 2,000*
Audits	Up to 2,000*
Credential Verification Time	≤ 1 second
Visual/Audible Communications	Tri-colored LED's & audible indicators
Power Supply	4 AA batteries (standard off the shelf: included)
Voltage Range	4 VDC to 7 VDC
Max Current Requirement	Up to 250 mA
Battery Life	Up to 2 yrs with 4 AA batteries
Operating Temperature - Exterior	-31° to 151°F (-35° to 66°C)
Operating Temperature - Interior	32° to 120°F (0° to 49°C) due to batteries
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10 C, FCC Part 15, ADA and RoHS

*Depending on access control software.

Functions

- *Classroom/Storeroom*
- *Office*
- *Privacy**

Note: Classroom/Storeroom and Office function not available with Mortise Deadbolt option. To ensure safety, all functions always allow for free egress.

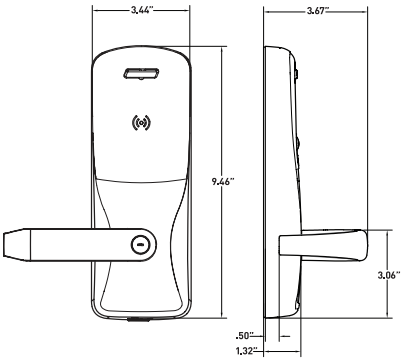
*Door position switch is required for cylindrical and mortise chassis with privacy function.

Standard Status Signals

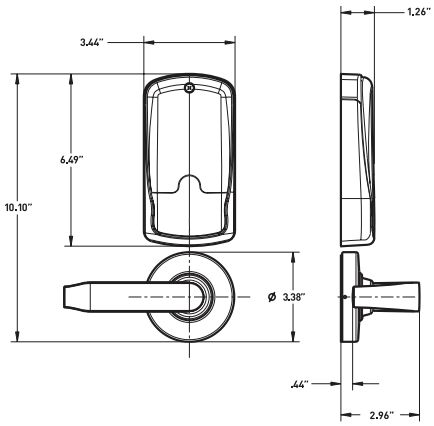
- *Mechanical Key Override*
- *Battery Status* - indicated by blinking lights

Dimensions

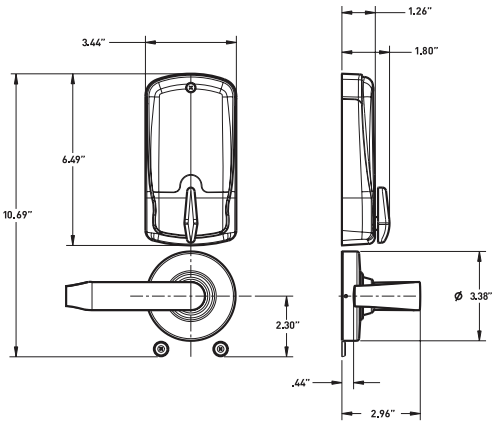
Exterior of the Lock



Interior of the Lock
Cylindrical



Mortise Deadbolt



Schlage Utility Software on Handheld Device

The Schlage Utility Software (SUS) on the Handheld Device (HHD), in conjunction with your access control software, provides an easy way to manage people, audits and locks for simple access control management.

Schlage Utility Software

- Initialize Lock and Accessories
- Field Configure Devices
  - Credential Reader Formats
  - Lock Function
  - Unlock Period
  - Failure Mode
  - Audible Alarm ON/OFF
- Service & Diagnostics
  - Battery Status
  - Validate hardware and software revision
  - Troubleshooting Status Signals

HHD

- 3.5 in LCD display
- Touch Screen/Keypad Backlit
- 32-bit processor
- OS: Windows Mobile 5.0
- Memory: 128 MB RAM/256 MB ROM
- Battery: Rechargeable 3.7 v, 1,230 mAH, Li-ion
- Dimensions: 5.3" x 2.9" x 0.7" (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs. (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

HHD is also compatible with CM, CL, VIP, WA, and KC2 series locks via a serial cable connection.

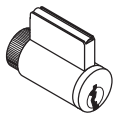
The HHD connects with CO-Series and AD-Series locks and accessories via the USB interface

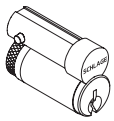
Mechanical Specifications

Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard 3/4″ throw optional	3/4″ throw with anti-friction tongue standard 1″ throw deadbolt on Mortise Deadbolt option
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7pin	SFIC 6 & 7pin
Schlage	●		●	●
Falcon	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options
⬟ = less cylinder, only with Sparta and Rhodes levers
▲ = less cylinder only
Note: See pricebook for specific configurations.


Full Cylinder


Full Size Interchangeable Core

Small Format Interchangeable Core

Reader Specifications

	Keypad	Magnetic Stripe	Proximity
Frequency Standards	N/A	ABA, ISO76XX Standard High & Low Coercivity	125 kHz
Maximum Read Range	N/A	N/A (Swipe card)	up to 1.25″
Compatibility	3-6 digit pin code	Triple Track Reader (1, 2 or 3), field configurable	Schlage, XceedID®, HID®, GE/CASI ProxLite™ and AWID®
Compatible Schlage Credentials	N/A	Configurable to read complete track 1, 2 or 3	125 kHz Proximity Clamshell (SXF7410), 125 kHz Proximity ISO Card (SXF7510), 125 kHz ISO Card w/ Magnetic Stripe (SXF7510MS)
Style/Layout	12-button, 3x4 matrix	Option for 12-button, 3x4 matrix	Option for 12-button, 3x4 matrix

The combo proximity keyfobs with iButton® option are available which allows you to manage proximity and iButton® technologies in the same facility.

Available CO-200 Reader Options

• Keypad

• Proximity
+ KEYPAD

• Proximity

• Magnetic Stripe

• Magnetic Stripe
+ KEYPAD

Ordering Information

Available through one of our GSA Schedule 84 approved distributors

Required Fields | Factory Defaults & Options

CO-200-CY-70-PR-SPA-626-PD-C123-RH-13-049-10-025-1-3/4

Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Exit Dummy Trim

4 Function

70	Classroom/Storeroom
50	Office
40	Privacy

5 Reader

KP	Keypad
MS	Magnetic Stripe
MSK	Magnetic Stripe + Keypad
PR	Proximity
PRK	Proximity + Keypad

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 Everest

See price book for other available keyway options including master keying

10 Handing

RH	**Right Handed**
RHR	Right Handed Reverse
LH	Left Handed
LHR	Left Handed Reverse

Field reversible

11 Backset & Latch or Armor Front

Cylindrical

13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"

Mortise

09-663 Armor Front, 1-1/4" Wide, Square Corner

See price book for mortise deadbolt and other backset and latch options or armor front options

12 Strike

Cylindrical

10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"

Mortise

10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box

See price book for other available strikes

13 Door Thickness

1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4"

See price book for detail

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605 Bright Brass

606 Satin Brass

612 Satin Bronze

643e Aged Bronze

Cool tone finishes

619 Satin Nickel

625 Bright Chrome

626 Satin Chrome

626AM Satin Chrome Antimicrobial

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CO-250

Standalone Electronic Lock

Images shown are not to scale.

The CO-Series is the ideal solution for customers seeking the added security and convenience of electronic access control without the cost or complexity of a fully networked system.

The CO-250 is a computer programmable offline lock that stores user rights on the magnetic stripe credential, and captures an audit trail in the lock. The CO-250 provides dynamic rights management, meaning you do not have to visit the door to change user access rights. This makes it a cost effective solution for offline environments with a large number of users. The CO-250 also allows you to retrieve audits by using the Handheld Device (HHD) in conjunction with your access control software.

The CO-250 from Schlage offers you many choices. Cylindrical, mortise, mortise deadbolt, and exit trim chassis options are available as well as a wide variety of finishes and levers to suite with your existing hardware.

Mechanical key override is standard and compatible with multiple cylinder types. The CO-Series is also compatible with many popular brands of exit devices.

The CO-Series has been tested the highest standards in the industry to ensure quality and reliability you have come to expect from Schlage. The CO-Series is ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed.

Features and Benefits

- Computer programmable with audit trail
- Unlimited number of users and up to 4000 audits*
- Available with Magnetic Stripe and Magnetic Stripe plus Keypad
- Up to 32 holidays & 16 time zones*
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed
- User rights stored on the magnetic stripe credential
- The ability to easily add and delete users
- Available in cylindrical, mortise, mortise deadbolt, and exit trim
- Compatible with major brands of key systems and exit devices
- Classroom/Storeroom, Office, and Privacy functions available

*Depending on access control software.

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Specifications

CO-250 Electronic Lock Specifications	
Users	Unlimited*
Audits	Up to 4,000*
Credential Verification Time	≤ 1 second
Visual/Audible Communications	Tri-colored LED's & audible indicators
System Interface	Handheld Device
Power Supply	4 AA batteries
Battery Life	Up to 2 yrs with 4 AA batteries
Operating Temperature - Exterior	-31° to 151°F (-35° to 66°C)
Operating Temperature - Interior	32° to 120°F (0° to 49°C) due to batteries
Operating Humidity	0 - 100% condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10 C, FCC Part 15, ADA and ROHS
Accessories	Handheld Device (HHD), Magnetic Stripe Credential Encoder (CL-Encoder 2)

*Depending on access control software.

Functions

- *Classroom/Storeroom*
- *Office*
- *Privacy**

Note: Classroom/Storeroom and Office function not available with Mortise Deadbolt option. To ensure safety, all functions always allow for free egress.

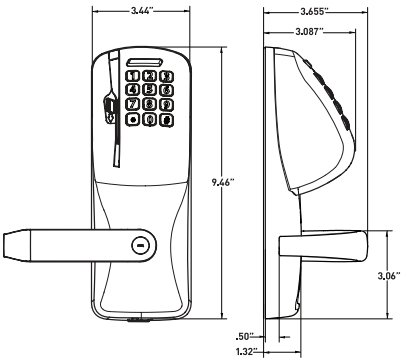
*Door position switch is required for cylindrical and mortise chassis with privacy function.

Standard Status Signals

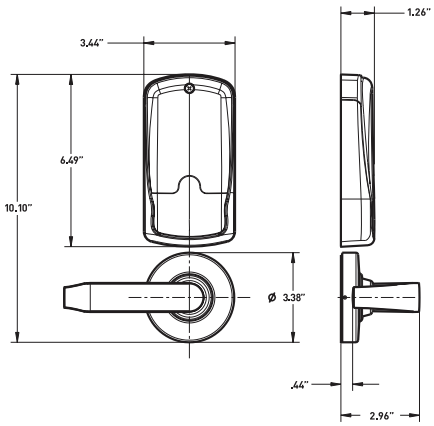
- *Mechanical Key Override*
- *Battery Status*

Dimensions

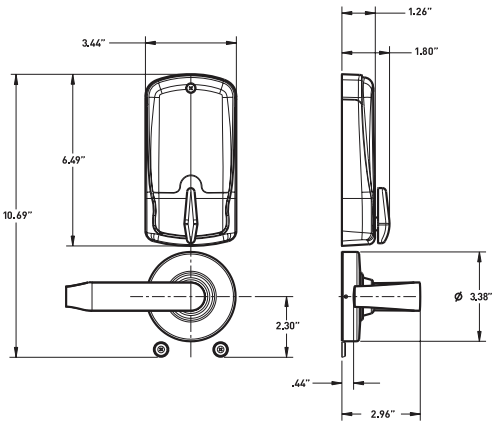
Exterior of the Lock



Interior of the Lock
Cylindrical



Mortise Deadbolt



Schlage Utility Software on Handheld Device

The Schlage Utility Software (SUS) on the Handheld Device (HHD), in conjunction with your access control software, provides an easy way to manage people, audits and locks for simple access control management.

Schlage Utility Software

- Initialize Lock and Accessories
- Field Configure Devices
  - Credential Reader Formats
  - Lock Function
  - Unlock Period
  - Failure Mode
  - Audible Alarm ON/OFF
- Service & Diagnostics
  - Battery Status
  - Validate hardware and software revision
  - Troubleshooting Status Signals

HHD

- 3.5 in LCD display
- Touch Screen/Keypad Backlit
- 32-bit processor
- OS: Windows Mobile 5.0
- Memory: 128 MB RAM/256 MB ROM
- Battery: Rechargeable 3.7 v, 1,230 mAH, Li-ion
- Dimensions: 5.3" x 2.9" x 0.7" (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs. (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

HHD is also compatible with CM, CL, VIP, WA, and KC2 series locks via a serial cable connection.

The HHD connects with CO-Series and AD-Series locks and accessories via the USB interface

Mechanical Specifications		
Chassis	**Cylindrical** (Based on Schlage ND-Series)	**Mortise** (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4″ standard, 1-3/8″ to 2-3/4″ optional (available in 1/8″ increments)	
Backset	2-3/4″ standard, 2-3/8″, 3-3/4″ and 5″ optional	2-3/4″ only
Latch Bolt	1/2″ throw security latch standard 3/4″ throw optional	3/4″ throw with anti-friction tongue standard 1″ throw deadbolt on Mortise Deadbolt option
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4″ x 4-7/8″ x 1-3/16″ lip to center with dust box standard, optional strikes lip lengths available

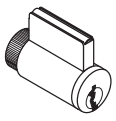
Compatibility

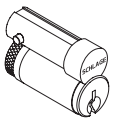
Exit Device Compatibility		Rim	SVR	CVR/CVC	Mortise
Von Duprin	98/99 and 98/99 XP	✓	✓	✓*	✓
Von Duprin	22/22F	✓	✓		
Falcon	25	✓			
Corbin Russwin®	5000	✓			
Precision™ 21 Rim 2100 converts to 21 with Precision's BP21 kit		✓			
Yale®	7000	✓			
Dorma®	9300	✓			
Sargent®	80	✓			

* Metal door only

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7pin	SFIC 6 & 7pin
Schlage	●		●	●
Falcon	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options
⬟ = less cylinder, only with Sparta and Rhodes levers
▲ = less cylinder only
Note: See pricebook for specific configurations.


Full Cylinder


Full Size Interchangeable Core

Small Format Interchangeable Core

Reader Specifications

Magnetic Stripe

+ KEYPAD

- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- 12 button, 3x4 matrix keypad

Magnetic Stripe

- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard

Ordering Information

Available through one of our GSA Schedule 84 approved distributors

Required Fields | Factory Defaults & Options

CO-250-CY-70-MS-SPA-626-PD-C123-RH-13-049-10-025-1-3/4

Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Exit Dummy Trim

4 Function

70	Classroom/Storeroom
50	Office
40	Privacy

5 Reader

MS	Magnetic Stripe
MSK	Magnetic Stripe + Keypad

6 Lever

SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular

Available with knurled surface

7 Finish

626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial

8 Lever Cylinder Type

PD	Schlage 6-pin Full Cylinder

See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale

9 Keyway Type

C123 Everest

See price book for other available keyway options including master keying

10 Handing

RH	**Right Handed**
RHR	Right Handed Reverse
LH	Left Handed
LHR	Left Handed Reverse

Field reversible

11 Backset & Latch or Armor Front

Cylindrical

13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"

Mortise

09-663 Armor Front, 1-1/4" Wide, Square Corner

See price book for mortise deadbolt and other backset and latch options or armor front options

12 Strike

Cylindrical

10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"

Mortise

10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box

See price book for other available strikes

13 Door Thickness

1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4

See price book for detail.

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605 Bright Brass

606 Satin Brass

612 Satin Bronze

643e Aged Bronze

Cool tone finishes

619 Satin Nickel

625 Bright Chrome

626 Satin Chrome

626AM Satin Chrome Antimicrobial

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CO-Series
Exit Trim Compatibility

The CO-Series offers 993 exit trim for use with compatible exit devices in retrofit or new construction applications.

The 993 Exit Trim was designed to suite with CO-Series cylindrical and mortise locksets to ensure that the facility remains aesthetically consistent.

The CO-Series 993 Exit Trim utilizes universal hardware to simplify installation of offline trim to a variety of exit devices, including Rim style from Von Duprin, Falcon, Sargent®, Corbin Russwin®, Dorma®, and Yale®.

Available Exit Trim Styles:

- 993R – Rim, Concealed Vertical Rod or Concealed Vertical Cable (CVR/CVC for metal doors only)
- 993S – Surface Vertical Rod
- 993M – Mortise
- 993DT – Non-Functioning Dummy Trim for Exit

Compatibility			
Devices	**CO-100**	**CO-200**	**CO-250**
Von Duprin 98/99 & 98/99 XP Rim/SVR/CVR*/CVC*/Mortise	X	X	X
Von Duprin 22/22F Rim/SVR	X	X	X
Falcon 25 Rim	X	X	X
Sargent® 80 Rim	X	X	X
Precision™ 21 Rim 2100 converts to 21 with Precision's BP21 kit	X	X	X
Yale® 7000 Rim	X	X	X
Corbin Russwin® 5000 Rim	X	X	X
Dorma® 9300 Rim	X	X	X

* Metal door only

Features and Benefits

- Multiple Credential Reader Options
- A wide variety of finishes and lever styles
- Powered by 4 AA batteries*
- Compatible with most Standard, FSIC or SFIC keyways from major brands of master key systems including Schlage, Sargent®, Corbin®, Medeco® and Yale®
- UL 294 listed, ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified**

*Excluding 993DT

**UL 294 does not apply to dummy trim devices

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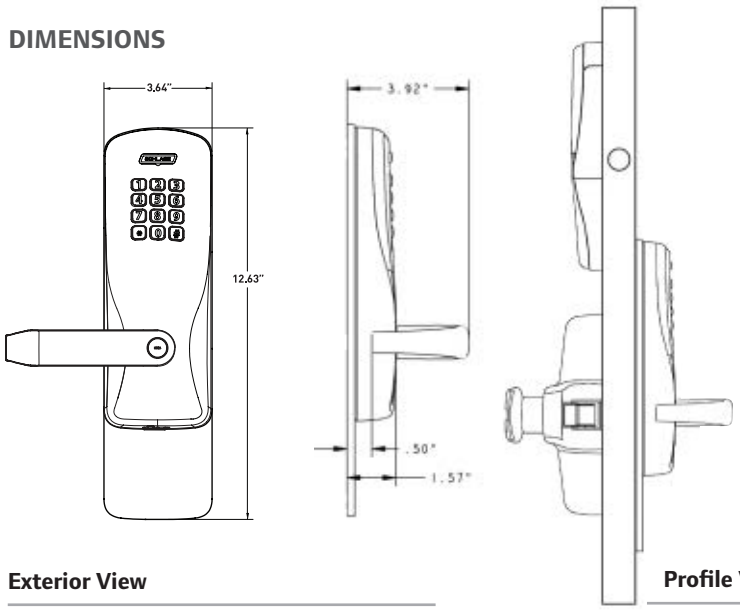
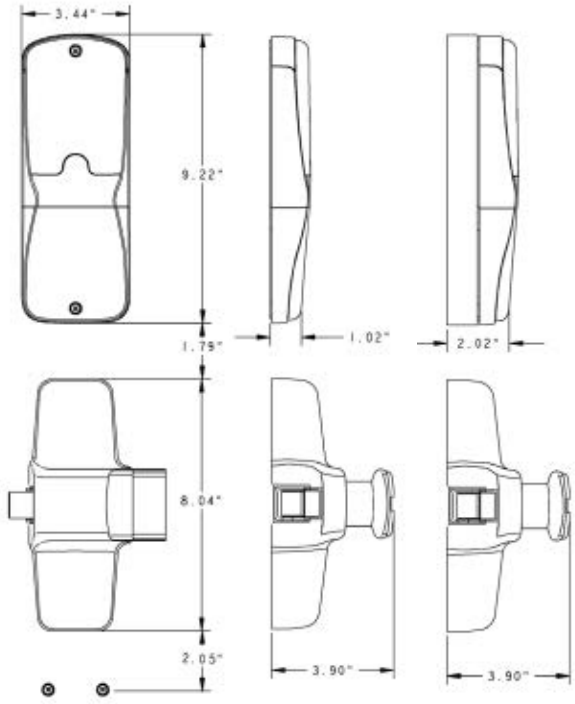
Security Technologies

DIMENSIONS



Exterior View **Profile View**

CO-Series - 993 Exit Trim



Interior View **Side View** **Side View**

CO-100/200/250 - all styles

CO-100/200/250 - RIM/CVR/CVC or Mortise

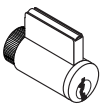
CO-100/200/250 SVR

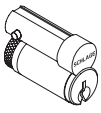
Note: (2) #7 fasteners with decorative washers located 11.88" below bottom edge of lock

Compatibility			
Reader Options	**CO-100**	**CO-200**	**CO-250**
KP Keypad	X	X	
PR Proximity		X	
PRK Proximity + Keypad		X	
MS Magnetic Stripe		X	X
MSK Magnetic Stripe + Keypad		X	X
Programming Options			
Computer		X	X
Manual	X	X	

Cylinder Compatibility	**Full Size** key-in-lever 6 pin	**Full Size** key-in-lever 7 pin	**FSIC** 6 & 7pin	**SFIC** 6 & 7pin
Schlage	●		●	●
Falcon	▲	⬟		▲
Sargent®	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options ▲ = less cylinder only
⬟ = less cylinder, only with Sparta and Rhodes levers
Note: See pricebook for specific configurations.


Full Cylinder


Full Size Interchangeable Core

Small Format Interchangeable Core

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CT5000
Offline Controller

Overview

The CT5000 is an offline single opening controller designed for applications where the security and convenience of offline electronic access control is desired, but an integrated electronic lock may not be practical. It is an ideal solution for narrow stile aluminum store front applications because it can work with a variety of readers as well as interface with peripheral devices such automatic operators, electric strikes, and electromagnetic locks.

The CT5000 supports up to two separate Wiegand reader inputs. It is compatible with many types of credential technologies. The CT5000 has three form C relay outputs, for strike, auxiliary and alarm. It also has three inputs that include door position and request-to-exit.

The CT5000 is compatible with many brands and types of credential technologies including Magnetic Stripe (tracks 1, 2, and 3), 125 kHz Proximity, and 13.56 MHz Smart Cards. It also supports a variety of card functions including: normal, toggle, freeze, pass through, construction, lockdown and Card + PIN applications.

The CT5000 offline controller has the unique ability to be programmed locally via keypad or via the Schlage Handheld Programming Device. The CT5000 is compatible with Schlage SMS Express, Premier or Enterprise access control software. The CT5000 compliments your facility's portfolio of CO-Series and AD-Series devices along with all of your other networked readers.

If networked functionality is required in the future, the CT5000 can be upgraded. With the addition of a networked communication board and upgraded firmware, the CT5000 becomes a wireless reader interface (WRI400). The WRI400 communicates via 900MHz wireless signals to an AD-Series PIM400 which connects to the networked access control system. The WRI400 eliminates the need to run additional wires to the door, saving you time and money on installation.

Features and Benefits

- Supports up to 5000 users and 5000 audits
- UL 294, Canada UL, FCC Part 15, Canada RSS-210, RoHs
- Includes 15 foot USB remote cable connector and decorative wall plate with USB input
- Supports up to two wiegand reader inputs
- Programmed using Schlage Handheld Device (HHD) via USB connection or compatible keypad
- Requires 2 Amp power supply, such as the Schlage PS902 (sold separately)
- Compatible with Schlage SMS Express, Select, Premier or Enterprise access control software
- Request-to-exit (remote release)
- LED visual indicators (including low battery and state of the relay)

Ingersoll Rand
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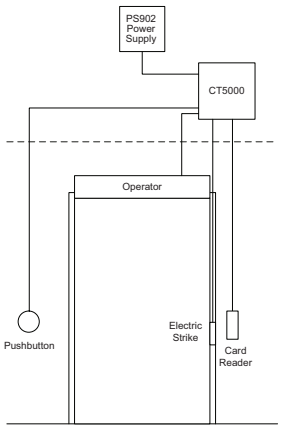
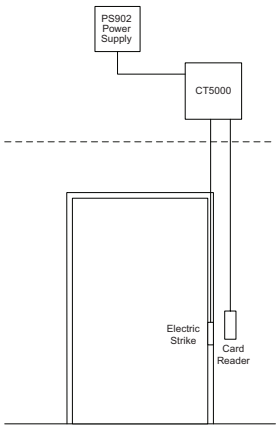
CT5000
Offline Controllers

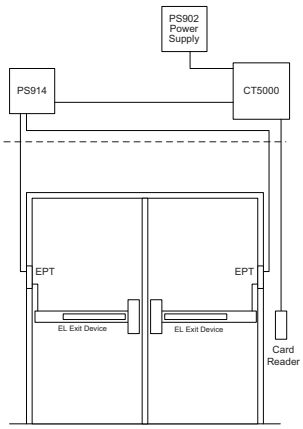
The CT5000 can be used for front door applications with an automatic operator, electric strike and card reader



For narrow stile applications the CT5000 can be used with an electric strike and card reader



The CT5000 and a card reader along with the Von Duprin 914 Power Supply can control two EL exit devices for double door applications



Note: PS902 and Von Duprin PS914 are sold separately.

CT5000 Offline Controller Specifications		
Users		Up to 5000
Audits		Up to 5000
Power Supply		12 VDC or 24 VDC (sold separately, must be UL 294 Class 2 listed power supply)
Voltage Range		9.5 VDC to 26 VDC
Connector Cable Specifications	**DC Power Input**	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 1000 ft (305 m)
	Credential Readers (x2)	Data Signals: 22AWG, 6 Conductor (Alpha 1296C or equivalent) up to 500 feet (152 meters) Reader Tamper Signals: 18AWG, Twisted Pair Shielded (Belden 8760 or equivalent) up to 500 feet (152 meters)
	Strike/ Aux Relay Outputs	18AWG, 2 Conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
Relay Output Tolerances	**Strike Output Relay**	Form C Relay; 6 Amps @ 24VDC or 6 Amps @ 20 VAC or 3 Amps @ 240 VAC
	Auxiliary Output Relay	Form C Relay; 6 Amps @ 24VDC or 6 Amps @ 20 VAC or 3 Amps @ 240 VAC
	Alarm Output Relay	Form C Relay; 6 Amps @ 24VDC or 6 Amps @ 20 VAC or 3 Amps @ 240 VAC
Operating Temperature		-31°F (-35°C) to 151°F (66°C)
Operating Humidity		0 - 100% condensing
Certifications		UL 294, Canada UL, FCC Part 15, Canada RSS-210, RoHs
Dimensions		10.43" x 7.28" x 3.79" 26.49 cm x 18.49 cm x 9.63 cm
Programming Method		Manually programmed via compatible keypad or computer programmed via SUS Software on the Schlage Handheld Programming Device (HHD)
Optional Accessories		125 foot USB remote cable connector, PS902, PS904, or Von Duprin PS914 (sold separately)

Credential Compatibility (software and reader dependent)	
Magnetic Stripe Card	Field configurable track 1, 2, or 3
125 kHz Proximity Card	Schlage, XceedID® (34X, 35X, 35C, 37X bit formats), HID®, GE/CASI ProxLite™ and AWID® 26 bit format
13.56 MHz Smart Card	aptiQ™ smart cards featuring MIFARE DESFire™ EV1 HID iCLASS® CSN only 26 bit format

The following readers are UL 294 listed for use with the CT5000:

- Essex Electronics model KTP-162
- Mercury Security models MR-5 and MR-20, XceedID models XF-1050, XF-1100, XF-1500, XF-1550 and XF-2100

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Schlage Utility Software (SUS)
on the Handheld Device (HHD)

Overview

Schlage Utility Software (SUS) is designed specifically for use on the Handheld Device (HHD) as the link between your access control management software and Schlage electronic offline and networked locks and accessories.

This solution consolidates and simplifies programming and managing your access control system. The SUS and HHD is used to initialize, configure and test product operation, and also provides an easy way to manage people, audits, locks and other network panel interface devices for simple access control. The intuitive screen layout for the SUS provides easy navigation during use.

For offline products the SUS is utilized to transfer access control data, such as authorized user lists, via the HHD to the locks. The SUS is also utilized to download audit trail information from offline devices to the HHD and then transfer that data to the access control management software.

In addition the SUS can configure other networked electronic devices (including PIM and PIB) and update firmware revision updates to the devices as desired.

The HHD connects with Schlage AD-Series electronic locks and accessories via a USB interface and utilizes Active Synch or Win Mobile Device Manager to communicate with your PC via the USB port. The HHD is also able to connect to the SPED, KC2, CM, CL, CT500, CT1000, CL Controller and WA-Series PIMs via a serial cable connection.

Features and Benefits

- Handheld Device with Schlage Utility Software installed
- Touch Screen operation
- Initialize Lock and Accessories with SUS
- Configure and Test Devices

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FEATURES AND SPECIFICATIONS

Schlage Utility Software

- Initialize Lock and Accessories
- Field Configure Devices
  - Credential Reader Formats
  - Lock Function
  - Unlock Period
  - Failure Mode
  - Audible Alarm ON/OFF
- Offline Devices
  - Manage up to 100 unique door files
  - Retrieve Audit trails from up to 100 devices
- Networked Devices
  - Communication Settings
  - Validate Status Monitor
- Service & Diagnostics
  - Battery Status
  - Validate hardware and software revision
  - Troubleshooting Status Signals
  - Firmware Upgrades

HHD Specifications

- 3.5 in LCD display
- Touch Screen with Backlit Keypad
- 32-bit processor
- Operating System: Windows Mobile 5.0
- Memory: 128 MB RAM / 256 MB ROM
- Battery: Rechargeable 3.7 V, 1,230mAH, Li-ion
- Dimensions (HWD): 5.3″ X 2.9″ X 0.7″ (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

How-To-Videos

- Specially formatted How-To-Videos for the HHD are available
- They can be downloaded from www.schlage.com/support
- If additional storage is needed, a standard mini SD memory card can be used
- Videos should be saved on the SD card or in a new folder on the device rather than in the shared sync folder or root directory

HHD Compatible Devices and Required Cable and Adaptors

Devices	Cable and Adaptors
AD-Series and CO-Series Locks PIM400, WRI400, ECK400, GCK400, WPR400, TK400 and CT5000 controller	HH-USB (included in HHD-Kit)
BE367, KC-2, CM, CL, CT500, CT1000, CL-Controller	HH-Serial + CIP
WA-Series PIM	HH-Serial + PIMWA-CV

ORDERING INFORMATION

HHD KIT – Handheld Device with SUS installed and HH-USB cable

HH-USB – USB Cable

HH-SERIAL – Serial Cable used to connect HHD to CIP

PIMWA-CV – Converter used to connect HH-SERIAL to WA-Series PIM

P512112 – CIP, utilized with HH-SERIAL to connect to CM, CL and KC-2 locks

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Proximity & Smart Keyfobs

with iButton® Option

Schlage's keyfobs provide the convenience of either contactless smart card technology or proximity technology in a form that can optionally include an iButton® credential. This durable combination works well in environments that do not require photo ID badging. The ability to attach the keyfob to a key ring ensures that personnel will be less likely to forget or lose their access credential.

The combination of either smart card technology or proximity technology with an iButton® provides the ideal dual credential for organizations that have integrated multiple credential technologies into their facilities. The iButton® provides a registration number used for access control in legacy systems, and the proximity or smart card technology enables future expansion with more advanced credentials.

The proximity keyfob incorporates the convenience of proximity technology with the iButton®. The smart keyfob can support diverse applications such as access control, biometrics, cashless vending, transit applications, and many more.

Smart Keyfob Features

- 13.56 MHz frequency Smart Technology
- Available with two memory and technology configurations
- 1K bit (8K byte) MIFARE® or a 4K bit (32K byte) MIFARE DESFire™ EV1*
- Data transfer rates of up to 848 kbps

Proximity Keyfob Features

- 125 kHz proximity technology

iButton® Features

- Durable stainless-steel packaging
- Unique factory programmed 64-bit registration number
- Momentary contact initiates identification
- Data transfer rate of up to 16.3 kbps

* Factors affecting read range include installation conditions such as voltage, location of power supply and mounting material.

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Keyfob Specifications

Dimensions (At widest point)		2.24″ x 1″ x 0.60″ 5.7 cm x 2.52 cm x 1.48 cm
Weight		0.20 oz. (5.6 g)
Maximum Read Range*		SXF 1060 Mini-Mullion up to 1″ SXF 1100 Mullion up to 2″ SXF 2100/2110 Mid-Range up to 2.5″
	AD-Series	PR Reader Module up to 0.75″ PRK Reader Module up to 0.75″ SM Reader Module up to 0.75″ SMK Reader Module up to 0.75″ MT Reader Module up to 0.75″ MTK Reader Module up to 0.75″
Frequency		125 KHz or 13.56 MHz (see below for part numbers)
Operating Temperature		-50° to 160° F (-45° to 70° C)
Material		Polycarbonate
Color		Gray

* Factors affecting read range include installation conditions such as voltage, location of power supply and mounting material.

ORDERING INFORMATION

Part Number**

IBF-110 (Combo iButton® keyfob with 125 KHz Prox)

IBWB-110 (125 KHz Prox keyfob without iButton®)

IBF-151 (Combo iButton® keyfob with 8K bit/1K byte MIFARE®)

IBWB-151 (8K bit/1K byte MIFARE® keyfob without iButton®)

** Standard part numbers. See ordering guide for more configurations and part numbers. Specifications subject to change without notice.

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CL-ENCODER2

Magnetic Stripe Credential Encoder

For use with AD-250 and CO-250
Electronic Locks Offline Controller

Overview

The CL-ENCODER2 is a motorized magnetic stripe encoder-reader that allows credentials to be instantly encoded and issued to users. Its compact footprint, rugged design and low audible noise make it a perfect choice for credential issuance in applications of any kind. A single card-slot design simplifies user interface - ensuring quality encoding every time. A smooth mechanical card-transport ensures fast, reliable, and high-quality encoder operation. A dual-color red/green LED provides clear status indications to the operator. Power-fail card return and manual card-eject features ensure that a customer's card can easily be retrieved under any conditions.

Features and Benefits

- Read and write Hi-Co and Lo-Co magnetic stripe cards per ISO 7810 and 7811
- Motorized for increased encoding precision and reliability
- Dual color LED status indicator
- Remote power pack
- Small footprint

CL-ENCODER2 Specifications	
Interface	RS232 - for use with Schlage software USB
Dimensions (HWD)	3.85″ x 4.47″ x 8.44″ (9.78 mm x 11.18 mm x 21.10 mm)
Weight	2 lbs (0.9 kg)
Magnetic Stripe	Tracks 1, 2, 3 Hi-Co/Lo-Co read/write per ISO 7810, 7811
Card Speed	7-11 i.p.s.
Input Voltage	+12 VDC ± 5 %
Current Draw	Idle: 300 mA Maximum: 3.0 A (during Hi-Co encode sequence) 1 A draw from an auxiliary serial port device
Communication Protocol	MagTek® MCP protocol
Command Set	MagTek MCP command set
MTBF	Electronics: 125,000 hours Magnetic read head: 1,000,000 passes (500,000 insertion cycles)
Temperature	Operating: 41°F to 113°F (5°C to 45°C) Storage: -40°F to 158°F (-40°C to 70°C)
Humidity	Operating and Storage: 5% to 95% non-condensing
Certifications	UL/CRU, CE Class B, FCC Class B
Material	PBT Polymer

ORDERING INFORMATION

CL-ENCODER2 - Magnetic Stripe Encoder, includes power supply

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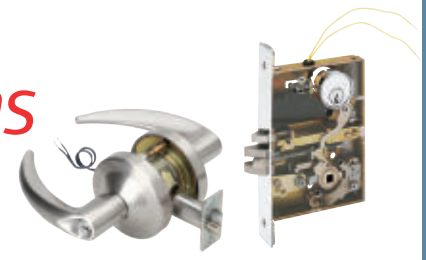
Electromechanical Solutions



This section of the Electronic Access Control catalog covers mechanical Schlage products which can be equipped with electronic features for added security and functionality.

Overview

The mechanical lock is the one of the most basic aspects of electronic access systems, however, they are as important as any other component of such a system. Mechanical security components must be able to stand up to constant wear and tear, and in some cases must be durable enough to handle direct attack or abuse. Without such durability and integrity, the building's assets and people are at risk.

Features

The two primary electromechanical Schlage products are the L-Series Mortise Lock and the ND-Series Cylindrical Lock. Both of these are offered as mechanical solutions for products without electronic capabilities; however, they may be equipped through order to incorporate electronic wiring and function. The L-Series and ND-Series can both be equipped with electrified locking capabilities. When triggered by the corresponding access control system, the lock will engage or disengage depending on the command.

The L-Series and ND-Series can also be fitted with Vandlgard® technology exclusive to Schlage products. The Vandlgard® option allows the lever to be rotated down even when the door is in the locked position. This prevents the lever from being vandalized or damaged when locked, improving both the functional integrity of the lock as well as the security which it provides. A full array of options, including levers, functions, and finishes are also available with both the L-Series and ND-Series.

Benefits

Years of engineering and design have been put into the L-Series and ND-Series from Schlage. This means with both sets of locks, strength, dependability, and flexibility are the best on the market today. Even after purchasing an expensive electronic access control system, there can still be a point of weakness at the opening if the mechanical lock does not function properly or stand up to abuse. Moreover, many tenants are depending on the mechanical aspects of an opening to be completely functional every day. When so much is at stake, you can rely on Schlage products to be dependable, strong, and flexible.

ND-Series Mechanical Specifications

Handing	Non-handed
Door Thickness	1-5/8 in. to 2-1/8 in. standard
Backset	2-3/4 in. standard, 3-3/4 in. and 5 in. optional
Faceplate	Brass, bronze or stainless steel. 1-1/8 in. x 2-1/4 in. (29mm x 57mm) square corner, beveled.
Lock Chassis	Zinc plated for corrosion resistance
Latchbolt	Steel, 1/2 in. (12mm) throw, deadlocking on keyed and exterior functions
Exposed Trim	Levers: Pressure cast zinc, plated to match finish symbols
Roses	Brass, bronze or zinc
Strike	ANSI curved lip strike 1-1/4 in. x 4-7/8 in. x 1-3/16 in. lip to center standard
Cylinders and Keys	6-pin Everest C123 keyway standard with two patented nickel silver keys per lock or SFIC Small Format Interchangeable Core (Core Not Included)
Lever Design	Rhodes Lever Handle
Finish	Oil Rubbed Bronze 613 & Satin Chromium Plated 626

ND-Series Electronic Specifications

Voltage	24V AC or 24V DC
Holding Current	.15A or .35A
Operating Temperature	Maximum +151°F (+66°C) Minimum -31°F (-33°C)
Rectifier used on AC operation unit only .35A @ 24 (Current requirements per lock)	

ND-Series Electrified Functions

Function	Outside Lever	Fail Safe/Secure?	Auxillary Latch	Inside Lever	Vandlgard®
ND12DEL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	No
ND12DEU	Continuously locked until unlocked by electric current	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	No
ND80PDEL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	No
ND96PDEL	Continuously disengaged electrically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	Yes
ND96PDEU	Continuously disengaged until unlocked by key or electric current	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	Yes

L-Series Mechanical Specifications

Handing	Non-handed
Door Thickness	1-3/4 in. (44mm) standard, 1-3/8 in. (35mm) to 2-1/2 in. (64mm) optional. Over 2-1/2 in. (64mm) door ranges vary by function. No escutcheon available for 1-3/4 in. (44mm) door standard 2 in. to 2-3/8 in. optional. Specify door thickness other than 1-3/4 in.
Backset	2-3/4 in. (70mm) only
Armored Front	1-1/4 in. x 8 in. x 7/32 in. (32mm x 203mm x 6mm) standard 1-1/16 in. x 8 in. x 7/32 in. (27 mm x 203 mm x 6mm) optional
Case Size	4-7/16 in. x 6-1/16 in. x 1 in. (113mm x 154mm x 25mm)
Spacing	Knob or lever to cylinder, 3-7/8 in. (98mm); knob or lever to thumbturn hub, 2-11/16 in. (68mm)
Bolts	1 in. (25mm) throw stainless steel deadbolt and 3/4 in. (19mm) throw stainless steel latch with anti-friction tounge
Cylinders and Keys	6-pin Everest C123 keyway standard with two patented keys standard
Keying Options	Interchangeable core and Primus High Security available. Master keying, grand master keying, and construction keying.
Strike	ANSI curved lip strike 1-1/4 in. x 4-7/8 in. (32mm x 124mm) x 1-3/16 in. (30mm) lip to center with dust box standard
Trim Combinations	Available with knobs both sides, levers both sides, or knob and lever with rose or escutcheon on each side
Escutcheons	L escutcheons are cold forged brass or bronze and stainless steel. N escutcheons are heavy wrought reinforced brass, bronze and stainless steel
Knobs	#41 and #42 heavy duty wrought brass, bronze or stainless steel knobs match D Series knobs
Levers	Forged brass or bronze and cast stainless steel. Designs available to match D-Series levers. 93 lever design: Extruded brass, bronze, or stainless steel.

L-Series Electronic Specifications

Voltage	24V AC or 24V DC (Max 29V; Min 20V)
Peak Current	1.3 Amps at 5 to 10 second intervals
Holding Current	.135 Amps between peak current intervals
Operating Temperature	Maximum +151°F (+66°C) Minimum -31°F (-33°C)
Interfacing devices	HandReaders, wall switches, security consoles, access card readers, thermo-sensitive devices, smoke and fire alarms, telephone access controls, automatic time devices and computerized controls
Micro Switch Electrical Requirements for Request to Exit (RX) Function	Current: 1.0 Amps Voltage: 24V AC or 24V DC Peak Load: 5 Amps, 250V AC or DC

L-Series Electrified Functions

Function	Outside Lever	Fail Safe/ Secure?	Auxillary Latch	Inside Lever	Latchbolt Retract	Request to Exit	Vandlgard®
L9080EL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	Latchbolt retracted by key outside or by lever inside	None	Optional (LV9080EL)
L9080EU	Unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	Latchbolt retracted by key outside or by lever inside	None	Optional (LV9080EU)
L9080EL-RX*	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	Latchbolt retracted by key outside or by lever inside	Allows for non-disruptive means of immediate egress	Optional (LV9080ELRX)
L9080EU-RX*	Unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	Latchbolt retracted by key outside or by lever inside	Allows for non-disruptive means of immediate egress	Optional (LV9080EURX)
L9082EL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Continuously locked electronically	Latchbolt is retracted by key on either side	None	None
L9082EU	Unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Unlocked by 24V AC or DC	Latchbolt is retracted by key on either side	None	None

*Specify L283-263 with L functions, specify L283-239 with LV functions

ND-Series and L-Series Comparison

	ND-Series	L-Series
Handing	**Non-handed**	**Non-handed**
Door Thickness	1-5/8 in. to 2-1/8 in. standard	1-3/4 in. (44mm) standard, 1-3/8 in. (35mm) to 2-1/2 in. (64mm) optional. Over 2-1/2 in. (64mm) door ranges vary by function. No escutcheon available for 1-3/4 in. (44mm) door standard 2 in. to 2-3/8 in. optional. Specify door thickness other than 1-3/4 in.
Backset	2-3/4 in. standard, 3-3/4 in. and 5 in. optional	2-3/4 in. (70mm) only
Levers	Pressure cast zinc, plated to match finish symbols	Forged brass or bronze and cast stainless steel. Designs available to match D-Series levers. 93 lever design: Extruded brass, bronze, or stainless steel
Strike	ANSI curved lip strike 1-1/4 in. x 4-7/8 in. x 1-3/16 in. lip to center standard	ANSI curved lip strike 1-1/4 in. x 4-7/8 in. (32mm x 124mm) x 1-3/16 in. (30mm) lip to center with dust box standard
Cylinders and Keys	6-pin Everest C123 keyway standard with two patented nickel silver keys per lock or SFIC Small Format Interchangeable Core (Core Not Included)	6-pin Everest C123 keyway standard with two patented keys standard

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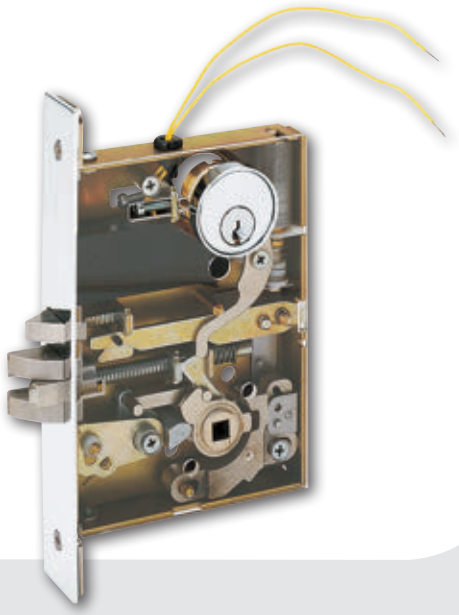
L-Series
Mortise Electrified Lock



Overview

The most complex electronic access systems still rely on mechanical hardware to operate properly. Advanced electronic technology can go to waste without adequate mechanical locking strength and functionality.

The Schlage L-Series is a mortise lock which can be equipped with an electrified locking option. The L-Series Mortise Lock is designed for the highest security applications, featuring a heavy-duty deadbolt and superior strength and durability.

The L-Series can serve as the mechanical component to nearly any electronic access system. With the electrified option, the L-Series is wired to two sources; a regulating device and a power source. A regulating device such as a hand or card reader signals the L-Series to lock or unlock, while the power source serves as the energy source to change the status of the lock.

Top of the line security means getting the most of both mechanical and electrical components. The Schlage L-Series has a proven record of performance, strength, an durability from the most trusted name in the industry.

Recommended Applications

The L-Series Electrified Mortise Lock is useful for many applications, including but not limited to:

- Security control centers
- Cashier rooms
- Fire safety exits
- Equipment rooms
- Hazardous material storage

Features & Benefits

- Vandlgard ® option prevents damage to internal lock when lever is subjected to force
- Fully wrapped heavy-gauge steel case protects against door edge attacks
- Universal lock case provides up to ten functions in one case
- Features reversible handing without opening the case
- Lever rotation up or down for easy use

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L-Series Mechanical Specifications	
Handing	Non-handed
Door Thickness	1 3/4″ (44mm) standard, 1 3/8″(35mm) to 2 1/2″ (64mm) optional. Over 2 1/2″ (64mm) door ranges vary by function. Specify door thickness other than 1 3/4″.
Backset	2 3/4″ (70mm) only
Armored Front	Standard: 1 1/4″ x 8″ x 7/32″ (32mm x 203mm x 6mm) Optional: 1 1/16″ x 8″ x 7/32″ (27 mm x 203 mm x 6mm)
Case Size	4 7/16″ x 6 1/16″ x 1″ (113mm x 154mm x 25mm)
Spacing	Knob or Lever to cylinder, 3 7/8″ (98mm); knob or lever to thumbturn hub, 2 11/16″ (68mm)
Bolts	1″ (25mm) throw stainless steel deadbolt and 3/4″ (19mm) throw stainless steel latch with anti-friction tounge
Cylinders and Keys	6-pin Everest C123 keyway standard with two patented keys standard
Keying Options	Interchangeable core and Primus High Security available. Master keying, grand master keying, and construction keying
Strike	ANSI curved lip strike 1 1/4″ x 4 7/8″ (32 mm x 124 mm) x 1 3/16″ (30mm) lip to center with dust box standard
Trim Combinations	Available with knobs both sides, levers both sides, or knob and lever with rose or escutcheon on each side
Escutcheons	L escutcheons are cold forged brass or bronze and stainless steel.
Knobs	#41 and #42 heavy duty wrought brass, bronze or stainless steel knobs match D Series knobs
Levers	See pricebook for details.

L-Series Electronic Specifications	
Voltage	24V AC or 24 V DC (Max 29V; Min 20V)
Peak Current	1.3 Amps at 5 to 10 second intervals
Holding Current	.135 Amps between peak current intervals
Operating Temperature	Maximum +151°F (+66°C) Minimum -31°F (-33°C)
Interfacing devices	HandReaders, wall switches, security consoles, access card readers, thermo-sensitive devices, smoke and ire alarms, telephone access controls, automatic time devices and computerized controls
Micro Switch Electrical Requirements for Request to Exit (RX) Function)	Current: 1.0 Amps Voltage: 24V AC or 24V DC Peak Load: 5 Amps, 250 V AC or DC

L-Series Electrified Functions
Note: See pricebook for details.

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ND-Series
Cylindrical Electrified Lock

Overview

Electronic access control systems can be installed in a variety of applications, but they always require a mechanical lock to ensure that safety and security needs are met.

The Schlage-ND Series is a cylindrical lock which can be equipped with an electrified locking option. It can be quickly and easily installed and integrates with various key systems for field adaptability.

The ND-Series serves as the mechanical component to nearly any electronic access system. With the electrified option, the ND-Series is wired to two sources; a regulating device and a power source. A regulating device such as a hand or card reader signals the ND-Series to lock or unlock, while the power source serves as the energy source to change the status of the lock.

When it comes to access control, mechanical components can be just as important as their electronic counterparts. The Schlage ND-Series provides versatility and easy installation to complete your access control system.

Features & Benefits

- Vandlgard ® option prevents damage to internal lock when lever is subjected to force
- Tested to over four times the ANSI Grade 1 standards
- Exceeds ANSI A156.2 series 4000 Grade 1 torque requirements
- Extensive options for lever, finish, handing, and functions
- Can be set to fail safe or fail secure
- Is available with request to exit functionality

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ND-Series Mechanical Specifications	
Handing	Non-handed
Door Thickness	1-5/8″ to 2-1/8″ standard including Vandlgard
Backset	2-3/4″ standard, 3-3/4″ and 5″ optional
Faceplate	Brass, bronze or stainless steel. 11/8″ x 21/4″ (29 mm x 57mm) square corner, beveled.
Lock Chassis	Zinc plated for corrosion resistance.
Latchbolt	Steel, 1/2″ (12mm) throw, deadlocking on keyed and exterior functions. 3/4″ (19mm) throw anti-friction latch available for pairs of fire doors.
Exposed Trim Levers	Pressure cast zinc, plated to match finish symbols.
Roses	Brass, bronze or zinc.
Strike	ANSI curved lip strike 11/4″ x 47/8″ x 13/16″lip to center standard.
Cylinders and Keys	6-pin Everest C123 keyway standard with two patented nickel silver keys per lock or SFIC Small Format Interchangeable Core (Core Not Included)
Keying Options	Interchangeable core and Primus high security cylinders. Master keying, grand master keying and construction keying.
Lever Design & Finish	All ND levers and all ND finishes available

ND-Series Electronic Specifications	
Voltage	24V AC or 24 V DC
Holding Current	.35A or .15A
Operating Temperature	Maximum +151°F (+66°C) Minimum -31°F (-33°C)
Rectifier used on AC operation unit only .35A @ 24 (Current requirements per lock)	

ND-Series Electrified Functions
Note: See pricebook for details.

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Readers

This section of the Electronic Access Control catalog covers XceedID® Proximity Readers, and aptiQ™ Smart and Multi-Technology Readers from Ingersoll Rand Security Technologies.

Overview

Ingersoll Rand offers a comprehensive line of credential readers with a range of technologies and form factors to meet a variety of security needs and budgets. The aptiQ™ line of multi-technology readers deliver complete flexibility when transitioning from proximity to smart technology. A variety of reader designs are available to accommodate a wide range of mounting applications.

Proximity Readers

- XceedID proximity technology offers your facility an easy and convenient access control solution. Proximity technology, which operates on 125 kHz frequency, is easily integrated into existing legacy proximity systems or ideal for a new installation.
- The PR10 proximity mini-mullion reader is attractive, cost-effective, and well suited for exterior and interior applications. This reader also has a sleek and attractive architectural styling. The PR10 proximity reader by XceedID offers a visual indicator and audio feedback representing status and activity information which make access control simple for users to understand.
- The proximity reader by XceedID operates on a Wiegand interface, and is compatible with industry leading proximity credentials.

Smart Readers

- The aptiQ™ SM10 mini-mullion smart reader by Ingersoll Rand Security Technologies is one of the most secure readers in the industry. Instead of using open transmission protocols, the SM10 smart card reader utilizes high security data. Each message between the card and the reader is digitally signed using Message Authentication Coding (MAC) to ensure the integrity of the data.
- Smart reader technology can be used in applications such as logical access, cashless vending, and cafeteria services.

Multi-Technology Readers

- aptiQ™ multi-technology readers are the most flexible readers in the industry. Finally, one reader handles all applicable ISO standards (14443), and can handle multiple formats simultaneously. aptiQ™ multi-technology readers contain both 125 kHz proximity and 13.56 MHz contactless smart card capability in one unit, which allows customers to economically migrate to the latest in smart card technology at their own pace.

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aptiQ™
Multi-Technology Readers

Overview

aptiQ™ Multi-Technology Readers by Ingersoll Rand Security Technologies are designed to simplify your access control solutions. Transition your system from proximity to smart card technology at your own pace without having to change out readers as new technologies are available. aptiQ readers handle all applicable ISO standards (14443A, 14443B, 15693), are FIPS 201-1 compliant and are versatile enough to read 125kHz proximity and 13.56MHz contactless smart cards in a single unit. aptiQ multi-technology readers interface with XceedID® MIFARE® Classic smart cards, the ultra-secure aptiQ™ MIFARE DESFire™ EV1, and can read the card serial numbers of a variety of smart cards from other manufacturers, making your next upgrade in technology simple and seamless. Additionally, aptiQ readers are already NFC compatible and able to communicate with NFC-enabled phones whenever you're ready to take that step.

aptiQ multi-technology readers use an open architecture platform designed to work with industry standards and common access control system interfaces. Multiple aptiQ reader form factors are designed to fit a variety of placement needs, with an attractive modern design which will complement any facility's architecture and décor. aptiQ readers are very easy to install with the quick-connect design and a standard wiring color scheme that most technicians are already accustomed to. But if you do have questions, you'll never worry about lack of service or assistance. As always, our knowledgeable sales & support staff is ready to assist you with any design or technology questions you may have.

Features & Benefits

- Accommodates interior, exterior, metal, and non-metal installation environments
- Recognizes most proximity credentials, XceedID® MIFARE® Classic smart credentials, and aptiQ™ MIFARE DESFire™ EV1 smart credentials
- FIPS 201-1 Compliant
- NFC Compatible
- Quick-connect design for easy installation
- Simple wiring – color scheme is identical to most readers in the market
- Easy-to-install mounting bracket
- Tri-state LED (red, green, amber) visual indicator and audio feedback representing status and activity information, easily discernible for the audibly or visually impaired.
- Wiegand output for simple interface with most access control panels
- Multiple reader cover color options
- Limited Lifetime Warranty
- Multi-technology readers may also be ordered with RS-485 capability

Ingersoll Rand®

Model*	PR10	SM10	MT11	MT15	MTK15
Reader Type	Proximity Mini-Mullion*	Smart Mini-Mullion*	Multi-Technology Mullion	Multi-Technology Single Gang	Multi-Technology Single Gang Keypad
Frequency	125 kHz	13.56 MHz	13.56 MHz and 125 kHz		
FIPS 201-1 Compliant	No	Yes			
Standard Default PIV Output	n/a	75 bit PIV**			
Standards	n/a	ISO 14443A, 14443B, 15693			
Certifications	FCC Certification • IC Certification • UL 294 Listed • R&TTE Directive (15 EU Countries) • CE Mark • IP65				
Voltage Range	5-16 VDC				
Power Supply	Linear DC				
Current Requirement (at 12 VDC and 25 C; mAmps)	Avg. 65 mA Peak 110 mA	Avg. 95 mA Peak 195 mA	MT11 Avg. 100 mA MT11 Peak 135 mA	MT11-485 Avg. 115 mA MT11-485 Peak 145 mA	MT15 & MT15-485 Avg. 120mA MT15 & MT15-485 Peak 200mA	MTK15 & MTK15-485 Avg. 120mA MTK15 & MTK15-485 Peak 230mA
Read Range (Based off of MRD)	Proximity: Up to 3″ (7.5 cm)	MIFARE: Up to 3″ (7.5 cm) DESFire EV1: Up to 2″ (5.1 cm)	Proximity: Up to 5″ (12.7 cm) MIFARE: Up to 4″ (10 cm)		DESFire EV1: Up to 2″ (5.1 cm) PIV Credential: Up to 2.5″ (6.5 cm)	
Cable Specification	18 AWG, 5 Conductor Stranded/Shielded					
System Interfaces	Wiegand	Wiegand / Clock & Data	Wiegand / Clock & Data / RS-485*** (OSDP)			
Cabling Distance	Wiegand Output: 500 ft. (152 m)					
Physical Dimensions (HWD)	4.26″ x 1.72″ x 0.81″ 10.8 cm x 4.4 cm x 2.1 cm		5.91″ x 1.72″ x 0.81″ 15 cm x 4.4 cm x 2.1 cm		5.1″ x 3.25″ x 0.76″ 12.9 cm x 8.3 cm x 1.9 cm	
Operating Temperatures	-31 to 151F (-35 to 67C)					
Weight (lbs)	4.1 oz	3.9 oz	5.7 oz		9.1 oz	9.3 oz
Material	PBT Polymer					
Technologies Supported in Default Mode	Schlage Proximity XceedID™ Proximity HID® Proximity GE/CASI ProxLite® AWID® Proximity LenelProx®	Schlage MIFARE® Secure Sector XceedID™ MIFARE® Secure Sector aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA DESFire® CSN • HID iClass® CSN Inside Contactless PicoTag® CSN ST Microelectronics® CSN Texas Instruments Tag-It® Serial Number Phillips I-Code® CSN	Schlage Proximity • XceedID™ Proximity • HID® Proximity GE/CASI ProxLite® • AWID® Proximity • LenelProx® Schlage MIFARE® Secure Sector • XceedID™ MIFARE® Secure Sector aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA • DESFire® CSN HID iClass® CSN • Inside Contactless PicoTag® CSN • ST Microelectronics® CSN Texas Instruments Tag-It® Serial Number • Phillips I-Code® CSN			

Color Options

Black (Standard) · Cream · Cool Tone Gray · Warm Tone Brown

* Some features and benefits listed on the front may not be applicable to the smart-only and proximity-only readers.

** Other output options available through configuration.

*** RS-485 model numbers include "-485" after the original model number. For example, MT11-485 is the RS-485 version of the multi-technology mini-mullion reader. Multi-drop, Open Standard Device Protocol (OSDP).

aptiQ™ Smart Technology from Ingersoll Rand enhances the intelligence of products through a secure, open architecture design in readers, credentials, and smart phone applications. aptiQ™ seamlessly interfaces and communicates with a variety of products, and provides a platform that easily adapts as new innovations enter the marketplace.

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aptiQ™

FIPS 201-1 Compliant Readers

Overview

aptiQ™ Smart and Multi-Technology Readers by Ingersoll Rand have been approved by the U.S. Government under HSPD-12 for FIPS 201-1 compliance as PIV Transparent Readers. PIV compliance is available on four reader models, including the SM10 Smart Mini-Mullion, MT11 Multi-technology Mullion, MT15 Multi-technology Single Gang, and MTK15 Multi-technology Single Gang with Keypad.

aptiQ™ Multi-Technology readers are a unique and critical component of successful security upgrades in all sectors of the government. FIPS 201-1 is a Federal Information Processing Standard ("FIPS") developed by the National Institute of Standards and Technology ("NIST") to satisfy the requirements of HSPD-12, a Homeland Security Presidential Directive. One of the main objectives of HSPD-12 is to ensure government-wide interoperability for information technology and security through the implementation of a range of federal standards and product requirements. FIPS 201-1 seeks to improve identification and authentication of Federal employees and contractors for access to the Federal factilities and information systems.

aptiQ™ FIPS 201-1 PIV compliant readers are available with multiple data output formats, which provide unprecedented versatility within the PIV II specification.

In addition to reading approved FIPS 201-1 PIV II credentials, aptiQ™ Smart and Multi-technology readers are also compatible with many standard proximity and leading smart card technologies (see specifications). The ability to read multiple existing card types and PIV II cards simultaneously is a tremendous benefit to those agencies looking to transition seamlessly from older proximity technologies to new, mandated PIV II credentials. A mixed population of old prox credentials and new PIV II credentials is unavoidable during the government's multi-year upgrade path to FIPS 201-1 compliance.

Features & Benefits

- Compatibility: compatible with industry standard 125 kHz and 13.56 MHz contactless technologies
- Read Range: up to 6 inches (proximity), up to 2 inches for PIV II credentials
- Tri-state LED (red, green, amber): Visual indicator and audio feedback representing status and activity information
- Tamper Detection
- Environment: accommodates interior, exterior, metal and non-metal installation environments

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ADDITIONAL FEATURES

- Compliance: compatible with applicable ISO standards
- Compatible with all access control systems that support Wiegand format
- Warranty: limited lifetime against defective workmanship and materials
- Additional Technologies Supported
  - Proximity
    - Schlage
    - XceedID®
    - HID® Proximity (certain formats)
    - GE/CASI ProxLite™
    - AWID® Proximity
  - Smart Card (secure sector only)
    - Schlage
    - XceedID® MIFARE®
    - aptiQ™ MIFARE DESFire™ EV1
    - FIPS 201-1/PIV II
  - Smart Card (card serial number only)
    - DESFire® Application HID iClass®
    - Inside Contactless PicoTag™

ORDERING INFORMATION

SM10 - Smart Mini-Mullion Reader

MT11 - Multi-Technology Mullion Reader

MT15 - Multi-Technology Single Gang Reader

MTK15 - Multi-Technology Single Gang Reader with Keypad

aptiQ™ PIV readers have been approved by the GSA lab as compliant with FIPS 201-1 and the appropriate PIV credentials.

Please see individual data sheets for each reader for more specific technical information.

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SERIII-W
Scramble Keypad

Overview

The SERIII Scramble Keypad is a keypad reader designed to prevent onlookers from detecting the PIN code being entered. The LED's display a randomly allocated set of numbers from 0 to 9. The position of the numbers change every time the keypad is activated. Only the user standing directly in front of the keypad can see the scrambled digits.

Features and Benefits

- Very narrow viewing angle of the lighted, scrambled digits
- The membrane keypad is extremely durable
- Random allocation of digits ensures even wear to the keys
- Individual PIN codes can be up to 9 digits in length
- The SERIII has a weatherproof rating of IP65
- An audible alarm signals when a button is depressed
- Robust polycarbonate enclosure
- The unit is equipped with power-up diagnostics and self-test routine
- The SERIII is provided with Wiegand communication protocol
- Over 3.6 million unique permutations are available
- Terminal connection on the rear of the unit

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Specifications	
Dimensions	5.39″ x 4.17″ x 2.05″
Input Voltage	8 - 12 VDC
Input Current	500mA max.
Operating Temperature	5º F to 122º F
Weight	16.76 oz.
Cable Distance (Wiegand)	500′ with 22AWG 6 conductor stranded with overall shield

ORDERING INFORMATION

SERIII-W - Scramble Keypad (Gray)

SERIII-WB - Scramble Keypad (Black)

SMK-2 - Scramble Keypad Surface Mount Kit (Gray)

SMK-2B - Scramble Keypad Surface Mount Kit (Black)

SSMK-2 - Scramble Keypad Surface Mount Kit (ADA Compliant)

PMK-2 - Panel Mount Kit (Gray)

PMK-2B - Panel Mount Kit (Black)

SPMK-2 - Panel Mount Kit w/Steel Back Box (Gray)

SPMK-2B - Panel Mount Kit w/Steel Back Box (Black)

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SMR10 and SMR20
Magnetic Stripe Readers

Overview

The SMR10 and SMR20 Stripe Readers have a slim, mullion style design. The die cast metal housing makes it ideal for indoor or outdoor applications. The SMR20 has a 12 position membrane style keypad.

Features and Benefits

- Rugged Metal Housing
- All stainless steel hardware is standard
- Audiovisual indication provides Two LED's (red/green) and beeper sounds
- Static Discharge Protection
- Accepts low or high coercivity-magnetic cards
- Standard Track 2 encoding (Track 1 & 3 are available)
- One security screw mounting
- Supports Wiegand or Clock & Data interface formats via Dip Switches

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Specifications	
Dimensions	1.95″W x 1.3″H x 5.5′L
Power requirements	5 or 12 VDC
Power consumption	20 mA at 12 VDC
Operating Temperature	-40º F to 170º F
Weight	10 oz.
Cable Distance	500′ with 18AWG 6 conductor stranded with overall shield

ORDERING INFORMATION

SMR10 - 5 VDC standard, Magnetic Stripe Card Reader (specify black or beige)

SMR10-12V - 12 VDC Magnetic Stripe Card Reader (specify black or beige)

SMR20 - 5 VDC standard, Magnetic Stripe Card Reader w/keypad (specify black or beige)

SMR20-12V - 12 VDC Magnetic Stripe Card Reader w/ keypad (specify black or beige)

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SMR5
Magnetic Stripe Reader

Overview

The SMR5 Mercury Magnetic Stripe Reader has a slim, mullion style design. The die cast metal housing makes it ideal for indoor or outdoor applications.

Features and Benefits

- Rugged Metal Housing
- All stainless steel hardware is standard
- Audiovisual indication provides multicolor LED (red/green) and beeper sounds
- Static discharge protection
- Accepts low or high coercivity-magnetic cards
- Standard Track 2 encoding (Track 1 & 3 are available)
- One security screw mounting
- Supports Wiegand or Clock & Data interface formats

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Security Technologies

Specifications	
Dimensions	1.95″W x 1.3″H x 5.5′L
Power requirements	5 or 12 VDC
Power consumption	20 mA at 12 VDC
Operating Temperature	-40º F to 170º F
Weight	10 oz.
Cable Distance	500′ with 18AWG 6 conductor stranded with overall shield

ORDERING INFORMATION

SMR5 - 5VDC Magnetic Stripe Card Reader (specify black or beige)

SMR5-12V - 12VDC Magnetic Stripe Card Reader (specify black or beige)

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SEKPDWG and SEKPDMGW

Electronic Keypads

Overview

The fully encapsulated Electronic Keypad can be used by itself or next to another reader device for additional security. Its stainless steel construction is ideal for indoor or outdoor applications. The two designs, single gang box or the mullion mount style, give it the diversity needed for any application.

Features and Benefits

- Field selectable keypad configurations
- SEKPDWG mounts directly to a single gang electrical box
- SEKPDMGW mounts to any mullion style frame
- No moving parts to replace

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Specifications	
Dimensions	SEKPDWG: 5.125″ x 3.375″ x .437″ SEKPDMGW: 7.125″ x 1.75″ x .75″
Power supply	5-12 VDC (field selectable)
Operating temperature	-40º F to 160º F
Weight	SEKPDWG: 16 oz. SEKPDMGW: 4.4 oz
Material	316L Stainless Steel
Standby current draw	SEKPDWG: 5V-20mA, SEKPDMGW: 5V-20mA

ORDERING INFORMATION

SEKPDWG - Single Gang Style Keypad

SEKPDMGW - Mullion Style Keypad

SEKPD8B - Mullion Style Keypad (8 Bit)

Note: Specify 5V or 12V

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SWSRBL

Wiegand Swipe Reader

Overview

The SWSRBL Wiegand Reader combines innovative circuitry and rugged construction to resist vandals. The polymeric housing and epoxy potted electronics makes it ideal for indoor or outdoor applications. The reader can be mounted on a vertical surface with the slot orientation either upward or downward, facing to the left or the right.

Features and Benefits

- Rugged polymeric housing and epoxy potted electronics
- Visual indication provides tri-colored LED
- Immune to external magnetic fields and RF signal
- Supports Wiegand interface format
- Versatile mounting configurations
- Slot width is 0.062″ to 0.069″

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Specifications	
Dimensions	2.3″ x 5.3″ x 1.7″
Power requirements	5-12 VDC
Power consumption	30 mA at 12 VDC
Operating Temperature	-40º F to 160º F
Weight	12.1 oz.
Cable Distance	500′ with 18AWG 6 conductor stranded with overall shield
For use with code stripe layout options	
A	long edge/right side
A1	long edge/left side
D	short edge

ORDERING INFORMATION

SWSRBL - Wiegand Reader

SWTRB - Wiegand Turnstile Reader

SWINS - Wiegand Insertion Reader

SWKEY - Wiegand Key Reader

SWPIN - Wiegand PinPad

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SENROLL
Enrollment Reader

Overview

The SENROLL Enrollment Reader can be used in conjunction with the Schlage Security Management System (SMS) Select, Premier or Enterprise Software to facilitate automatic enrollment of online and/or offline credentials into your access control system. Automatic enrollment eliminates the time involved in manually entering credential data and greatly reduces the potential for human error. The SENROLL contains read heads for:

- Proximity / Smartcard
- iButton®
- Magnetic Stripe

The SMS software will automatically store the credential data in the database upon presentation of a credential to one of the read heads. This all-in-one unit allows the end-user to utilize different credential technologies or migrate to different technologies in the future. The SENROLL can be connected to the SMS workstation using either a serial port or a USB port (the latter via an inline USB/Serial converter that is included with the reader). For your convenience, the unit can be located at the SMS workstation for easy enrollment. No additional hardware is required.

Specifications	
Dimensions	1.53″ H x 4.20″ W x 6.92″ D
Power supply	included
Power consumption	100mA
Ambient Temperature	0° to 70° C or –40° to 185° F
Humidity	10% to 90% (non-condensing)
Maximum distance to SMS PC	50 feet, RS-232 communication
Recommended cable	included
Please refer to SMS Manual for supported formats	

ORDERING INFORMATION

SENROLL- Provides multiple read head technologies for entering credential data into the Schlage Security Management System database (SMS Select, Premier or Enterprise)

NOTE: Please specify if using with multi-technology cards

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SBSRW
Barcode Slot Reader

Overview

The SBSRW Barcode Slot Reader combines innovative circuitry and optics to provide high 'first read' rates. The polycarbonate housing makes it ideal for indoor or outdoor applications.

Features and Benefits

- Polycarbonate housing
- Visual indication provides one LED
- 3″-30″ per second barcode scanning speed
- Bi-directional scanning
- Slot width is 0.050″
- Supports TTL/Open Collector interface format or Wiegand
- Optics resolution is 5 mil (high)/ 10 mil (low)
- Light source is 630nm visible/940 nm infrared

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Specifications	
Dimensions	2.4″W x 1.4″H x 4.6″L
Power requirements	5VDC
Power consumption	145mA typical 245 max at 5VDC
Operating temperature	-40º F to 170º F
Weight	7 oz.
Cable distance	50′ with 18AWG 6 conductor stranded with overall shield to reader interface

ORDERING INFORMATION

SBSRW - Barcode Slot Reader TTL/Open Collector

SBSRW-WIEG - Barcode Slot Reader Wiegand interface format

SBSRW-TP - Barcode Slot Reader Thermal Paper

SBSRW-V - Barcode Slot Reader- Visual

SBSRW-OP - Barcode Slot Reader- Optical

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KP212 and KP232
Mullion Mounted Keypad Series

Overview

The Mullion Keypad Series is a stand alone solution and is ideal for controlling electrified door hardware such as electric strikes or electromagnetic locks. The one-piece design allows easy installation, mounting directly to mullion. Designed with backlit keys and weather resistant, they are well suited for both indoor and outdoor applications.

The mullion stile readers can be programmed to accept up to 120 user codes, are equipped with a Form C, dry contact relay and can be released by using a momentary Request to Exit switch.

The KP232 is designed to meet most residential, commercial, and industrial single door access control needs, and has two inputs and four outputs and factory set access control.

Features and Benefits

KP212 and KP232

- Up to 120 Users
- Illuminated Hardened Keys
- Sounder
- Doorbell Relay
- Weather Resistant
- Programmable 00-99 Second Relay Activation Time
- Remote Trigger Input (REX)
- Bell Output (timed or continuous)
- Applications:
  - Heavy Traffic
  - Indoor/Outdoor

(KP2000 on back)

KP2000
Single Gang Flush Mount

Overview

The KP2000 Series Single gang flush mount keypads manage up to 500 users and provide complete access control functionality including monitoring door position, controlling locking hardware, triggering propped or forced alert or alarm shunt output. Other applications for the KP2000 Series keypads include: controlling electronic devices such as handicapped doors, gate controls, alarm systems, ATM vestibules, and other types of machinery requiring momentary or latched outputs.

You can select between two modes of functionality with the KP2000 Series Keypads. They can operate most Wiegand access system controllers, or as standalone access control devices.

The KP2000 Series comes in two different styles: the “e” style and the “eM” style. The “e” style keypad uses hardened backlit keys while the “eM” style uses a durable metal keypad including Braille alpha-numeric keys. The KP2000 series can be used in interior and exterior applications. The flush-mount keypads are constructed to meet your aesthetic needs while ensuring long-term durability and high-quality performance.

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KP2000 Features

- 500 users
- Door position input
- Request to Exit input
- 2 Form C SPDT relay outputs – default for access control function
- Sounder for key press and alert conditions
- All outputs can be programmed independently if required
- Option for secure installation with control electronics in protected area
- Widest array of user type options including single use and two man rule
- 10-30 VDC and 12-24 VAC operation
- Over-voltage protection for reliable operation
- Single-gang flush mount design
- Indoor/outdoor use
- Keypad programmable
- Key press feedback via sounder and yellow LED
- Built-in assignable sounder
- Bi-color Red/Green LED indicates relay status

Reader Specifications

Feature Set	**KP212**	**KP232**	**KP2000E**	**KP2000EM**
Mounting	Mullion	Mullion	Single Gang/Flush	Single Gang/Flush
Users	120	120	500	500
PIN Length	1-6 digits	1-6 digits	1-10 digits	1-10 digits
Duty Cycles	Medium	Medium	Medium	Heavy Duty
Back Light	Yes	Yes	Yes	No
Keys	Hard Plastic	Hard Plastic	Heavy Duty Plastic	Heavy Duty Metal w Braille
Weather Resistant	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor
Doorbell Key	Yes	Yes	No	No
Wiegand Output	No	No	No	No
Remote Trigger (REX)	Yes	Yes	Yes	Yes
Access Control Functionality	Programmable relay activation time (0-99 seconds). Perfect for electric or magnetic locks requiring momentary control.	4 dedicated relay outputs (Lock release, door forced, door propped and alarm shunt)	Monitors DPS, controls various electronic hardware, triggers door propped, forced door alert or alarm shunt	Monitors DPS, controls various electronic hardware, triggers door propped, forced door alert or alarm shunt
Relays	2 Relays (Main and Aux)	Main, Prop Door, Forced Door and Alarm Shunt Relay	2 Form C, expandable to 10 programmable outputs	2 Form C, expandable to 10 programmable outputs
Outputs	2 Independent (configurable)	4 Independent (dedicated)	2 Independent (Programmable with the option to add 8 more)	Programmable
Finish	Aluminum	Aluminum	Aluminum	Aluminum
UL 294	No	No	Yes	Yes

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CRM2 and CRP2
Enrollment Readers

Overview

The CRM2 Magnetic Stripe Credential Enrollment Reader and the CRP2 Proximity Credential Enrollment Reader are designed to allow easy enrollment of credentials into the SMS Express access control system. These compact readers eliminate the need for manual data entry, and provide error-free identification and security throughout the workplace. The plug and play functionality provided via a convenient USB connection allows either of these readers to seamlessly integrate with the SMS Express software. Additionally, the reader allows for keystrokes to be added before and after the card's data, providing flexibility and data customization.

Note: Compatible with SMS Express version 4.0 and higher

Features and Benefits

CRM2
- Magnetic stripe reader
- Reads data from any data track location on the card
- USB connectivity
- Plug-and-play functionality

CRP2
- Proximity reader
- USB connectivity
- Plug-and-play functionality

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CRP2 Specifications	
Typical Maximum read range:	1.0″ – 3.0″ (2.5 – 7.6cm) dependent upon proximity card type and environmental conditions
Dimensions:	3 3/8″ x 2″ x 0.6″
Weight:	0.45 lbs (12.7g)
Power supply and interface:	USB self-powered
Indicators:	Tri-state LED, beeper
Transmit frequency:	125 kHz
Operating temperature range:	-22° to 150°F (-30° to 65°C)
Operating humidity range:	5% to 95% relative humidity, non-condensing
Storage temperature range:	-40° to 185°F (-40° to 85°C)
Certifications:	FCC, United States; CE Mark Europe, C-tic Australia, RoHS
Warranty:	One year for material/workmanship and defects

CRM2 Specifications	
Desktop Dimensions:	3.674″ x 1.325″ x 1.193″ (93.32 x 33.65 x 30.3 mm); Optional base: 3.375″ x 3.5″ x 0.5″ (86 x 89 x 13 mm)
Desktop Weight:	4.6 oz. (136g); Base: 13 oz. (369g)
Media Thickness:	0.015″ (0.127 mm) to 0.038″ (1.14 mm)
Slot Width:	0.040″ (1.0 mm)
Swipe Speed:	3 to 60 inches per second, bi-directional
Power Supply and Interface:	USB: self-powered; RS-232 [DB9F] model: 5V supplied by either PS/2 keyboard pass-through or USB power tap
Indicators:	Tri-state LED, beeper
Operating Temperature Range:	32° to 131°F (0° to 55°C)
Operating Humidity Range:	5% to 95% relative humidity, non-condensing
Storage Temperature Range:	-22° to 158°F (-30° to 70°C)
Cable Length:	6-foot articulated cable
Operating Life:	1,000,000 cycles minimum
Warranty:	One year for material/workmanship and defects

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Credentials

This section of the Electronic Access Control catalog covers proximity, smart, and multi-technology credentials from Ingersoll Rand Security Technologies.

Overview

Schlage by Ingersoll Rand Security Technologies offers a comprehensive line of smart, multi-technology and proximity credentials with an array of technological capabilities and form factors to meet the security needs and budget of virtually any customer. Schlage has a full offering of credentials to provide complete flexibility when transitioning from proximity to smart technology. Additionally, a variety of designs are available to accommodate a wide range of needs, from ISO card styles for name badges to keyfobs.

Proximity Credentials

- Schlage proximity technology offers your facility an easy and convenient access control solution. Proximity technology, which operates on 125 kHz frequency, is easily integrated into existing legacy proximity systems and new installation.
- Offered in several different form factors, Schlage has the proximity credentials to meet your needs.
  - The **clamshell style** is highly durable and more ridged than the typical credit card, making this card ideal for harsh environments.
  - The **ISO style card** is similar in size and thickness to a credit card and has the ideal surface to print custom artwork, images, and photographs for identification. This card can also include a magnetic stripe.
  - The **keyfob** can be easily attached to any key ring for convenience.
  - The **PVC patch** credential can be adhered to any frequently used surface.
- Proximity credentials by Schlage are compatible with most industry leading proximity readers and are completely ISO compliant. These credentials also have a passive design, requiring no batteries or maintenance for the life of the card.

Smart Credentials

- Schlage contactless smart credentials put you in control by delivering smarter solutions. Storage options of 2.5k, 8k, 16k, 32k, or 64k bits will meet the most demanding storage requirements, and allow for a wide range of card applications to be utilized.
- Aside from physical access, smart credential uses could include transit and point of sale applications, such as cashless vending and cafeteria services.
- Contactless smart credentiasl by Schlage operate on 13.56 MHz frequency, and utilize high security encrypted data, which is mutually authenticated in communication between the card and reader, providing optimum security.
- Smart credentials are also offered in **clamshell style, ISO style cards, keyfobs, and PVC patches**.

Multi-Technology Credentials

- Schlage multi-technology credentials are extremely flexible. Particularly useful during a transition from proximity technology to smart technology, this card can be read by both proximity readers and smart readers, which allows customers to economically migrate to the latest in smart technology at their own pace.
- This credential is only available in an ISO style card.

	125 kHz Proximity Credentials				125 kHz/13.56 MHz Multi-Technology Credentials		
Model Number	**7410**	**7510**	**7610**	**7710**	**9951**	**9958**	**8920/8940/8980**
Credential Type	Clamshell	ISO-Glossy White*	Keyfob	PVC Disk	ISO-Glossy White*		
Credential Technology; ISO Standard	125 kHz Prox	125 kHz Prox	125 kHz Prox	125 kHz Prox	125 kHz Prox/MIFARE; ISO 14443		125 kHz Prox/ MIFARE DESFire™ EV1; ISO 14443
Dimensions (HWT in inches)	3.37 x2.125 x0.075	3.37 x2.125 x0.033	2 x1.24 x0.38	1.38 in. or 35mm diameter	3.37x2.125 x0.033		
Slot Punch (Printed Guide)	Vertical (Punched)	Vertical or Horizontal	Key Ring	N/A	Vertical		
Memory Capacity; Application Sectors	N/A	N/A	N/A	N/A	8k bit/ 1K byte; 16 sectors	32k bit/ 4K byte; 40 sectors	2K/4K/8K byte

*All ISO glossy white cards are printable with a magnetic stripe option. Add M1 to the model number for magnetic stripes when ordering.

	13.56 MHz Smart Credentials											
Model Number	**9420**	**9451**	**9520**	**9551**	**9558**	**9651**	**9751**	**9758**	**8420/ 8440/ 8480**	**8520/ 8540/ 8580**	**8620/ 8640/ 8680**	**8720/ 8740/ 8780**
Credential Type	Clamshell		ISO-Glossy White*			Keyfob	PVC Patch		Clamshell	ISO Glossy White*	Keyfob	PVC Disk
Credential Technology; ISO Standard	MIFARE Lite; ISO 14443	MIFARE; ISO 14443	MIFARE; ISO 14443			MIFARE; ISO 14443	MIFARE; ISO 14443		MIFARE DESFire™ EV1	MIFARE DESFire™ EV1	MIFARE DESFire™ EV1	MIFARE DESFire™ EV1
Dimensions (HWT in inches)	3.37x2.125 x0.075		3.37x2.125x0.033			2 x1.24 x0.38	3.32x2.08x0.03		3.37 x2.125 x0.033	3.37 x2.125 x0.033	2 x1.24 x0.38	1.38 in. or 35mm diameter
Slot Punch (Printed Guide)	Vertical (Punched)		Vertical or Horizontal			Key Ring	Vertical		Vertical (Punched)	Vertical or Horizontal	Key Ring	N/A
Memory Capacity; Application Sectors	2.5k bit; 5 sectors	8k bit/ 1K byte; 16 sectors	2.5k bit; 5 sectors	8k bit/ 1K byte; 16 sectors	32k bit/ 4K byte; 40 sectors	8k bit/ 1K byte; 16 sectors	8k bit/ 1K byte; 16 sectors	32k bit/ 4K byte; 40 sectors	2k/4k/8k bytes	2k/4k/8k bytes	2k/4k/8k bytes	2k/4k/8k bytes

*All ISO glossy white cards are printable with a magnetic stripe option. Add M1 to the model number for magnetic stripes when ordering.

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Smart Credentials

Overview

Schage Contactless Smart Credentials put you in control by delivering smarter solutions. These credentials protect your most sensitive data by utilizing extra layers of security protection, and can be used for many other applications including transit, cashless vending, and cafeteria point of sale.

The contactless smart credential by Schlage operates on a 13.56 MHz frequency, and utilizes high security encrypted data, which is mutually authenticated in communication between the card and reader, providing optimum security. Schlage offers the choice of 2.5k, 8k, 16k, 32k, and 64k bits of storage, which will meet the most demanding storage requirements.

Features & Benefits

- Open architecture design is built on ISO 14443A standards, providing for a faster data transfer speed
- Offered in clamshell, ISO style cards, key fobs, and adhesive patches
- Utilizes MIFARE or MIFARE DESFire EV1 technology

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13.56 MHz Smart Credentials						
Model Number	9420	9451	9520	9551	9558	9651
Credential Type	Clamshell		ISO-Glossy White[1]			Keyfob
Credential Technology; ISO Standard	MIFARE; ISO 14443					MIFARE; 14443
Dimensions (HWT in inches)	3.37x2.125x0.075		3.37x2.125x0.033			2x1.24x0.038
Slot Punch (Printed Guide)	Vertical (Punched)		Vertical or Horizontal			Key Ring
Memory Capacity; Application Sectors	2.5k bit; 5 sectors	8k bit/ 1K byte; 16 sectors	2.5k bit; 5 sectors	8k bit/1K byte; 16 sectors	32k bit/ 4K byte; 40 sectors	8k bit/1K byte; 16 sectors
Warranty	Lifetime - Credentials have a lifetime warranty against manufacturers defects. See sales policy for complete warranty details.					

13.56 MHz Smart Credentials						
Model Number	9751	9758	8420/8440/8480	8520/8540/8580	8620/8640/8680	8720/8740/8780
Credential Type	PVC Patch		Clamshell	ISO-Glossy White[1]	Keyfob	PVC Disk
Credential Technology; ISO Standard	MIFARE; ISO 14443		MIFARE DESFire EV1			
Dimensions (HWT in inches)	3.37x2.125x0.033		3.37x2.125x0.075	3.37x2.125x0.033	2x1.24x0.28	35mm
Slot Punch (Printed Guide)	Vertical		Vertical (Punched)	Vertical or Horizontal	Keyring	N/A
Memory Capacity; Application Sectors	8k bit/1K byte; 16 sectors	32k bit/4K byte; 40 sectors	2k/4k/8k bytes			
Warranty	Lifetime - Credentials have a lifetime warranty against manufacturers defects. See sales policy for complete warranty details.					

[1] ISO Glossy White style credentials are made from composite material, are printable, and can include a magnetic stripe as an option. Add M1 to the model number for a magnetic stripe when ordering.

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Multi-Technology Credentials

Overview

Schlage multi-technology credentials are extremely flexible. Particularly useful during a transition from proximity technology to smart technology, this card can be read by both proximity readers and smart readers, which allows customers to economically migrate to the latest smart technology at their own pace.

Multi-technology credentials from Schlage contain both 125 kHz proximity and 13.56 MHz contactless smart card capability in one unit, and are available in the newest technologies of today, including both MIFARE and aptiQ™ MIFARE DESFire™ EV1 technology.

Features & Benefits

- Only available in ISO style cards

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125 kHz/13.56 MHz Multi-Technology Credentials			
Model Number	9951	9958	8920/8940/8980
Credential Type	ISO-Glossy White[1]		
Credential Technology; ISO Standard	125 kHz Prox/MIFARE®; ISO 14443		125 kHz Prox/MIFARE DESFire™ EV1; ISO 14443
Dimensions (HWT in inches)	3.37x2.125 x0.033		
Slot Punch (Printed Guide)	Vertical		
Memory Capacity; Application Sectors	8k bit/1K byte; 16 sectors	32k bit/4K byte; 40 sectors	2K/4K/8K byte
Warranty	Lifetime - Credentials have a lifetime warranty against manufacturers defects. See sales policy for complete warranty details.		

[1] ISO-Glossy White style credentials are made from composite material, are printable, and can include a magnetic stripe as an option. Add M1 to the model number for a magnetic stripe when ordering.

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Proximity Credentials

Overview

Schlage proximity technology is an easy, convenient access control solution. Proximity technology, which operates on 125 kHz frequency, is easily integrated into existing legacy proximity systems or ideal for a new installation. Proximity credentials can easily fit into a wallet or may be used as a strapped or clipped badge.

From highly durable clamshell-style cards, to basic ISO style cards, to keyfobs and adhesive patches, Schlage offers several different form factors to meet the needs of many different customers.

Proximity credentials by Schlage are compatible with all industry leading proximity readers and are also completely ISO compliant. These credentials also have a passive design, requiring no batteries or maintenance for the life of the card.

Features & Benefits

- Clamshell style offers high durability, and is suitable for harsh environments
- ISO style card is similar in size and thickness to a credit card, and has the ideal surface to print custom artwork, images, and photographs for identification
- Keyfob proximity credentials can easily be attached to any key ring for convenience
- Adhesive patch proximity credentials can be adhered to any frequently used surface

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125 kHz Proximity Credentials				
Model Number	7410	7510	7610	7710
Credential Type	Clamshell	ISO-Glossy White[1]	Keyfob	PVC Disk
Credential Technology; ISO Standard	125 kHz Prox			
Dimensions (HWT in inches)	3.37x2.125x0.075	3.37x2.125 x0.033	2x1.24 x0.38	35mm
Slot Punch (Printed Guide)	Vertical (Punched)	Vertical or Horizontal	Keyring	N/A
Memory Capacity; Application Sectors	N/A			
Warranty	Lifetime - Credentials have a lifetime warranty against manufacturers defects. See sales policy for complete warranty details.			

[1] ISO-Glossy White style credentials are made from composite material, are printable, and can include a magnetic stripe as an option. Add M1 to the model number for a magnetic stripe when ordering.

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Proximity & Smart Keyfobs

with iButton® Option

Schlage's keyfobs provide the convenience of either contactless smart card technology or proximity technology in a form that can optionally include an iButton® credential. This durable combination works well in environments that do not require photo ID badging. The ability to attach the keyfob to a key ring ensures that personnel will be less likely to forget or lose their access credential.

The combination of either smart card technology or proximity technology with an iButton® provides the ideal dual credential for organizations that have integrated multiple credential technologies into their facilities. The iButton® provides a registration number used for access control in legacy systems, and the proximity or smart card technology enables future expansion with more advanced credentials.

The proximity keyfob incorporates the convenience of proximity technology with the iButton®. The smart keyfob can support diverse applications such as access control, biometrics, cashless vending, transit applications, and many more.

Smart Keyfob Features

- 13.56 MHz frequency Smart Technology
- Available with two memory and technology configurations
- 1K bit (8K byte) MIFARE® or a 4K bit (32K byte) MIFARE DESFire™ EV1*
- Data transfer rates of up to 848 kbps

Proximity Keyfob Features

- 125 kHz proximity technology

iButton® Features

- Durable stainless-steel packaging
- Unique factory programmed 64-bit registration number
- Momentary contact initiates identification
- Data transfer rate of up to 16.3 kbps

* Factors affecting read range include installation conditions such as voltage, location of power supply and mounting material.

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Keyfob Specifications

Dimensions (At widest point)		2.24″ x 1″ x 0.60″ 5.7 cm x 2.52 cm x 1.48 cm
Weight		0.20 oz. (5.6 g)
Maximum Read Range*		SXF 1060 Mini-Mullion up to 1″ SXF 1100 Mullion up to 2″ SXF 2100/2110 Mid-Range up to 2.5″
	AD-Series	PR Reader Module up to 0.75″ PRK Reader Module up to 0.75″ SM Reader Module up to 0.75″ SMK Reader Module up to 0.75″ MT Reader Module up to 0.75″ MTK Reader Module up to 0.75″
Frequency		125 KHz or 13.56 MHz (see below for part numbers)
Operating Temperature		-50° to 160° F (-45° to 70° C)
Material		Polycarbonate
Color		Gray

* Factors affecting read range include installation conditions such as voltage, location of power supply and mounting material.

ORDERING INFORMATION

Part Number**

IBF-110 (Combo iButton® keyfob with 125 KHz Prox)

IBWB-110 (125 KHz Prox keyfob without iButton®)

IBF-151 (Combo iButton® keyfob with 8K bit/1K byte MIFARE®)

IBWB-151 (8K bit/1K byte MIFARE® keyfob without iButton®)

** Standard part numbers. See ordering guide for more configurations and part numbers. Specifications subject to change without notice.

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SWIEG
Wiegand Card

Overview

Wiegand Card - The SWIEG Wiegand Card is virtually impossible to counterfeit, it cannot be altered or copied. The Wiegand code is embedded in the card, any attempt to reach the code stripe will destroy the card.

Features and Benefits

- The card is laminated under pressure to create rugged solid vinyl
- Provides trillions of possible codes
- Immune to external magnetic fields and RF signal
- Available to meet strict ISO thickness standards
- Can add a Proximity, Magnetic Stripe, Barcode, or Photo ID
- Can be used with direct image and thermal transfer printers
- The Wiegand cards provides an infinite number of reads
- Slot punching is available

Specifications	
Dimensions	3.375″ x 2.125″ x 0.030″
Operating temperature	-40º F to 160º F
Weight	.20 oz.
For use with code stripe layout options	
A	long edge/right side
A1	long edge/left side
D	short edge

ORDERING INFORMATION

SWIEG - Standard Wiegand Card

SWIEGPL - Wiegand Card plain white ready for printing

SWIEGII - Dual Technology with Magnetic Stripe

SWIEGDUAL - Dual Technology with Proximity technology

SWKEY - Wiegand Key

SLOTWG - Slot Punching unit

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Biometrics

This section of the Electronic Access Control catalog covers HandKey® biometric hand geometry readers and other accessories that can be easily integrated into an access control system.

Overview

HandKey® biometric hand geometry readers from Schlage provide increased security for the most important openings in your facilities. The HandKey utilizes the size and shape of the hand to verify the identity of the user, ensuring that only authorized users can access the door. While other credentials can be lost, stolen or duplicated without authorization, the HandKey eliminates this risk. The open-architecture design of the HandKey makes integrating biometric hand readers into critical access points easy, simple, and seamless for new or existing access control systems.

Features

The HandKey provides the flexibility to be used as a stand-alone device that protects a single critical access point, or integrated into virtually any new or existing access control system in the market. Standalone operation is enabled utilizing the built-in door lock output, and a programmable auxiliary output that can be used to output audible or silent alarms, or activate lighting systems or other peripheral devices. The same HandKey reader can be set up to operate in card reader emulation mode, outputting Wiegand data to an access control system. This enables the HandKey to look just like a card reader to your access control system, ensuring real-time monitoring and communication between the device and your access control panel.

Event monitoring alerts you in the event that the device has been tampered with, when a user is refused after exceeding the user definable number of verification attempts, or when the user is under duress. With the HandKey, you can also customize security levels, time zones, holidays and languages based on your unique needs.

Benefits

The HandKey creates an affordable way to provide the highest level of security possible for your access control application. Verification of identity takes less than one second, making it ideal for even high throughput applications.

The hand reader ensures that you are only allowing the correct people, not just the proper cards, to access the most important areas of your facility. The cost commonly associated with managing an access control system can be minimized with the help of a HandKey. Since the credential cannot be forgotten or stolen, you eliminate the need to replace lost, damaged, or stolen cards or keys.

The HandKey readers measure the size and shape of a user's hand, including length, width, thickness and surface area, to verify identity. The HandKey does not read fingerprints or palm prints, and works effectively even if the user's hand is wet, dirty or injured.

Designed upon an open-architecture platform, the HandKey ensures that you can incorporate biometrics where you need them, whether it is on a single high-security door within your facility, or on many openings throughout your whole organization as part of an access control system.

Options

The HandKey Series readers have several options to choose from including:

- Biometric Reader Model: ID3D-R and HandKey-II. **Choice of model may limit other available options and accessories.**
- Communications: Ethernet or modem communications module options to meet the needs of your communication environment.
- Memory: Field-upgradeable and expandable memory options to support from 256 to 259,072 users.
- Outdoor Enclosures: To protect the reader from the elements and enable operations in a variety of outdoor or other harsh environments.
- Card Reader and Keypads: A variety of reader mounted or wall-mounted options, including proximity, magnetic stripe, barcode, HID iClass® and MIFARE®.
- Left-handed Configuration: Available to support drive-through applications and parking/entrance gates.
- Mounting Options: Enable mounting on table-top, surface wall-mount, or recessed wall-mount.

Accessories

A variety of HandKey accessories are available to maximize the flexibility of your solution:

- HandNet Lite provides an easy way to manage hand templates for up to 32 HandKeys.
- HandNet for Windows enables you to control and monitor a network of HandKey® readers. With one program you can monitor activity and alarms on all readers, manage hand templates between readers, and control the access of each user. HandNet for Windows comes in three tiers to enable flexibility based upon the size of your system. These tiers are upgradable for added flexibility to meet your future needs as your application grows.

	HandKey-II
Construction	Polycarbonate housing with aluminum fingerpins
Base Users	512 Users
User Memory Options	Expandable to 259,072 users
Template Size	9 bytes
Verification Time	Less than one second for comparison to reference template
ID Number Length	1-10 digits
Duress Code	1 leading digit, user definable
Communications	
RS232	Baud rate 300 bps to 28,800 bps
RS485	Baud rate 300 bps to 28,800 bps
RS422	Baud rate 300 bps to 28,800 bps
Optional Modem	Baud rate 300 bps to 14,400 bps
Optional Ethernet	Field Installable: 10 Base T
Mounting Options	
Table Mount	Option Available
Surface Wall Mount	Standard
Recessed Wall Mount	N/A
Left Hand Option	N/A
Antimicrobial Coating on Platen	Standard
Blue Hand Outline	Standard
Outdoor and Enclosure Options	Heater option available; Polyethylene enclosure with UV resistance available; Metal water tight enclosure available
Dimensions (HxWxD)	11.65 in. x 8.85 in. x 8.55 in.; 29.6 cm x 22.5 cm x 21.7 cm
Power Requirements	12 to 24 VDC or 12 to 24 VAC 50-60 Hz 7 Watts (without options)
Weight	5.3 lbs. (2.4 kgs.) (Without battery back-up or wall plate)
Temperature	
Operating	0° C to +45° C /32° F to 113° F
Non-Operating (Storage)	-10° C to +60° C /14° F to 140° F
Relative Humidity	
Operating	20% to 80% RH Non-condensing
Non-Operating (Storage)	5% to 85% RH Non-condensing
Inputs	
Standard	26 bit, 9 bit ID Wiegand
Optional	Mag stripe, bar code, smart card
HandKey Inputs	Request to Exit, Door switch input, 2 auxiliary inputs
Outputs	
Door Control	Lock output
Card Reader Emulation Mode	Wiegand (standard), mag stripe, bar code
Auxiliary Output	1 programmable auxiliary
Outputs to peripheral devices	Audible or silent alarms, door locks, lighting systems
Event Monitoring	
Tamper	HandKey opened or removed
ID Refused	User not verified after user definable number of tries exceeded
Duress	User entered duress code digit
Power Failure	HandKey switched to optional battery power
Programmable HandKey Commands	Add/remove users; Set global operating thresholds; Set individual user data (authority or threshold levels, time zones); Transmit data from Master to Remote; Data received by Master from Remote; Transmit/receive data from optional software; Check status of door (Tamper, Door monitor switch); Time zones – 62 total (2 fixed, 60 programmable); Set language; Set date format, date and time; Edit holidays

	ID3D-R HandKey
Construction	Metal housing
Base Users	256 Users
User Memory Options	Expandable to 27,904 users
Template Size	9 bytes
Verification Time	Less than one second for comparison to reference template
ID Number Length	1-10 digits
Duress Code	1 leading digit, user definable
Communications	
RS232	Printer Output Only: Baud rate 300 bps to 19,200 bps
RS485	Baud rate 300 bps to 19,200 bps
RS422	Baud rate 300 bps to 19,200 bps
Optional Modem	Factory Installable Only: 2,400 baud
Optional Ethernet	Factory Installable Only: 10 Base T
Mounting Options	
Table Mount	Standard
Surface Wall Mount	Option Available
Recessed Wall Mount	Option Available
Left Hand Option	Left Handed configuration available
Antimicrobial Coating on Platen	N/A
Blue Hand Outline	N/A
Outdoor and Enclosure Options	ID3D-RW available as whole unit with outdoor housing and integrated heaters
Dimensions (HxWxD)	8.30 in. x 6.50 in. x 7.17 in.; 21.3 cm x 16.5 cm x 18.7 cm
Power Requirements	12 to 24 VDC or 12 to 24 VAC 50-60 Hz 7 Watts (without options)
Weight	7.2 lbs. (3.3 kgs.) (Without back plate)
Temperature	
Operating	0° C to +45° C/32° F to 113° F
Non-Operating (Storage)	-10° C to +60° C/14° F to 140° F
Relative Humidity	
Operating	20% to 80% RH Non-condensing
Non-Operating (Storage)	5% to 85% RH Non-condensing
Inputs	
Standard	26 bit, 9 bit ID Wiegand
Optional	Mag stripe, bar code, smart card
HandKey Inputs	Request to Exit, Door switch input, 1 Auxilary input
Outputs	
Door Control	Lock output
Card Reader Emulation Mode	Wiegand (standard), mag stripe, bar code
Auxiliary Output	1 programmable auxiliary
Outputs to peripheral devices	Audible or silent alarms, door locks, lighting systems
Event Monitoring	
Tamper	HandKey opened or removed
ID Refused	User not verified after user definable number of tries exceeded
Duress	User entered duress code digit
Power Failure	HandKey switched to optional battery power
Programmable HandKey Commands	Add/remove users; Set global operating thresholds; Set individual user data (authority or threshold levels, time zones); Transmit data from Master to Remote; Data received by Master from Remote; Transmit/receive data from optional software; Check status of door (Tamper, Door monitor switch); Time zones – 62 total (2 fixed, 60 programmable); Set language; Set date format, date and time; Edit holidays

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Biometric Access Control Products

Quick Reference

HandKey® II
Part Number: HK-2-F3

- Convenience of multiple credential options such as proximity, magnetic stripe, barcode, HID iCLASS® and MIFARE®
- Field installable Ethernet module
- Outdoor enclosure options that make the HandKey II an ideal solution for outdoor usage
- Field upgradable and expandable memory options from 512 to 259,072 users for scalable security that grows with your needs
- Three user-definable outputs to connect to auxiliary devices such as audible or silent alarms, door locks or lighting systems
- Ability to write the industry's most compact biometric template on a card instead of in a database results in higher security & unlimited user capacity
- Specially formulated antimicrobial coating with silver ions on the platen to inhibit the growth of bacteria, mold and mildew to mitigate hygiene concerns. The coating is safe and lasts for the life of the product
- Blue hand outline on platen facilitates easy enrollment and reduces error rates during verification

HandKey ID3D-R
Part Number: ID3D-R

- All-metal housing for increased durability and toughness
- Left handed configuration for drive-through applications and entrance gates
- Recess-mount option for reduced obstruction at high traffic areas
- Convenience of multiple credential options - magnetic stripe, bar code
- Two user definable outputs to connect to auxiliary devices such as audible or silent alarms, door locks or lighting systems

Ingersoll Rand
Security Technologies

ID3D-RW

Biometric HandKey with Standard
256 User Memory, Integrated Heater + Enclosure

Ideally suited for outdoor environments, the ID3D-RW enclosure is constructed of heavy-gauge zinc-coated steel. It features a sealed keypad, low-temperature display and a heated interior. This is a fully integrated unit and comes complete with a HandKey and an internal heater.

FX Enclosure (FX-ENCL)

Biometric HandKey Enclosure

Constructed from high impact UV resistant polycarbonate material, the FX Enclosure provides a degree of protection against dusty, dirty, or rainy environments. This enclosure has been designed so that it can be added to an existing installation. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.

TX Enclosure (TX-ENCL)

Biometric HandKey Enclosure

The TX Enclosure provides a higher degree of protection against dusty, dirty, or rainy environments. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.

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HandKey® II

Biometric Hand Geometry Reader

Nothing is tougher!

Our HandKey II product is ideal for applications where consistent and dependable security is of prime importance. The product is easy to maintain, and provides an ideal mix of convenience, security and peace of mind.

Top 10 reasons to select Hand Geometry

FIELD PROVEN RELIABILITY

1. Hundreds of thousands of HandKeys are installed all over the world in diverse applications providing millions of error free transactions every day

CONVENIENCE AND COST SAVINGS

2. Incredibly fast installation & intuitive enrollment increases user convenience
3. Verification in less than 1 second makes it ideal for high throughput applications
4. High product quality + Low maintenance costs = Low total cost of ownership
5. Eliminate the worry of lost, stolen or unauthorized transfer of ID cards plus the cost of purchasing and maintaining these cards

ELIMINATE PRIVACY CONCERNS

6. Hand Geometry technology is well accepted by end users as there are NO fingerprints or palm prints taken and the user does not leave behind any trace of their biometric data

AMAZING VERSATILITY

7. HandKeys can be used as standalone systems to protect critical access points that can be easily integrated into virtually every new or existing access control system in the market today
8. Ability to customize user specific security levels, time zones, holidays and languages based on your needs
9. Optional access control template management software allows the HandKeys to form a system that communicates alarms and transactions in real time, provides activity reports, allows supervised on-site or remote user enrollment and expiring privileges for temporary access
10. Environmental enclosures and integrated heater units make the HandKey an ideal solution for outdoor usage

Features and Benefits

- Convenience of multiple credential options such as proximity, magnetic stripe, barcode, HID iCLASS® and MIFARE®
- Field installable Ethernet module
- Outdoor enclosure options that make the HandKey II an ideal solution for outdoor usage
- Field upgradable and expandable memory options from 512 to 259,072 users for scalable security that grows with your needs
- Three user-definable outputs to connect to auxiliary devices such as audible or silent alarms, door locks or lighting systems
- Ability to write the industry's most compact biometric template on a card instead of in a database results in higher security & unlimited user capacity
- Specially formulated antimicrobial coating with silver ions on the platen to inhibit the growth of bacteria, mold and mildew to mitigate hygiene concerns. The coating is safe and lasts for the life of the product
- Blue hand outline on the platen facilitates easy enrollment and reduces error rates during verification

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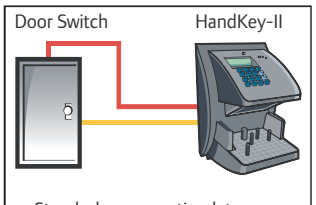
Door control and monitoring

Each HandKey II is a complete, integrated door controller providing lock operation, request-for-exit and alarm monitoring. Biometric templates and decision-making capability reside locally, ensuring your doors are always secure and will continue to operate properly even if all communication to the main access control system is lost.

Stand-alone or fully integrated

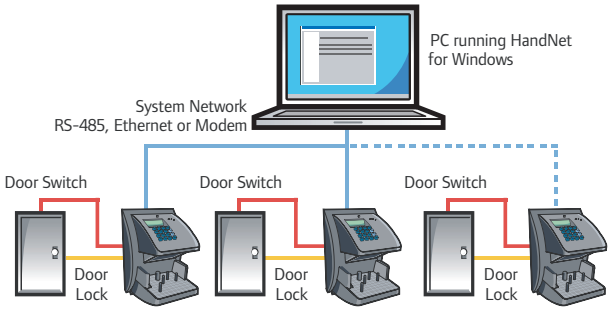
HandKey readers can be used as a stand-alone unit or as part of an integrated access control system. The units easily integrate into existing systems using the card reader emulation mode. Or, by using the HandNet software for template management, thousands of units can be linked together to form a system that communicates alarms and transactions in real time, provides activity, user and systems reports, and allows supervised user enrollment and deletions at any reader. A variety of communications options, including dial-up modems and Ethernet, allow you to design a system that's right for your facilities.



Stand-alone operation lets you provide security to a single door at an affordable price

In a network

Schlage's HandNet software links a virtually unlimited number of HandKey units into an integrated door access control system. All alarms and transactions report back in real time to the central computer, making door and alarm monitoring easy and efficient. Activity, user and system reports can be easily generated. The central computer handles all hand template management allowing supervised enrollment at any reader and system wide deletions. An optional internal modem lets you include remote site operations. Ethernet communication is also available.



Base Model	HandKey II
Description	HandKey with base memory for 512 users
Verification Time	≤ 1 second for comparison to reference template
ID Number Length	1 – 10 digits
Duress Code	1 leading digit, user definable
Communication	RS232: Baud rate 300 bps to 28,800 bps RS422: Baud rate 300 bps to 28,800 bps RS485: Baud rate 300 bps to 28,800 bps Optional Modem: Baud rate 300 bps to 14,400 bps Optional Ethernet: 10 Base T
Template Size	9 bytes
User Memory	512 users expandable to 259,072 users
Inputs	Standard: 26 bit, 9 bit ID Wiegand Optional: Mag stripe, bar code, smart card HandKey input: Request to Exit, Door switch input, 2 auxiliary inputs
Outputs	Door control: Lock output Card reader emulation mode: Wiegand, mag stripe, bar code 1 programmable auxiliary Outputs to peripheral devices: Audible or silent alarms,door locks, lighting systems
Event Monitoring	Tamper: HandKey opened or removed ID refused: User not verified after user definable number of tries exceeded Duress: User entered duress code digit Power failure: HandKey switched to optional battery power
Programmable HandKey Commands	• Add / remove users • Set global operating thresholds • Set individual user data (authority or threshold levels, time zones) • Transmit data from Master to Remote • Data received by Master from Remote • Transmit / receive data from optional software • Check status of door (Tamper, Door monitor switch) • Time zones – 62 total (2 fixed, 60 programmable) • Set language • Set date format, date and time • Edit holidays
Antimicrobial	Available on Platen
Blue Hand Outline	Available on Platen
Dimensions HxWxD	11.65 in. x 8.85 in. x 8.55 in. 29.6 cm x 22.5 cm x 21.7 cm
Power Requirements	12 to 24 VDC or 12 to 24 VAC 50-60 Hz 7 Watts (without options)
Weight	5.3 lbs. (2.4 kgs.) (Without battery back-up or wall plate)
Temperature	Operating: 0 deg C to +45 deg C / 32 deg F to 113 deg F Non-Operating (Storage): -10 deg C to +60 deg C /14 deg F to 140 deg F
Relative Humidity	Operating: 20% to 80% RH Non-condensing Non-operating (Storage): 5% to 85% RH Non-condensing

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HandKey® ID3D-R

Biometric Hand Geometry Reader

Nothing is tougher!

At Schlage biometrics we know that every product you specify has to stand up to constant use and abuse. The all-metal HandKeys ID3D-R and ID3D-RW are able to withstand the rigors of daily use and abuse without fail.

Top 10 reasons to select Hand Geometry

FIELD PROVEN RELIABILITY

1. Hundreds of thousands of HandKeys are installed all over the world in diverse applications providing millions of error free transactions every day

CONVENIENCE AND COST SAVINGS

2. Incredibly fast installation & intuitive enrollment increases user convenience
3. Verification in less than 1 second makes it ideal for high throughput applications
4. High product quality + Low maintenance costs = Low total cost of ownership
5. Eliminate the worry of lost, stolen or unauthorized transfer of ID cards plus the cost of purchasing and maintaining these cards

ELIMINATE PRIVACY CONCERNS

6. Hand Geometry technology is well accepted by end users as there are NO fingerprints or palm prints taken and the user does not leave behind any trace of their biometric data

AMAZING VERSATILITY

7. HandKeys can be used as standalone systems to protect critical access points that can be easily integrated into virtually every new or existing access control system in the market today
8. Ability to customize user specific security levels, time zones, holidays and languages based on your needs
9. Optional access control template management software allows the HandKeys to form a system that communicates alarms and transactions in real time, provides activity reports, allows supervised on-site or remote user enrollment and expiring privileges for temporary access
10. Environmental enclosures and integrated heater units make the HandKey an ideal solution for outdoor usage

Features and Benefits

- All-metal housing for increased durability and toughness
- Left handed configuration option for drive-through applications and entrance gates
- Recess-mount option for reduced obstruction at high traffic areas
- Convenience of multiple credential options such as magnetic stripe, bar code
- Integrated unit with heater and enclosure makes ID3D-RW ideal for outdoor environments
- Two user definable outputs to connect to auxiliary devices such as audible or silent alarms, door locks or lighting systems

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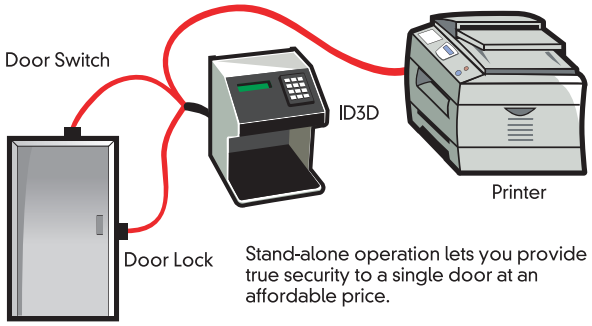
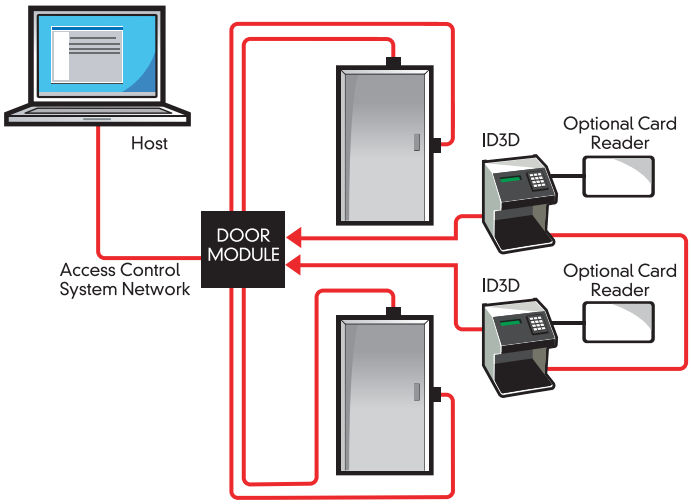
Stand Alone System

The HandKey can operate as a complete stand-alone access control station. Door lock operation and alarm monitoring of the door status is provided. An external alarm circuit is included for operating an audio or visual alarm.



Third Party System Interface

The HandKey can easily be integrated into new or existing third party access control systems using its card reader emulation output. All Wiegand, proximity and magnetic stripe formats can be accommodated. No modifications are needed to the third party system. The HandKeys can be interconnected via RS-485 twisted pair for hand data transfer.



Base Model	ID3D-R / ID3D-RW
Description	HandKey with base memory for 256 users
Verification Time	≤ 1 second for comparison to reference template
ID Number Length	1 – 10 digits
Duress Code	1 leading digit, user definable
Communication	RS232 (Printer output only): Baud rate 300 bps to 19,200 bps RS422: Baud rate 300 bps to 19,200 bps RS485: Baud rate 300 bps to 19,200 bps Optional Ethernet: 10 Base T
Template Size	9 bytes
User Memory	256 users expandable to 27,904 users
Inputs	Standard: 26 bit, 9 bit ID Wiegand Optional: Mag stripe, bar code HandKey Input: Request to Exit, Door switch input, 1 Auxilary input
Outputs	Door control: Lock output Card reader emulation mode: Wiegand, mag stripe, bar code 1 programmable auxiliary Outputs to peripheral devices: Audible or silent alarms, door locks, lighting systems
Event Monitoring	Tamper: HandKey opened or removed ID refused: User not verified after user definable number of tries exceeded Duress: User entered duress code digit Power failure: HandKey switched to optional battery power
Programmable HandKey Commands	• Add / remove users • Set global operating thresholds • Set individual user data (authority or threshold levels, time zones) • Transmit data from Master to Remote • Data received by Master from Remote • Transmit / receive data from optional software • Check status of door (Tamper, Door monitor switch) • Time zones – 62 total (2 fixed, 60 programmable) • Set language • Set date format, date and time • Edit holidays
Antimicrobial	NA
Blue Hand Outline	NA
Dimensions HxWxD	8.30 in. x 6.50 in. x 7.17 in. (ID3D-R Dimensions) 21.3 cm x 16.5 cm x 18.7 cm (ID3D-R Dimensions)
Power Requirements	12 to 24 VDC or 12 to 24 VAC 50-60 Hz 7 Watts (without options)
Weight	7.2 lbs. (3.3 kgs.) (Without back plate)
Temperature	Operating: 0 deg C to +45 deg C / 32 deg F to 113 deg F Non-Operating (Storage): -10 deg C to +60 deg C / 14 deg F to 140 deg F
Relative Humidity	Operating: 20% to 80% RH Non-condensing Non-operating (Storage): 5% to 85% RH Non-condensing

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Biometric Terminal Accessories
for HandKey®

Schlage offers a number of accessories for access control HandReader terminals. From mounting kits and readers to networking options and memory expansions, we'll help you create the solution to meet your specific needs.

Base Model	HandKey II	ID3D-R / ID3D-RW
Card Readers	Prox: Externally top mounted HID prox reader. Factory option only HID iCLASS®: iCLASS reader,Factory option only SC-100: MIFARE® reader, Factory option only CR-2: Mag stripe wall mount card reader BC-100: Bar code reader, wall mount swipe	Prox: NA iCLASS: NA SC-100: NA CR-2: Mag stripe wall mount card reader CR-2L: Mag stripe, top mount swipe card reader CR-3L: Mag stripe, side mount swipe card reader BC-100: Bar code reader, wall mount swipe
Memory	EM-801-F3: Field upgradable memory expansion up to 9,728 users EM-803-F3: Field upgradable memory expansion up to 32,512 users EM-813-F3: Memory expansion up to 64,768 users EM-823-F3: Memory expansion up to 129,536 users EM-833-F3: Memory expansion up to 194,304 users EM-843-F3: Memory expansion up to 259,072 users	EM-600: Memory expansion up to 3,328 users EM-602: Memory expansion up to 9,728 users EM-604: Memory expansion up to 27,904 users
Communication	EN-200: Field upgradable Ethernet communication module 10baseT MD-500: Internal Dial-up modem	EN-100: Ethernet communication module 10baseT MD-200: Internal Dial-up modem

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Base Model	HandKey II	ID3D-R / ID3D-RW
Power Options	PS-110: Power supply, 120VAC to 13.5 VDC PS-220: Power supply, 220VAC to 13.5 VDC BB-250: Optional battery backup	IS-400: Power supply, 120VAC to 13.5 VDC PS-220: NA BB-100: Optional battery backup
Mounting	TM-100: Table top secure mount for flat surfaces	TM-100: NA WM-200: Recessed wall mount kit WM-201: Surface wall mount kit
Left Hand Option	NA	LH-100: Left hand version of ID3D-R LH-100RW: Left hand version of ID3D-RW
Network Accessories	DC-102: Data converter for 4 wire system, RS-232 to RS-422 with 120V, 60Hz power supply DC-102 with 220V, 50Hz power supply DC-104: Data converter for 2 or 4 wire systems, RS232 to RS485/RS 422 with 120V, 60Hz power supply DC-104 with 220V, 50Hz power supply	DC-102: Data converter for 4 wire system, RS-232 to RS-422 with 120V, 60Hz power supply DC-102 with 220V, 50Hz power supply DC-104: Data converter for 2 or 4 wire systems, RS232 to RS485/RS 422 with 120V, 60Hz power supply DC-104 with 220V, 50Hz power supply

Mounting Accessories for HandKey® E-Series

Recessed Wall Mount Kit

Part Number: WM-200

Surface Wall Mount Kit

Part Number: WM-201

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Enclosure Options
for the HandKey® Series

ID3D-RW

Overview

Schlage biometrics provides various options to protect your HandKeys® from the elements. Three different, proven solutions are available to ensure your HandKeys keep performing regardless of your environment.

ID3D-RW
Biometric HandKey with Standard 256 User Memory, Integrated Heater + Enclosure

Ideally suited for outdoor environments, the ID3D-RW is constructed of heavy-gauge zinc-coated steel. It features a sealed keypad, low-temperature display and a heated interior. This is a fully integrated unit and comes complete with a HandKey and an internal heater.

FX Enclosure

FX Enclosure (FX-ENCL)
Biometric HandKey Enclosure

Constructed from high impact UV resistant polycarbonate material, the FX Enclosure provides a degree of protection against dusty, dirty, or rainy environments. This enclosure has been designed so that it can be added to an existing installation. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.

TX Enclosure

TX Enclosure (TX-ENCL)
Biometric HandKey Enclosure

The TX Enclosure provides a higher degree of protection against dusty, dirty, or rainy environments. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.

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Specifications

	ID3D-RW	FX Enclosure	TX Enclosure
Part Number	ID3D-RW	FX-ENCL	TX-ENCL
Temperature Range	-35F to 120F / -37C to 49C	-20F to 120F / -29C to 49C	-45F to 120F / -43C to 49C
Dimensions H x W x D	11.75 in x 8.00 in x 8.75 in 29.9 cm x 20.3 cm x 22.2 cm	14.75 in x 12.00 in x 10.50 in 37.5 cm x 30.5 cm x 26.7 cm	23.00 in x 14.00 in x 11.25 in 58.4 cm x 35.6 cm x 28.6 cm
Cross Weight (including reader)	23.0 lbs / 10.4 kg	7.3 lbs / 3.3 kg	45.0 lbs / 20.4 kg
HandReader Models	ID3D-RW	HK-2-F3	HK-2-F3
Heater	Standard	Factory installed option only, Model No. INT-HTR	Factory installed option only, Model No. INT-HTR

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HandNet®
for Windows

Overview

HandNet for Windows lets you control and monitor a network of HandKey readers. With just one comprehensive program, you can monitor activity and alarms on all readers, and control the access of each user.

Features and Benefits

- Automatic hand template management feature allows template distribution from an enrollment HandKey to other selected HandKeys thus eliminating the need for a user to be enrolled at every HandReader
- Independent door control capability without the need for an access control panel
- Monitor multiple remote sites from the convenience of your PC
- Remote enrollment feature enables a HandKey to be controlled from the software. For example, a guard behind a glass partition or a supervisor in a distant office can enroll new users without physically going to the HandKey
- Assign temporary access to selected users by specifying a user's access start and stop days and times
- Manage archive activity to keep old information available for reports
- Manage alarms for additional security

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Specifications	HandNet For Windows	HandNet Lite
Computer	Pentium 233 MHz or higher (Minimum 133 MHz)	Intel 666 MHz or higher
Operating System	Windows XP Professional Service Pack 2 Windows XP Professional Service Pack 3 Windows Vista Business Service Pack 1 Windows 7 Pro Compatible 32 Bit Windows 7 Pro Compatible 64 Bit	Windows XP SP3, Vista Business SP1 Windows Server 2003 SP1 or greater Windows 2000 Professional or Server Editions SP4, and Windows 95 & 98
Drive	CD ROM for installation	CD ROM for installation
Hard Disk	50 MB Minimum, 10 MB Free space	60 GB Minimum, 10 GB Free space
Monitor	SVGA Color, 1024 x 768 recommended(800 x 600 minimum)	SVGA Color, 1024 x 768 recommended(800 x 600 minimum)
Memory	32 MB (Minimum 16 MB)	4 Gb (Minimum 2 GB)
Database	MS Access	MS SQL Server 2000 MSDE
Products Supported	HK-2-F3, ID3D-R / RW	HK-2-F3, ID3D-R/RW, DX-2000, DX-2100, DX-2200, DX-2400
Template Managements	Available	Available
Supported Communications	RS232, RS485, Ethernet, Modem RS232, RS485, Ethernet	RS232, RS485, Ethernet, Modem RS232, RS485, Ethernet
Smart Card Compatability	NA	HID iCLASS®, MIFARE®, MIFARE DESFire™ EV1
Time Zones	Available	Available
Reports	Available	Limited – use reports from an access control panel
Door Control	Available	NA – use panel door control
Alarms	Available	NA – use panel alarms
Open Door Remotely	Available	NA – use panel door control
Network Readers	Available	Available
Archive Activity	Available	Available – database backup
Remote Enrollment	Available	Available

OPTIONS

HN-2-T1
Manages up to 5 HandKeys

HN-2-T2
Manages up to 25 HandKeys

HN-2-T3
Manages an UNLIMITED number of HandKeys

HandNet Lite
Software program to manage up to 32 HandKeys

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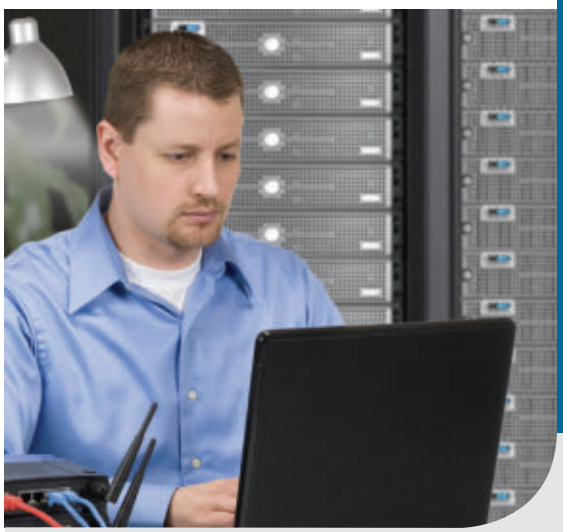
Biometrics for Access Control

Training Course Outline



Overview

Schlage biometrics offers training courses to provide you with the tools and services needed to optimize the performance and reliability of the HandKey® and related software solutions. Our comprehensive offering will help reacquaint you with HandKey hardware, installation, and its relationship with software operation. Training is regularly scheduled at our factory location or can be delivered at your location.

The HandKey Training Course Covers:

- Introduction to Biometrics
- Access Control Product Line
- Options & Accessories
- Installation
- Hands-on Training
- Troubleshooting

The Access Control HandKey Software Training Course Covers:

- Comparison of HandNet® for Windows vs. HandNet Lite
- Overview of HandNet for Windows & HandNet Lite
- Installing HandNet for Windows & HandNet Lite
- Adding Users
- Connecting to the HandKey
- Creating Reports
- Archiving
- Database Backup and Restore
- Troubleshooting

Schlage Biometrics ACCESS CONTROL Training Courses	
SBT-HK	1-Day Schlage Biometrics Training - HandKey
SBT-HNWL	1-Day Schlage Biometrics HandNet for Windows & HandNet Lite Software Training

Training Courses

Keeping installers, technicians, and sales people current on the HandKey features, capabilities, troubleshooting techniques, and installation guidelines is key to profitability and maintaining customer satisfaction.

The goals of these courses are to provide a working knowledge of the HandKey hardware and software and be able to perform basic troubleshooting. The Schlage HandKey training classes are technically oriented and feature hands-on training through classroom exercises.

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System Components

The Systems Components category features a variety of devices which are utilized as part of an access control system. Products include electric strikes, electromagnetic locks, power supplies, and system accessories.

Electric Strikes

Overview

Electric strikes provide remote release of a locked door, allowing a door to be opened without retracting the latch bolt. Von Duprin offers a selection of strikes for a variety of applications and door preps.

Features

The 6000 Series features stainless steel construction for heavy duty applications. The 6100 Series is designed for use with rim exit devices and the 6200 Series is designed for use with mortise or cylindrical locks. Both the 6100 and 6200 Series are available with a variety of options including AC operation, dual switch monitoring, entry buzzer, fail secure and fail safe.

The 6300 Series is a surface mounted electric strike which is ideal for aftermarket applications. It can be used with the Von Duprin 98/99 as well as most rim exit devices and can be mounted on any hollow metal, aluminum or wood frame.

The 5100 Series has been designed for medium duty applications, specifically to control traffic flow through interior and exterior openings in retail and commercial facilities.

Benefits

Electric strikes can be used in standalone applications or as part of a sophisticated access control system and can be deployed on a variety of openings. In many cases electric strikes are an ideal solution for end users who are ready to migrate from mechanical to electronic access control.

Electromagnetic Locks

Overview

Schlage offers a broad selection of electromagnetic locks – with feature and function sets to address a variety of applications. Whether it's securing a hospital laboratory, monitoring a controlled area in an airport or providing traffic control for doors in a commercial or education building, Schlage electromagnetic locks are designed to exceed the standards set by the Builders Hardware Manufacturers Association (BHMA).

Features

The newly designed M400 Series electromagnetic locks are available in two configurations to meet your specific security needs. The M420/450/490 provides basic security while the M420P/450P/490P provides intelligent sensing and reporting features needed to integrate with access control systems. The M400 Series is available with BHMA hold force ratings of 500 lbs, 1000 lbs and 1500 lbs.

For retrofit applications, the 40 Series and 70 Series electromagnetic locks are fully featured and cost effective. The 40 Series is rated to 500 lbs and the 70 Series is rated to 1000 lbs of hold force.

Schlage offers a variety of electromagnetic locks for specialty applications including the M490DE for delayed egress, 490G for gates, GF3000 shear locks for mortised/vertical doors, and the 320M for sliding door applications.

Benefits

The M400 Series electromagnetic locks were redesigned with a new bayonet mounting feature that allows the installer to have their hands free during the mounting process. The M400 Series electromagnetic locks are non-handed and symmetrical, allowing for optimum placement of the magnet no matter the application.

The 40 and 70 Series Electromagnetic locks feature common templates for cost effective retrofit installations. The specialty electromagnetic locks are designed with specific feature sets which optimize performance in a variety of unique, harsh and complex environments.

Power Supplies

Overview

The PS900 Series is a consolidated line of power supplies and accessories that offer enhanced flexibility and functionality specific to the changing needs of the access control market. The PS900 Series can be used in a variety of applications to convert high voltage AC power into the low voltage DC outputs required by most access control devices. The PS900 Series protects devices downstream by providing Class 2*, filtered and regulated power. The full line is UL 294 certified.

Features

The PS900 Series features three Schlage branded models; PS902 - 2 amp, PS904 - 4 amp and PS906 – 6 amp. The PS900 Series also features the Von Duprin PS914 – 4 amp with high in-rush which is designed specifically for use with electrified exit devices. These PS900 Series power supplies can be outfitted with a variety of distribution options including basic fuse protection, simple relay, and advanced logic providing complex sequencing and timing functions.

Benefits

Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal provided.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This new design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc).

*Note: PS906 can provide Class 2 rated outputs when used with 900-8P distribution board.

System Accessories

Overview

System Accessories include a variety of devices that enable specific functionality whether in standalone applications or as part of networked access control systems. The category is comprised of pushbuttons, key switches, request to exit bars, monitoring stations & consoles, exit sensors, electric horns and more.

Features

The specially designed 620 Series heavy-duty pushbuttons and 700 Series general purpose pushbuttons, as well as the 650 Series heavy-duty keyswitches, offer momentary or maintained SPDT or DPDT contact configurations.

The 700 Series Pushbuttons are used to control the ingress and/or egress of a door.

The 620 to 631 Series are heavy duty and have multiple button configurations and finish options.

The 650 Series keyswitches utilize an innovative magnetic spring design which allows installers to configure both clockwise and counterclockwise key turn direction as well as momentary or maintained action in seconds.

The 740 Series Emergency Break Glass Releases are designed for use as emergency releases of non-designated egress doors such as in individual and partitioned laboratories, secluded testing areas, or other isolated work rooms that are purposely provided with exit doors.

The 672/692 Series Request-to-Exit Bars are non-latching releasing devices which allow egress at doors with electric locking devices, such as electromagnetic locks. The SCAN II is a passive infrared (PIR) sensor specifically designed for request-to-exit applications.

The 8200 Series consoles provide door control and monitoring for up to eight zones. The 8204 is used for one to four zones and the 8208 for one to eight zones.

The 800 Series monitoring stations can provide monitoring for a single zone with up to 2 LED indicators. The 801 unit includes an audible and visual indication of lock status and delay activation.

The 660 Series Mini Station Control is designed for concealed desk application, and it is used to release an electric or electronic locking mechanism from a remote location.

Electric horns are designed for use as an immediate local audible warning device incorporated in a security system. Horns are 12 or 24VDC, field selectable and have eight sound tones up to 3000Hz.

Magnetic door position switches can be used to monitor a wide range of conditions for doors, roof hatches, gates or the proximity of any two objects.

Armored door cords are used when installing electric exit devices or electric locks and provide a simple and economical solution for transferring power from frame to door.

The PB405 PowerBolt is a mortise, right angle deadbolt with which is available with fail safe or fail secure options.

Benefits

System accessories allow you to customize each opening to meet specific security and safety needs. Schlage offers a variety of the most popular accessories designed for medium to heavy duty applications. By choosing Schlage components you can be assured that the system will meet the requirements of the job, whether new construction or aftermarket.

	Schlage Power Supplies			Von Duprin Supplies
	PS902	**PS904**	**PS906**	**PS914**
Features				
Input Voltage	120V/240V AC, 50/60 Hz, universal input			
Output Voltage	2 amp @ 12V or 24V DC, field selectable with jumper, 240m Vpp max ripple, 5% regulation	4 amp @ 12V or 24V DC, field selectable with jumper, 240m Vpp max ripple, 5% regulation	6 amp @ 12V or 24V DC, field selectable with jumper, 240m Vpp max ripple, 5% regulation	4 amp, High Inrush @ 12V or 24V DC, field selectable with jumper, 360m Vpp max ripple, 5% regulation
AC Primary Fuse Size	3.15A, 250V, 5 x 20mm SLOW-BLOW	4A, 250V, 5 x 20mm SLOW-BLOW	6.3A, 250V, 5 x 20mm SLOW-BLOW	6.3A, 250V, 5 x 20mm SLOW-BLOW
Battery Fuse Size	7.5A 32V ATO Blade Style			
DC Output Protection	Overload Protection - current limited foldback circuit			
AC Input Termination	3 position terminal block with protective cover; wire capacity 10 AWG max			
DC Output Termination	2 position terminal block with protective cover; wire capacity 12 AWG max			
Operating Temperature	32 - 120°F (0 -49°C)			
Distribution/Option Board Connectors	1	2	3	2
Fire Alarm Board Connector	Yes	No	No	No
Enclosure	14 in. (h) x 12 in. (w) x 4 in. (d)			
Operating Temperature	32˚F - 120˚F (0˚C - 49˚C)			
Option Boards:				
900-BB: Battery Backup	Y	Y	Y	Y
900-BBK: Battery Backup Kit	Y	Y	Y	Y
900-FA: Fire Alarm	Y	Y (Must be installed on distribution boards)	Y (Must be installed on distribution boards)	Y (Must be installed on distribution boards)
900-2RS: 2 Relay EL Control Board				Y
900-2Q: 2 Relay QEL Control Board	Y	Y	Y	Y
900-4R: 4 Relay Output Board	Y	Y	Y	Y
900-4RL: 4 Relay Logic Board	Y	Y	Y	Y
900-8F: Fused 8 Zone Distribution Board	Y	Y	Y	Y
900-8P: PTC 8 Zone Distribution Board	Y	Y	Y	Y
Certifications				
UL294	Y	Y	Y	Y
Class 2	Y	Y	Y	Y
RoHS	Y	Y	Y*	Y
FCC Part 15	Y	Y	Y	Y

*Note: Class 2 rated outputs can be provided using 900-8P distribution board in conjunction with the PS906.

	M400 High Security Mag Locks								
	M420	**M420P**	**M450**	**M450P**	**M490**	**M490P**	**M490DE**	**M490DEP**	**M490G**
Features									
Hold Force	500 lbs.		1000 lbs		1500 lbs		1500 lbs		1500 lbs
Input Voltage	12V/24V DC		12V/24V DC		12V/24V DC		12V/24V DC		12V/24V DC
Current Draw	0.75A @ 12V DC 0.38A @ 24V DC		0.75A @ 12V DC 0.38A @ 24V DC		0.65A @ 12V DC 0.35A @ 24V DC		.75A @ 12V DC .45A @ 24V DC		0.65A @ 12V DC 0.35A @ 24V DC
Features									
Automatic Voltage Sensor (AVS)	Y		Y		Y		Y		Y
Voltage Suppression	Y		Y		Y		Y		Y
Internal Plunger Switch	-		-		-		Y		-
Auto Relocking Switch (ARS)	-		-		-		-		-
Magnetic Bond Sensor (MBS)	-	Y	-	Y	-	Y	-	Y	Y
Door/Gate Status Monitoring (DPS/DSM)	-	Y	-	Y	-	Y	-	Y	Y
Relock Time Delay	-	Y	-	Y	-	Y	-	Y	-
Anti-Tamper Switch (ATS)	-	O	-	O	-	O	-	O	-
MBS Indicator (LED)	-	O	-	O	-	O	-	O	-
Anti-Tailgate Feature	-		-		-	Y	-		-
Surface Mount	Y		Y		Y		Y		-
Mortise Mount	-		-		-		-		-
Top Jam (inswinging doors)	O		O		O		-		-
Herculite Door Bracket	O		O		O		O		-
Bayonet Mounting Bracket	Y		Y		Y		Y		-
Universal Mounting Bracket	-		-		-		-		Y
Field Configurable Handing	Y		Y		Y		Y		-
Lock Dimensions (H xW x L)	2.5 in. x 9 in. x 1.375 in.		3 in. x 10.25 in. x 1.75 in.		3 in. x 12.5 in. x 1.75 in.		3 in. x 12.5 in. x 3.0625 in.		3 in. x 11 in. x 1.75 in.
Weight	6 lbs		10 lbs		14 lbs		16 lbs		14 lbs
Certifications									
BHMA Grade 1	Y		Y		Y		Y		-
UL1034	Y		Y		Y				-
Ul10C	3HR		3HR		3HR		3HR		-
cUL	Y		Y		Y		Y		-
CSFM	Pending		Pending		Pending		Pending		-
NFPA101	-		-		-		Y		-
BOCA	-		-		-		Y		-

	Specialty Mag Locks			40/70 Standard Duty Mag Locks	
	GF3000SM (Surface Mount)	**GF3000 (Mortise Mount)**	**320M**	**40**	**70**
Features					
Hold Force	3000 lbs		500 lbs	500 lbs	1000 lbs
Input Voltage	12V/24V DC		12V/24V DC	12V/24V DC	12V/24V DC
Current Draw	0.90A @ 12V DC 0.45A @ 24V DC		0.23A @12V DC 0.45A @ 24V DC	0.32A @ 12V DC 0.15A @ 24V DC	0.25A @12V DC 0.12A @ 24V DC
Features					
Automatic Voltage Sensor (AVS)	Y		Y	Y	Y
Voltage Suppression	Y		Y	Y	Y
Internal Plunger Switch	-		-	-	-
Auto Relocking Switch (ARS)	S		-	-	-
Magnetic Bond Sensor (MBS)	O		Y	Y	Y
Door/Gate Status Monitoring (DPS/DSM)	O		Y	Y	Y
Relock Time Delay	Y		Y	-	-
Anti-Tamper Switch (ATS)	-	-	-	-	-
MBS Indicator (LED)	-	-	-	-	-
Anti-Tailgate Feature	-	-	-	-	-
Surface Mount	Y	-	-	Y	Y
Mortise Mount	-	Y	Y	-	-
Top Jam (inswinging doors)	Y	-	-	O	O
Herculite Door Bracket	-	-	-	-	-
Bayonet Mounting Bracket	-	-	-	-	-
Universal Mounting Bracket	-	-	-	-	-
Field Configurable Handing	-	-	-	-	-
Lock Dimensions (H x W x L)	1.25 in. X 9.8125 in. X 1.5 in.	1.5 in. X 9.5 in. X 1.5 in.	1.375 in. x 7 in. x 1.875 in.	1.875 in. x 8 in. x 1625 in.	3 in. x 8 in. x 1.875 in.
Weight	9 lbs.	7 lbs.	6 lbs.		8 lbs.
Certifications					
BHMA Grade 1	Y		Y	Y	Y
UL1034	-		Y	Y	Y
Ul10C	3HR		3HR	1HR	1HR
cUL	Y		Y	Y	Y
CSFM	Y		Y	Y	Y
NFPA101	-		-	-	-
BOCA	-		-	-	-

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VON DUPRIN®

6100 Series

Strikes for Rim Exit Devices
Models 6111, 6112, 6113 & 6121

Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6100 Series is designed to withstand abuse. Its heavy duty stainless steel construction is fully UL1034 and UL10C listed and ANSI/BHMA Grade 1 1500 lb. hold force rated.

6100 Series electric strikes are designed for use with a variety of Rim Exit Devices. They interface with the latch mechanism of the exit device. The movable lip (keeper) allows a door to open even when the latch bolt is extended. This feature, called remote release provides added benefits such as increased convenience and efficiency. The 6100 Series also provides added security and traffic control.

6100 Series electric strikes can be used for retrofit applications or new construction. To assure the proper selection of an electric strike on new applications, lockset compatibility charts are shown on the next page. When using a lockset not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for application assistance.

The power failure mode of the 6100 can be specified at the time of order. Fail secure is available for fire rated openings. In a fail secure application the door is normally locked. To unlock the door power must be applied. Fail safe strikes which are commonly used for life safety applications are non-fire rated. To unlock a fail safe strike power is removed. The 6100 comes standard 24 VDC; 12 VDC and AC operation are optional.

Features and Benefits

- Non-handed design provides greater flexibility
- Strike box is adjustable to compensate for misalignment of the door or frame
- Two piece plug connectors are furnished for ease of installation and for removal during strike servicing
- ANSI 156.5 Grade 1 1500 lb. hold force rated
- UL1034 Burglary-Resistant & UL10C Electric Strike for Fire Door
- Six finishes available to suite with existing hardware
- Durable stainless steel construction
- 24 VDC standard with 12 VDC and AC operation optional

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6100 Series Specifications

	12VDC	24VDC
Resistance in Ohms +/- 10% @ 70 F	21	82
Watt-seated @ 70 F	7.5	8
Amps-seated @ 70 F	0.6	0.33
Amps-inrush @ 70 F	0.6	0.33

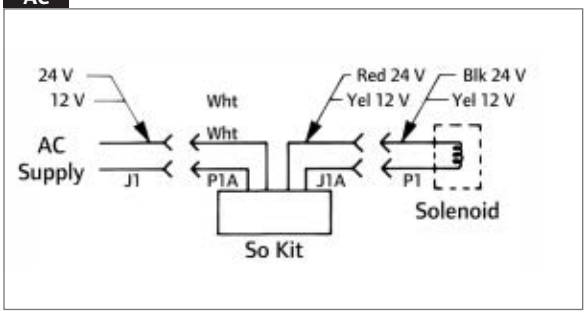
Rim Exit Device Compatibility
6111, 6112, 6113 & 6121 Strikes

Manufacturer	Device
Von Duprin	22, 33A, 35A, 55*, 88, 98, 99 8827 LBR† x Pullman latch Non-Fire rated 9827 LBR† x Pullman latch Non-Fire rated 9927 LBR† x Pullman latch Non-Fire rated
Falcon Monarch **	XX-R, 18-R, 19-R, 24-R, 25-R
Falcon Doromatic	1790
Precision**	2100
Sargent	2800, 6500, 6800, 8500, 8800, 9500, 9800***, 9898
Yale	1500, 700

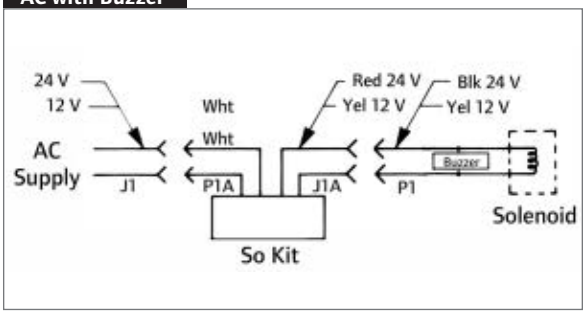
* Strike must be factory modified, specify when using with a 55 Rim device
** Deadlocking feature will not properly function, consult factory
*** Panic only, NO Fire rated
† 6111 is recommended for LBR applications
Note: When using a lockset not listed or when retrofitting an existing application, please contact Von Duprin Technical Support for application assistance

Wiring

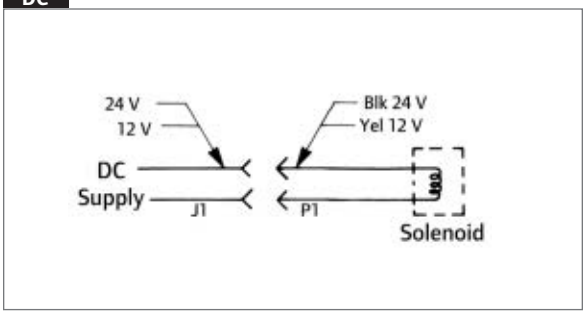
AC



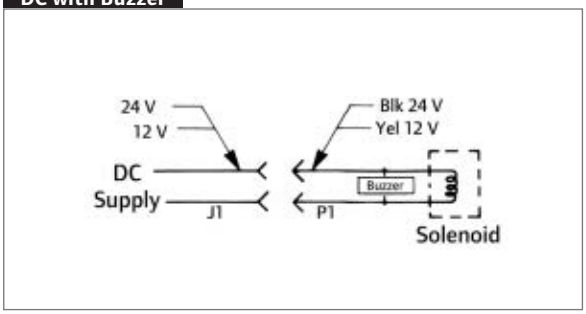
AC with Buzzer



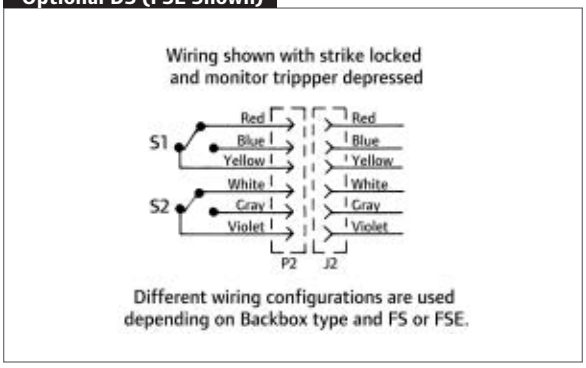
DC



DC with Buzzer



Optional DS (FSE Shown)



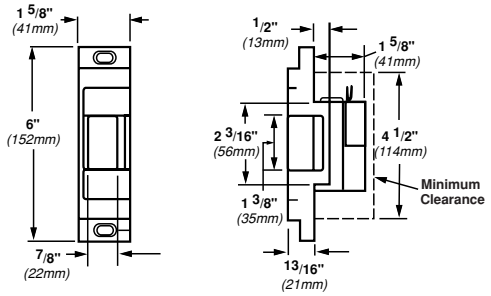
Model Specifications

Model #		6111	6112	6113	6121
Retrofits Model		VD 3031	FA 310-4	VD 3011 or 3021	FA 310-4-100
Latchbolt Throw		¾″			
Face Plate Length		6″	9″	6″	9 ⅛″
Backbox Depth		1 ¾″	1 ¾″	1 15/16″	N/A
Lockset		Rim Exit Device			
# Doors		Single, Double Door with Mullion	Single		Double Door without Mullion
Door/Frame Type		Hollow Metal, Aluminum & Wood			
Options	Blade Stop Shim	Yes	No	Yes	No
	DS or DS-LC (Dual Monitor Switches)	Yes			
	EB (Entry Buzzer - Fail Secure Only)	Yes			
Certifications		UL1034, UL10C, ANSI/BHMA 156.5 Grade 1 1500 lb. Hold force rated			
Application Notes		For use with rim exit devices on single doors or double doors with mullion applications. 1/2″ projection Blade Stop Shim 010055-XX available for use on cased opening or blade stop frames. Specify when using 55 rim devices. May also be used with Vertical Rod exit devices noted on previous page x Pullman latch LBR Non-fired rated.	For use with rim exit devices on single door applications. Designed to replace Folger Adam 310-4, minor fame prep modification required.	1/2″ projection Blade Stop Shim 010055-XX available for use on cased opening or blade stop frames. Non-Fire rated.	Non-fire rated. For use with rim exit devices on double door applications without mullion. Strike mounts on inactive leaf. Replace Folger Adam 310-4-100.

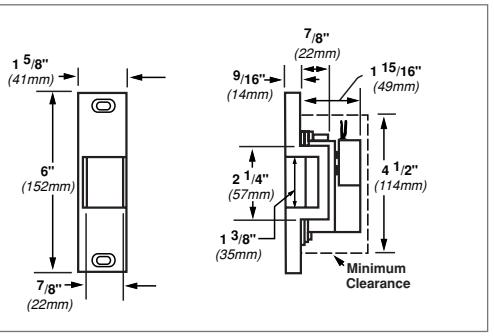
Note: 16 VDC and 28 VDC solenoid are sold as replacement parts for existing strikes. Please contact Customer Care for details.

Dimensions

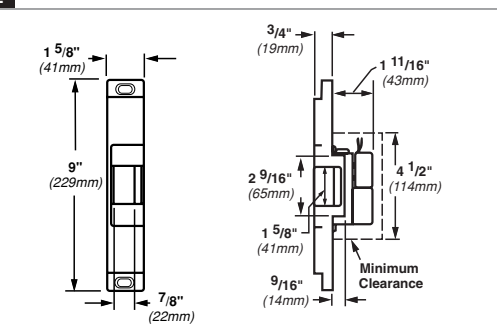
6111



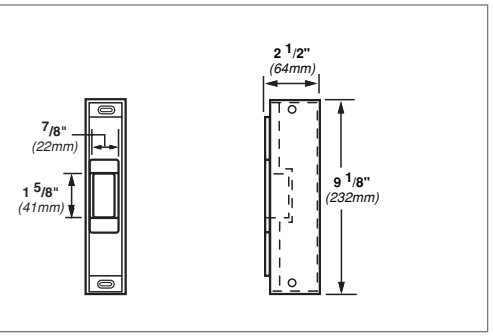
6113



6112



6121



Ordering Information

6112 –	FSE –	DS –	24 –	S024 –	US3 –	EB
Model	Power Failure Mode	Dual Switch*	Voltage	Rectifier Kit*	Finish	Buzzer*
1	2	3	4	5	6	7

*Optional

Selections Correspond With the Numbers Above

1 Model

6111	See chart on page 3 to make the proper selection
6112	See chart on page 3 to make the proper selection
6113	See chart on page 3 to make the proper selection
6121	See chart on page 3 to make the proper selection

2 Power Failure Mode

FSE	Fail Secure. Requires power to be applied to unlock the strike lip. On loss of power, the strike lip is locked. **Fire rated**.
FS	Fail Safe. Requires power to be applied to lock the strike lip. On loss of power, the strike lip is unlocked. **Non-Fire Rated**.

3 Dual Switch (Optional)

DS	Monitors latch bolt & lock status. DS Switches rated at 24 VDC 50 milliampere - 2 Amps.
DS-LC	Optional for computer monitoring. Monitors latch bolt & lock status. DS switches rated 24 VDC 50 milliampere or less.

4 Voltage (VDC)

24	Low voltage DC power
12	Low voltage DC power

If AC power is required specify rectifier kit below.

5 Rectifier Kit (Optional)

SO12	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid

6 Finish
US Number/Von Duprin Number

US3/85	Plated Polished Brass on Stainless Steel
US4/84	Plated Dull Brass on Stainless Steel
US10/06	Plated Dull Bronze on Stainless Steel
US10B/86	Plated Dark Bronze on Stainless Steel
US32/31	Stainless Steel, Polished
US32D/32	Stainless Steel, Satin

7 Buzzer (Optional)

EB	Entry Buzzer. Only available if Fail Secure (FSE) is specified.

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VON DUPRIN®

6200 Series

Strikes for Mortise or Cylindrical Devices Models 6210, 6211, 6211AL, 6211WF, 6212, 6212WF, 6213, 6214, 6215, 6216, 6221, 6222, 6223, 6224, 6224AL, 6225 & 6226

Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6200 Series is designed to withstand abuse. Its heavy duty stainless steel construction is fully UL1034 and UL10C listed and ANSI/BHMA Grade 1 1500lb. hold force rated.

6200 Series electric strikes are designed for use with a variety of mortise or cylindrical locksets as well as mortise exit devices. It interfaces with the latch mechanism of the exit device. The 6200 Series movable lip (keeper) allows a door to open even when the latch bolt is extended. This feature, called remote release provides added benefits such as increased convenience and efficiency. The 6200 Series also provides added security and traffic control.

6200 Series electric strikes can be used for retrofit applications or new construction. To assure the proper selection of an electric strike on new applications, lockset compatibility charts are shown on the next page. When using a lockset not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for application assistance.

The power failure mode of the 6200 Series can be specified at the time of order. Fail secure is available for fire rated openings. In a fail secure application the door is normally locked. To unlock the door power must be applied. Fail safe strikes which are commonly used for life safety applications are non-fire rated. To unlock a fail safe strike power is removed. The 6200 Series comes standard with 24 VDC; 12 VDC and AC operation are optional.

Features and Benefits

- Non handed design provides greater flexibility
- Strike box is adjustable to compensate for misalignment of the door or frame
- Two piece plug connectors are furnished for ease of installation and for removal during strike servicing.
- ANSI 156.5 Grade 1 1500lb. hold force rated
- UL1034 Burglary-Resistant & UL10C Electric Strike for Fire Door
- Six finishes available to suite with existing hardware
- Durable stainless steel construction
- 24 VDC standard with 12 VDC and AC operation optional

Ingersoll Rand
Security Technologies

6200 Series Specifications

	12VDC	24VDC
Resistance in Ohms +/- 10% @ 70 F	21	82
Watt-seated @ 70 F	7.5	8
Amps-seated @ 70 F	0.6	0.33
Amps-inrush @ 70 F	0.6	0.33

Mortise Lockset Compatibility 6211, 6211AL, 6211WF, 6212, 6213, 6214, 6215, 6221, 6222, 6223, 6224, 6224AL, 6225 & 6226 Strikes

Manufacturer	Model Number
Von Duprin	7500
Adams Rite	4510, 4710
Baldwin	6000
Best	24H, 30H
Corbin	9000
Falcon	M2300, M2500, M2600, M3300, M3500, M3600
Precision	Mortise
Russwin	Mortise
Sargent	7700, 8100, 9000
Schlage	L9000, K30, K40, K50, K60
Yale	7030, 7130, 8600, 8700

Note: Von Duprin cannot guarantee compatibility as other manufacturer's designs may change without notice.

Mortise Lockset Compatibility 6210

Manufacturer	Model Number
Von Duprin	7500
Best	30H (Not 45H/47H)
Corbin/Russwin	ML2200, 5000, 9000, CR2200 (Not 2000)
Falcon	M100, M200, M300, M400, M500, M600
Sargent	7700, 8100 (Not 7800/8200)
Schlage	L9000
Yale	8700 (Not 8800)

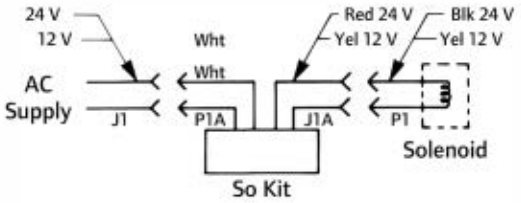
Cylindrical Lockset Compatibility 6211, 6211AL, 6211WF, 6212, 6213, 6214, 6215, 6221, 6222, 6223, 6224, 6224AL, 6225 & 6226 Strikes

Manufacturer	Cylindrical Latchbolt Projection
Baldwin	1/2" – 3/4" (13mm – 19mm)
Best	3/8" – 3/4" (10mm – 19mm)
Corbin	1/2" – 3/4" (13mm – 19mm)
Falcon	1/2" – 3/4" (13mm – 19mm)
Russwin	1/2" – 3/4" (13mm – 19mm)
Sargent	1/2" – 3/4" (13mm – 19mm)
Schlage	3/8" – 3/4" (10mm – 19mm)
Yale	1/2" – 3/4" (13mm – 19mm)

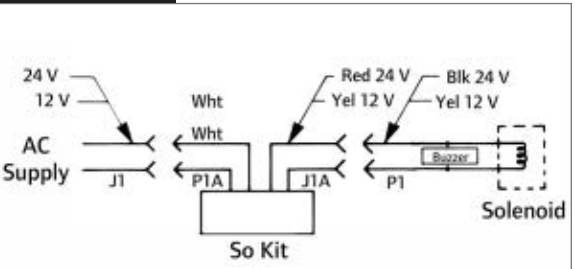
Note: Signalling may not function when using 3/8" (10mm) throw bolt. Deadlocking cannot be guaranteed with all locks.

Wiring

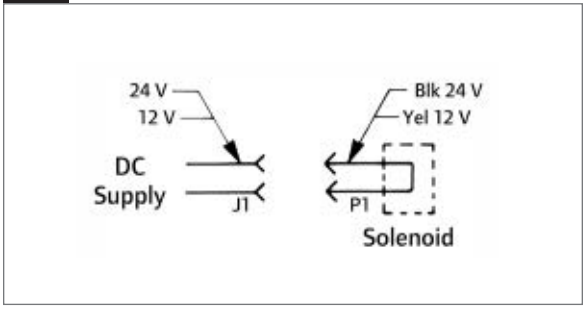
AC



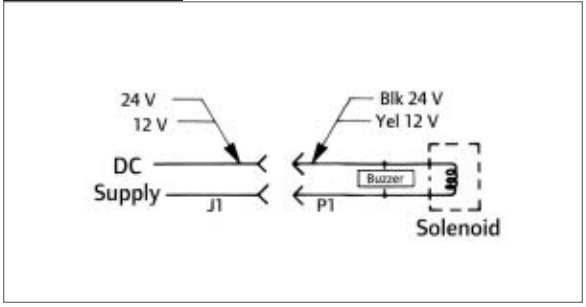
AC with Buzzer



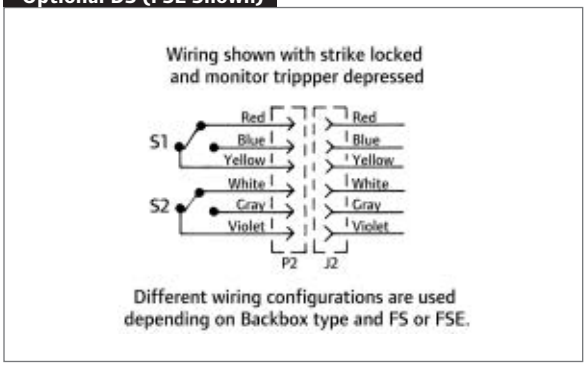
DC



DC with Buzzer

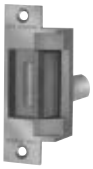


Optional DS (FSE Shown)



Note: When using a lockset not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for assistance.

Model Specifications

						
Model #		**6210**	**6211**	**6211AL**	**6211WF**	**6212**
Retrofits Model		n/a	VD 3140, FA 712	FA 722	FA 732	VD 3146
Latchbolt Throw		¾″	¾″	¾″	¾″	¾″
Face Plate Length		4 7/8″	4 7/8″	4 7/8″	4 7/8″	6 3/8″
Backbox Depth		1 21/32″	1 21/32″	1 21/32″	4 1/2″	1 21/32″
Lockset	Mortise	•	•	•	•	•
	Cylindrical		•	•	•	•
# Doors	Single	•	•	•	•	•
	Pair					
Door & Frame Type	Hollow Metal	•	•			•
	Aluminum	•	•	•		•
	Wood				•	
Options	DS or DS-LC (Dual Monitor Switches)	•	•	•	•	•
	EB (Entry Buzzer - Fail Secure Only)	•	•	•	•	•
	28 VDC AC rectifier kit	•	•	•	•	•
	16 VDC solenoid	•	•	•	•	•
Certifications	UL1034	•	•	•	•	•
	UL10C	•	•	•	•	•
	ANSI/BHMA 156.5 Grade 1 1500lb. Hold force rated	•	•	•	•	•
Application Notes		1	2	3	4	5

Application Notes

1 For use with mortise locks without deadbolt on single door, hollow metal frame applications and using ANSI prep at standard height. Strike pocket inserts are provided to accommodate different manufacturers deadlocking trigger locations.

2 For use on new installations with mortise locks without deadbolt or cylindrical locks on single door, hollow metal frame applications. Designed to replace Von Duprin 3140 or Folger Adam 712.

3 For use on new installations with mortise locks without deadbolt or cylindrical locks on single door, aluminum frame applications

4 For use on new installations with mortise locks without deadbolt or cylindrical locks on single door wood frame applications. Designed to replace Folger Adams 732. Wood frame horizontal solenoid location differs from Folger Adams. Requires additional frame prep when retrofitting.

5 For use with mortise locks without deadbolt or cylindrical locks on single door, hollow metal or aluminum frame applications. Fits modified ANSI 115.2 cutout. Designed to replace Von Duprin 3146

Model Specifications

Model #		**6212WF**	**6213**	**6214**	**6215**	**6216**	**6221**
Retrofits Model		n/a	VD 3041, 3042, 3061, 3062	FA 310-2 3/4	FA 310-2	FA 310-3-1	VD 3071 & 3072
Latchbolt Throw		¾″	¾″	¾″	¾″	¾″	¾″
Face Plate Length		6 ⅜″	• 6″	9″	9″	9″	6″
Backbox Depth		4 ¾″	2 ½″	1 ⅝″	1 ⅝″	3 5/32″	4 ¾″
Lockset	Mortise	•	•	•	•	•	•
	Cylindrical	•	•	•	•		•
# Doors	Single	•	•	•	•	•	
	Pair						•
Door & Frame Type	Hollow Metal		•	•	•	•	•
	Aluminum		•†	•	•	•	•
	Wood	•	See note 7 below			•	•
Options	DS or DS-LC (Dual Monitor Switches)	•	•	•	•	•	•
	EB (Entry Buzzer - Fail Secure Only)	•	•	•	•	•	•
	28VDC AC rectifier kit	•	•	•	•	•	•
	16VDC solenoid	•	•	•	•	•	•
Certifications	UL1034	•	•	•	•	•	•
	UL10C	•	•	•	•	•	•
	ANSI/BHMA 156.5 Grade 1 1500lb. Hold force rated	•	•	•	•	•	•
Application Notes		6	7	8	9	10	11

Application Notes

6 For use with mortise locks without deadbolt or cylindrical locks on single door, wood frame applications.

7 For use with mortise locks without deadbolt or cylindrical locks on single door hollow metal or aluminum frame applications (includes wood frame on retrofit applications). Designed to replace Von Duprin 3041, 3042, 3061 and 3062.

8 For use with mortise locks without deadbolt or cylindrical locks on sing door hollow metal or aluminum frame applications. Designed to replace Folger Adams 310-2 3/4

9 For use with mortise locks without deadbolt or cylindrical locks on single door hollow metal or aluminum frame applications. Designed to replace Folger Adams 310-2.

10 For use with mortise locks with deadbolt 1″ throw on single door hollow metal aluminum or wood frame applications. Deadbolt must be manually operated. Designed to replace Folger Adams 310-3-1.

11 Open back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4″ (44mm) thick double door applications. 4 3/4″ (120 mm) minimum stile required. For a concealed vertical rod and mortise device combination, specify "A" backbox.

Model Specifications

6222	6223	6224	6224AL	6225	6226	Model #	
FA 310-23/ 4 OB	VD 3091 & 3092	FA 310-2 3/4	FA 310-2RF	FA 310-2 OB	FA 310-2	Retrofits Model	
¾″	¾″	¾″	¾″	¾″	¾″	Latchbolt Throw	
9″	6″	9″	9″	9″	9″	Face Plate Length	
1 ⅝″	4 ½″	1 ⅝″	1 ⅝″	1 ⅝″	1 ⅝″	Backbox Depth	
•	•	•	•	•	•	Mortise	Lockset
•	•	•	•	•	•	Cylindrical	
						Single	# Doors
•	•	•	•	•	•	Pair	
•	•	•		•	•	Hollow Metal	Door & Frame Type
•	•	•	•	•	•	Aluminum	
	•					Wood	
•	•	•	•	•	•	DS or DS-LC (Dual Monitor Switches)	Options
•	•	•	•	•	•	EB (Entry Buzzer - Fail Secure Only)	
•	•	•	•	•	•	28VDC AC rectifier kit	
•	•	•	•	•	•	16VDC solenoid	
•	•	•	•	•	•	UL1034	Certifications
•	•	•	•	•	•	UL10C	
•	•	•	•	•	•	ANSI/BHMA 156.5 Grade 1 1500lb. Hold force rated	
12	13	14	15	16	17	Application Notes	

Application Notes

12 Open back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4″ (44mm) thick double door applications

13 Closed back electric stirke for use with mortise locks without deadbolt or cylindrical locks on 1 3/4″ (44mm) thick double door applications. 4 3/4″ (120mm) minimum stile required. For a concealed vertical rod and mortise device combination specify “A” backbox.

14 Closed back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4″ (44mm) or 2 1/4″ (57mm) thick double door applications.

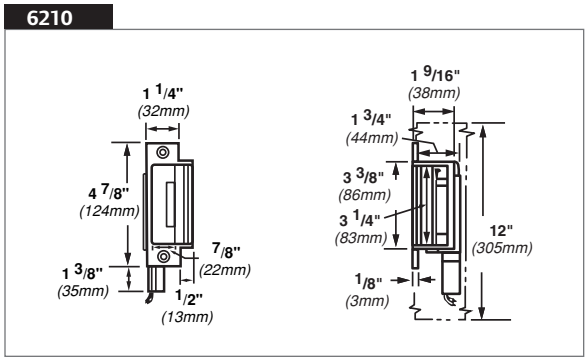
15 Closed back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4″ (44mm) or 2 1/4″ (57mm) thick aluminum double door applications.

16 Open back electric stirke for use with mortise locks without deadbolt or cylindrical locks on 1 3/4″ (44mm) thick double door applications.

17 Closed back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4″ (44mm) or 2 1/4″ (57mm) thick double door applications.

Dimensions

6210



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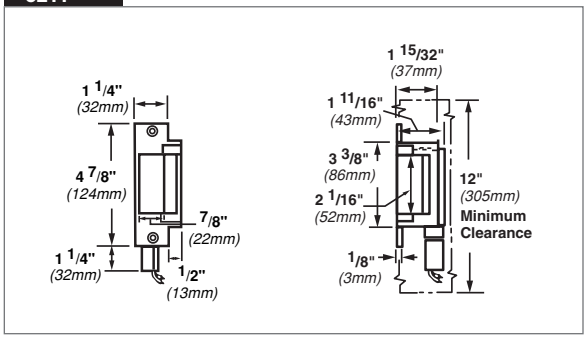

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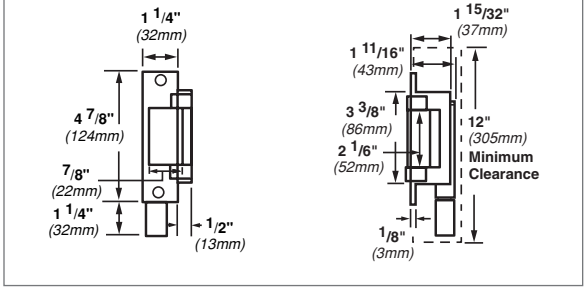

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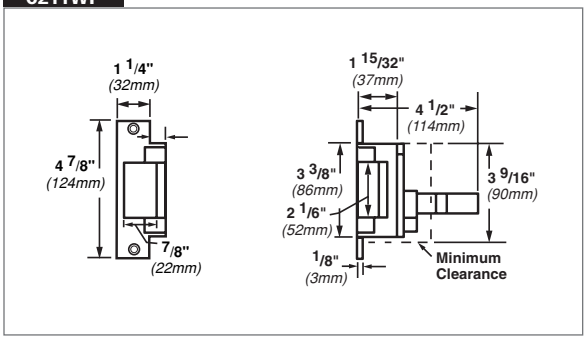

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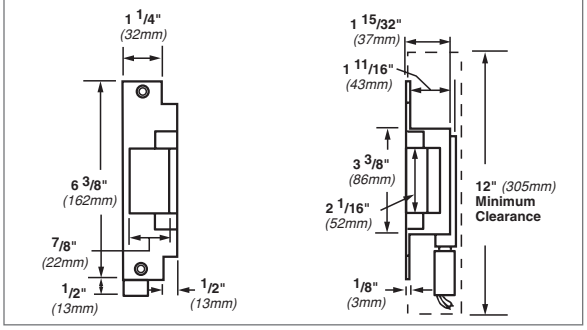

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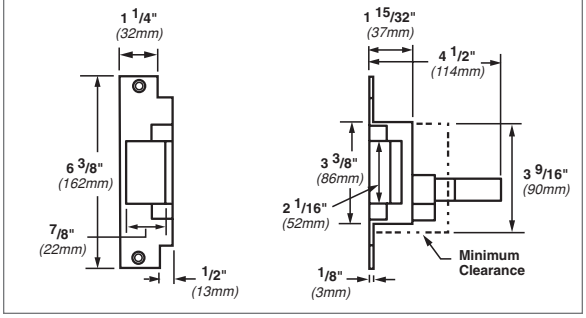

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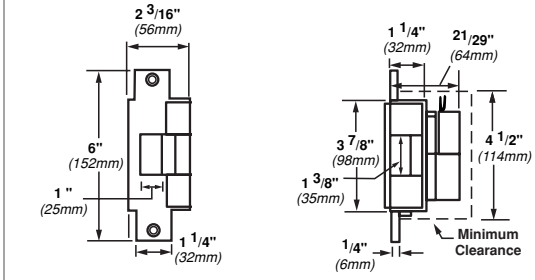

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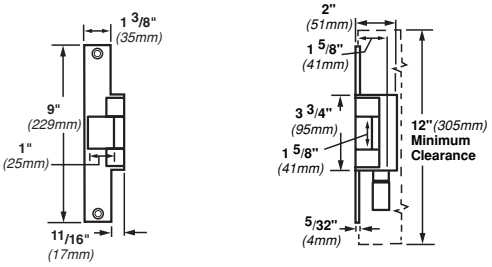

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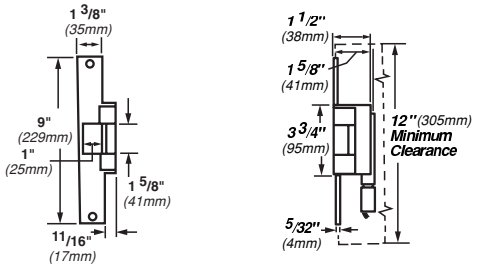

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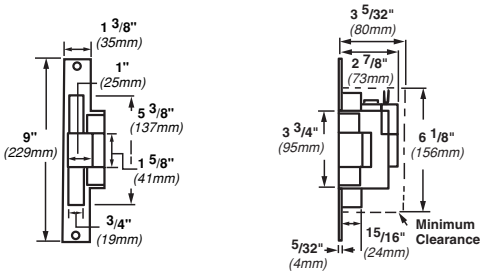
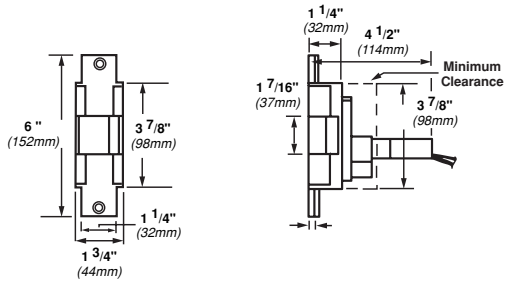


Dimensions

6221



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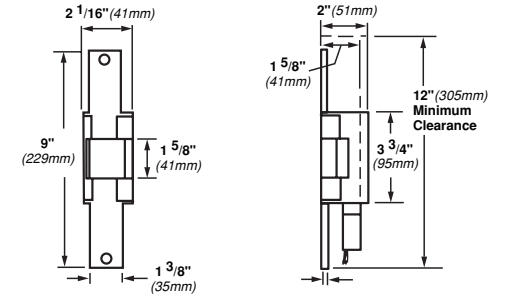

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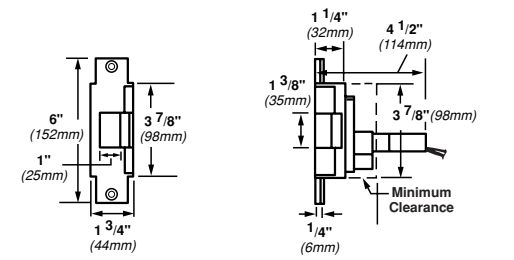

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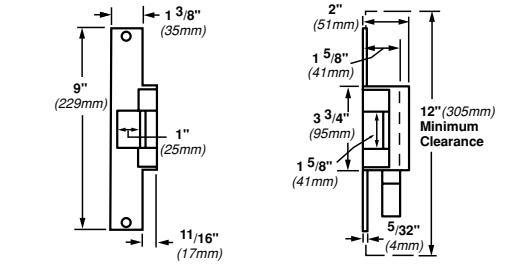
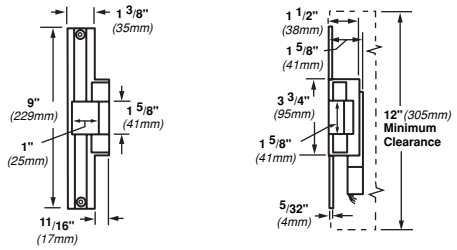


6224AL



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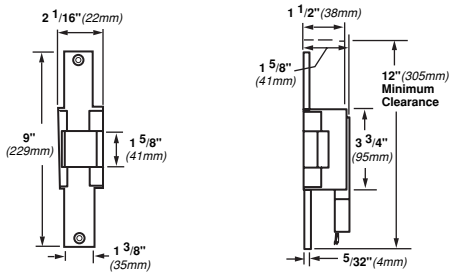

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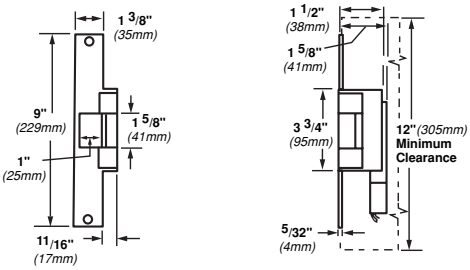

Ordering Information

6210	–	FSE	–	DS	–	24	–	S024	–	US3	–	EB
Model		Power Failure Mode		Dual Switch*		Voltage		Rectifier Kit*		Finish		Buzzer*
1		2		3		4		5		6		7

*Optional

Selections Correspond With the Numbers Above

1 Model	
6210	See chart on page 3 to make the proper selection
6211	See chart on page 3 to make the proper selection
6211AL	See chart on page 3 to make the proper selection
6211WF	See chart on page 3 to make the proper selection
6212	See chart on page 3 to make the proper selection
6212WF	See chart on page 4 to make the proper selection
6213	See chart on page 4 to make the proper selection
6214	See chart on page 4 to make the proper selection
6215	See chart on page 4 to make the proper selection
6216	See chart on page 4 to make the proper selection
6221	See chart on page 4 to make the proper selection
6222	See chart on page 5 to make the proper selection
6223	See chart on page 5 to make the proper selection
6224	See chart on page 5 to make the proper selection
6224AL	See chart on page 5 to make the proper selection
6225	See chart on page 5 to make the proper selection
6226	See chart on page 5 to make the proper selection

2 Power Failure Mode	
FSE	Fail Secure. Requires power to be applied to unlock the strike lip. On loss of power, the strike lip is locked. **Fire rated**.
FS	Fail Safe. Requires power to be applied to lock the strike lip. On loss of power, the strike lip is unlocked. **Non-Fire Rated**.

3 Dual Switch (Optional)	
DS	Monitors latch bolt & lock status. DS Switches rated at 24 VDC 50 milliampere - 2 Amps.
DS-LC	Optional for computer monitoring. Monitors latch bolt & lock status. DS-LC switches rated 24 VDC 50 milliampere or less.

4 Voltage (VDC)	
24	Low voltage DC power
12	Low voltage DC power

If AC power is required specify rectifier kit below.

5 Rectifier Kit (Optional)	
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid

6 Finish US Number/Von Duprin Number	
US3/85	Plated Polished Brass on Stainless Steel
US4/84	Plated Dull Brass on Stainless Steel
US10/06	Plated Dull Bronze on Stainless Steel
US10B/86	Plated Dark Bronze on Stainless Steel
US32/31	Stainless Steel, Polished
US32D/32	Stainless Steel, Satin

7 Buzzer (Optional)	
EB	Entry Buzzer. Only available if Fail Secure (FSE) is specified.

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VON DUPRIN®

6300 Series

Surface Mounted Strike for Rim Exit Devices

Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6300 Series is designed to withstand abuse. Its heavy duty stainless steel construction is fully UL1034 and UL10C listed.

6300 Series electric strikes are designed for use with a variety of rim devices. It interfaces with the latch mechanism of the exit device. The movable lip (keeper) allows a door to open even when the latch bolt is extended. This feature, called remote release provides added benefits such as increased convenience and efficiency. The 6300 Series is also provides added security and traffic control.

6300 Series electric strikes are ideal for aftermarket applications. It is easy to install without modifying or altering the door frame. To assure the proper selection of an electric strike on new applications, lockset compatibility charts are shown on the next page. When using a lockset not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for application assistance.

The 6300 is fail secure (FSE) only to achieve compliance with UL10C for fire rated openings. In a fail secure application the door is normally locked. To unlock the door power must be applied. The 6300 strike can be used with either 12VDC or 24VDC. There are 2 connectors that ship with it and the appropriate connector for either 12VDC or 24VDC will be used based upon the available voltage at the opening.

Features and Benefits

- Non handed design provides greater flexibility
- Requires no alteration or cutting to existing frame
- UL1034 Burglary-Resistant & UL10C Electric Strike for Fire Door
- Stainless steel (satin) finish
- Durable stainless steel construction
- Field selectable voltage 12VDC or 24VDC

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6300 Surface Mount Specifications

Model	Voltage	Current	Duty	Amps	Ohms
6300	12V	DC	Continuous	0.50	22
6300	24V	DC	Continuous	0.24	89

DC = Direct Current
Continuous Duty = Energized 1 min. or more

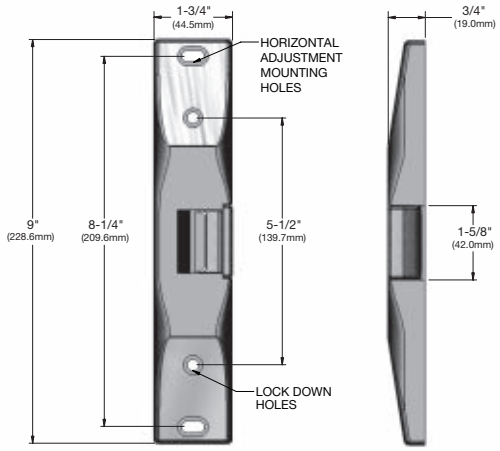
Rim Exit Device Compatibility 6300 Strikes

Manufacturer	Model Number
Von Duprin	VD 22/22-F Rim
Von Duprin	VD 33A/35A Rim
Von Duprin	VD 55 Rim
Von Duprin	VD 88/88-F Rim device
Von Duprin	VD 98/99 and 98/99-F Rim
Falcon	Falcon 24/24-F Rim
Falcon	Falcon 25/25-F Rim
Falcon	Falcon 19/19-F Rim
Falcon Doromatic	Falcon Doromatic 1790
Falcon Doromatic	Falcon Doromatic 2090

* Note: When using device not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for application assistance.

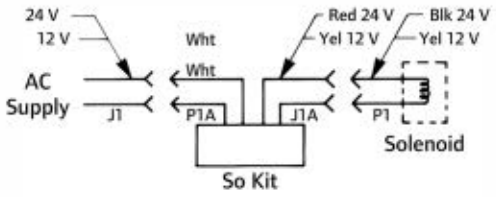
Model Specifications

Model #	6300
Retrofits Model	N/A
Latchbolt Throw	¾″
Face Plate Length	9″
Projection	¾″
Lockset	Rim Exit Device
# Doors	Single or Pair with Mullion
Door/Frame Type	Hollow Metal, Aluminum & Wood
EB (Entry Buzzer)	Optional
Certifications	UL1034, UL10C
Application Notes	Surface mounted electric strike ideal for aftermarket applications. Strike designed for use with Von Duprin 98/99, however it can be used with most rim exit devices.

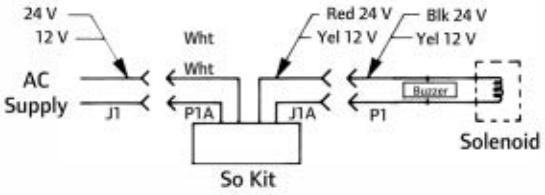


Wiring

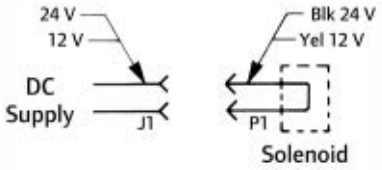
AC



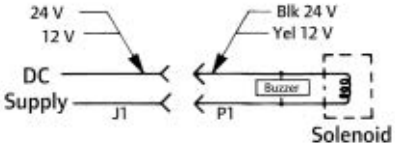
AC with Buzzer



DC



DC with Buzzer



Ordering Information

6300	S024	EB
Model	Rectifier Kit *	Buzzer*
1	2	3

Selections Correspond With the Numbers Above
* Optional

1 Model	
6300	Surface Mounted Strike for Rim Exit Devices

2 Rectifier Kit (Optional)	
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid

3 Buzzer (Optional)	
EB	Entry Buzzer.

Standard Features:
- Power Failure Mode: Fail Secure (FSE)
- Voltage: Field selectable 24 VDC or 12 VDC
- Finish: Stainless Steel, Satin (US32D/32)

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Security Technologies

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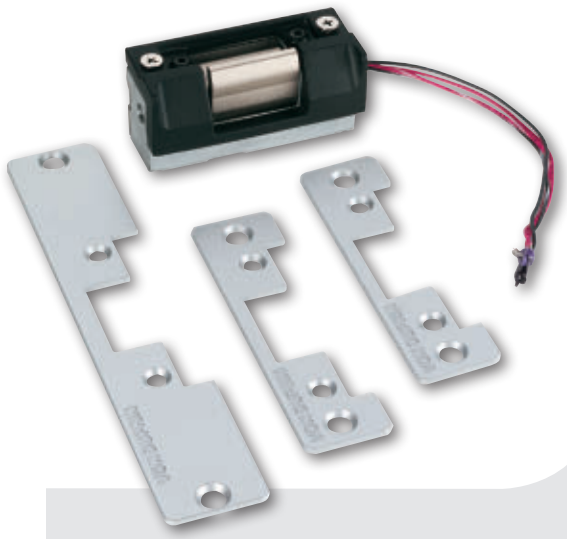

5100 Series
Electric Strikes

Overview

The Von Duprin 5100 Electric Strike has been designed and manufactured to meet the needs of locksmiths and security professionals. This easy-to-install electric strike was created for medium duty applications, specifically to control traffic flow through interior and exterior openings in retail and commercial environments.

Features and Benefits

- Three faceplates standard in every box
- 12/24 dual-voltage
- Fail-safe/fail-secure
- Adjustable keeper
- Internal solenoid
- Non-handed
- Backbox depth of 1 11/16″
- Keeper depth of 1/2″
- Mounting tabs
- Retrofit kit
- Illustrated installation instructions
- Tamper resistant
- 1 year electrical product warranty
- Continuous duty operation
- Heavy duty construction

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POWER OPTIONS

- DC: Regulated Power Supplies (Recommended)
  - PS902 Power Supply
- DC: 24V Unregulated Power Supplies (Acceptable)
  - Schlage 593 PI-24DC (Plug-In)
  - Schlage 592-24RC (Hard-Wired)
- AC/DC Conversion:
  - Von Duprin SO-24 Kit

Specifications		
ANSI/BHMA 156.5 Grade 1		
UL 1034 Burglary Listing		
	12VDC	**24VDC**
Resistance (Ohms)	32	128
Power (watts)	4.5	4.5
Current (amps)	0.38	0.19
All specs ± 10% @77°F/25°C		

STANDARD CONFIGURATION

- 24 volts DC
- Fail-secure
- Field convertible to Fail-safe

DIMENSIONS

- Backbox: 3 3/8″ x 1″ x 1 11/32″
- Overall Strike Depth: 1 11/16″
- Faceplates:
  - 4 7/8″ round corner ANSI A115.2 standard frame prep
  - 4 7/8″ square corner ANSI A115.2 standard frame prep
  - 7 15/16″ long, round corner wood frame prep
- Keeper pocket: 1 7/16″L x 1/2″D x 11/16″ - 13/16″W (adjustable)
- Lip Attachment cut-out depth: 1 1/16″

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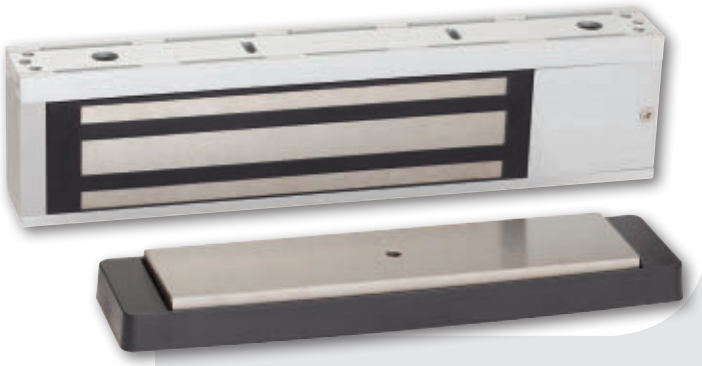
M490/492
Electromagnetic Locks



Overview

The M400 Series line of electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy to install, and secure. The new bayonet mounting feature makes installs easier, allowing the installer to have their hands free during the mounting process. There is no need to consider door handing as all the M400 Series electromagnetic locks are both non-handed and symmetrical, allowing optimum placement of the magnet no matter the application.

All M400 Series locks have automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex.
The M490 is tested and certified to meet or exceed UL1034 and BHMA 1500lb. hold force requirements.

The M490 electromagnetic lock comes in two configurations to meet your specific security needs. The M490 provides basic security, while the M490P provides intelligent sensing and reporting features needed to integrate with access control systems. Additional options are available for the M490P. Kits are available for top jam, double door, and glass door applications.

Features and Benefits

- Bayonet mount makes installation simpler by not requiring magnet to be held overhead while mounting screws are installed
- New design allows for RH/LH configuration in the field
- Armature mount allows armature to pivot compensating for slight opening imperfections
- Limited Lifetime Warranty
- UL1034 Burglary-Resistant Electronic Locking Mechanisms, UL10C Positive Pressure Fire Tests of Door Assemblies and ANSI/BHMA Grade 1 certifications
- 1500 lb. Hold Force
- See page 2 for additional features and options

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ADDITIONAL FEATURES

M490/M492

- **Automatic Voltage Selection (AVS)** senses the voltage applied to the lock and responds accordingly

M490P/M492P

- **Magnetic Bond Sensor (MBS)** monitors the strength of the bond between the lock and armature so you know the door is secure
- **Door Position Switch (DPS)** monitors whether the door is open or closed
- **Relock Time Delay (RTD)** provides a relock delay that is adjustable from 0.5 to 30 seconds

Optional

- **Anti-Tamper Switch (ATS)** provides an indication that the cover of the magnet is securely fastened to the lock and that the on board circuitry is secure
- **MBS Indicator (LED)** provides visual indication of magnetic bond at the lock

OPTIONS (FOR ALL)

- Herculite Door Bracket
- Top Jamb (inswinging doors)

M490/M492 Electromagnetic Lock Specifications

Specification	M490/M490P	M492/M492P
Holding Force	meets or exceeds BHMA standard of 1500 lbs.	meets or exceeds BHMA standard of 1500 lbs.
Input Voltage (Standard Unit)	12/24 VDC	
Current Draw (Amps Standard Unit)	.65A @ 12 VDC .35A @ 24 VDC	1.3A @ 12 VDC .7A @ 12 VDC
Automatic Dual Voltage	12/24 VDC	
Height	3"	3"
Length	12 - 1/2"	25 - 1/16"
Width	1 - 3/4"	1 - 3/4"
Weight (approximate)	14 lbs.	28 lbs.
Certifications	UL 294, UL10C, ANSI/BHMA A156.23	
Temperature	0º-49º C (32º-120º F)	
Wire Gauge	14-22 AWG	

Filler Plates and Angle Brackets Specifications

	M490	M492
Length	10-1/2"	20- 5/8"
Filler Plates		
Width x Height		
1-1/4" x 1/8"	4901F	4921F
1-1/4" x 1/4"	4902F	4922F
1-1/4" x 3/8"	4903F	4923F
1-1/4" x 1/2"	4904F	4924F
1-1/4" x 5/8"	4905F	4925F
3/4" x 1/2"	4906F	4926F
3/4" x 5/8"	4907F	4927F
3/4" x 3/4"	4908F	4928F
Angle Brackets		
Width x Height	**Plate No.**	**Plate No.**
1"x1"	4901A	4921A
1-1/2" x 1"	4902A	4922A
1-1/2" x 1-1/2"	4903A	4923A
1-1/2" x 2"	4904A	4924A
1-1/2" x 2 -1/2"	4905A	4925A

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M450/452
Electromagnetic Locks

Overview

The M400 Series line of electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy to install, and secure. The new bayonet mounting feature makes installs easier, allowing the installer to have their hands free during the mounting process. There is no need to consider door handing as all the M400 Series electromagnetic locks are both non-handed and symmetrical, allowing optimum placement of the magnet no matter the application.

All M400 Series locks have automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. The M450 is tested and certified to meet or exceed UL1034 and BHMA 1000lb. hold force requirements.

The M450 electromagnetic lock comes in two configurations to meet your specific security needs. The M450 provides basic security, while the M450P provides intelligent sensing and reporting features needed to integrate with access control systems. Additional options are available for the M450P. Kits are available for top jam, double door, and glass door applications.

Features and Benefits

- Bayonet mount makes installation simpler by not requiring magnet to be held overhead while mounting screws are installed
- New design allows for RH/LH configuration in the field
- Armature mount allows armature to pivot compensating for slight opening imperfections
- Limited Lifetime Warranty
- UL1034 Burglary-Resistant Electronic Locking Mechanisms, UL10C Positive Pressure Fire Tests of Door
- 1000 lb. Hold Force
- See page 2 for additional features and options

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ADDITIONAL FEATURES

M450/M452

- **Automatic Voltage Selection (AVS)** senses the voltage applied to the lock and responds accordingly

M450P/M452P

- **Magnetic Bond Sensor (MBS)** monitors the strength of the bond between the lock and armature so you know the door is secure
- **Door Position Switch (DPS)** monitors whether the door is open or closed
- **Relock Time Delay (RTD)** provides a relock delay that is adjustable from 0.5 to 30 seconds

Optional (P models only)

- **Anti-Tamper Switch (ATS)** provides an indication that the cover of the magnet is securely fastened to the lock and that the on board circuitry is secure
- **MBS Indicator (LED)** provides visual indication of magnetic bond at the lock

OPTIONS (FOR ALL)

- Herculite Door Bracket
- Top Jamb (inswinging doors)

M450/M452 Electromagnetic Lock Specifications

Specification	M450/M450P	M452/M452P
Holding Force	meets or exceeds BHMA standard of 1000 lbs.	1000 lbs. per door leaf
Input Voltage (Standard Unit)	12/24 VDC	
Current Draw (Amps Standard Unit)	.75A @ 12 VDC .38A @ 24 VDC	1.5A @ 12 VDC .75A @ 24 VDC
Automatic Dual Voltage	12/24 VDC	
Height	3"	3"
Length	10 - 1/4"	20 - 9/16"
Width	1 - 3/4"	1 - 3/4"
Weight (approximate)	10 lbs.	20 lbs.
Certifications	UL1034, UL10C, ANSI/BHMA156.23	
Temperature	0º-49º C (32º-120º F)	
Wire Gauge	14-22 AWG	

Filler Plates and Angle Brackets Specifications

	M450	M452
Length	10-1/2"	20- 5/8"
Filler Plates		
Width x Height		
1-1/4" x 1/8"	4501F	4521F
1-1/4" x 1/4"	4502F	4522F
1-1/4" x 3/8"	4503F	4523F
1-1/4" x 1/2"	4504F	4524F
1-1/4" x 5/8"	4505F	4525F
3/4" x 1/2"	4506F	4526F
3/4" x 5/8"	4507F	4527F
3/4" x 3/4"	4508F	4528F
Angle Brackets		
Width x Height	**Plate No.**	**Plate No.**
1"x1"	4501A	4521A
1-1/2" x 1"	4502A	4522A
1-1/2" x 1-1/2"	4503A	4523A
1-1/2" x 2"	4504A	4524A
1-1/2" x 2 -1/2"	4505A	4525A

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M420/422
Electromagnetic Locks

Overview

The M400 Series line of electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy to install, and secure. The new bayonet mounting feature makes installs easier, allowing the installer to have their hands free during the mounting process. There is no need to consider door handing as all the M400 Series electromagnetic locks are both non-handed and symmetrical, allowing optimum placement of the magnet no matter the application.

All M400 Series locks have automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. The M420 is tested and certified to meet or exceed UL1034 and BHMA 500lb. hold force requirements.

The M420 electromagnetic lock comes in two configurations to meet your specific security needs. The M420 provides basic security, while the M420P provides intelligent sensing and reporting features needed to integrate with access control systems. Additional options are available for the M420P. Kits are available for top jam, double door, and glass door applications.

Features and Benefits

- Bayonet mount makes installation simpler by not requiring magnet to be held overhead while mounting screws are installed
- New design allows for RH/LH configuration in the field
- Armature mount allows armature to pivot compensating for slight opening imperfections
- Limited Lifetime Warranty
- UL1034 Burglary-Resistant Electronic Locking Mechanisms, UL10C Positive Pressure Fire Tests of Door Assemblies and ANSI/BHMA Grade 1 certifications
- 500 lb. Hold Force
- See page 2 for additional features and options

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ADDITIONAL FEATURES

M420/M422

- **Automatic Voltage Selection (AVS)** senses the voltage applied to the lock and responds accordingly

M420P/M422P

- **Magnetic Bond Sensor (MBS)** monitors the strength of the bond between the lock and armature so you know the door is secure
- **Door Position Switch (DPS)** monitors whether the door is open or closed
- **Relock Time Delay (RTD)** provides a relock delay that is adjustable from 0.5 to 30 seconds

Optional (P models only)

- **Anti-Tamper Switch (ATS)** provides an indication that the cover of the magnet is securely fastened to the lock and that the on board circuitry is secure
- **MBS Indicator (LED)** provides visual indication of magnetic bond at the lock

OPTIONS (FOR ALL)

- Herculite Door Bracket
- Top Jamb (inswinging doors)

M420/M422 Electromagnetic Lock Specifications

Specification	M420/M420P	M422/M422P
Holding Force	meets or exceeds BHMA standard of 500 lbs.	meets or exceeds BHMA standard of 500 lbs.
Input Voltage (Standard Unit)	12/24 VDC	
Current Draw (Amps Standard Unit)	.75A @ 12 VDC .38A @ 24 VDC	1.5A @ 12 VDC .76A @ 24 VDC
Automatic Dual Voltage	12/24 VDC	
Height	2-1/2"	2-1/2"
Length	9"	18-1/16"
Width	1 - 3/8"	1 - 3/8″
Weight (approximate)	6 lbs.	12 lbs.
Certifications	UL1034, UL10C, ANSI/BHMA156.23	
Temperature	0º-49º C (32º-120º F)	
Wire Gauge	14-22 AWG	

Filler Plates and Angle Brackets Specifications

	M420	M422
Length	10-1/2"	20- 5/8"
Filler Plates		
Width x Height		
1-1/4" x 1/8"	4201F	4221F
1-1/4" x 1/4"	4202F	4222F
1-1/4" x 3/8"	4203F	4223F
1-1/4" x 1/2"	4204F	4224F
1-1/4" x 5/8"	4205F	4225F
3/4" x 1/2"	4206F	4226F
3/4" x 5/8"	4207F	4227F
3/4" x 3/4"	4208F	4228F
Angle Brackets		
Width x Height	**Plate No.**	**Plate No.**
1"x1"	4201A	4221A
1-1/2" x 1"	4202A	4222A
1-1/2" x 1-1/2"	4203A	4223A
1-1/2" x 2"	4204A	4224A
1-1/2" x 2 -1/2"	4205A	4225A

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M490G
Electromagnetic Gate Lock

Overview

The Schlage M490G Electromagnetic Gate Lock is a weather resistant electromagnetic lock with 1500 lbs. of holding force, designed for use on all types of sliding and swinging gates. As a high security magnetic lock it can accommodate misalignment problems while supplying superior holding force.

A 1/2″ compression connector is provided for installation of 1/2″ EMT conduit, insuring protection of hook-up wiring from weather and vandalism. Heavy duty plating resists corrosion of mating surfaces providing a low maintenance locking device.

A modified Top Jamb mounting bracket allows a single M490G to be mounted in a variety of positions. The M490G Gate Lock may be mounted to any gate frame or post. Special brackets may be required to adapt the lock to a particular frame or post. It is important that the lock is mounted so that the armature pulls straight back from the magnet face.

The M490G can be field configured for either 12 or 24 VDC operation. Magnetic Bond Sensor (MBS) and Gate Status Monitor (DPS) are standard.

Features and Benefits

- 1500 lbs. of direct holding force
- Magnetic Bond Sensor (MBS) and Gate Status Monitor (DPS)
- Field Selectable 12 or 24VDC operation
- Built-in voltage spike suppressor
- Electroless nickel plated finish
- Universal mounting brackets
- 1/2″ EMT compression fitting
- Two foot wire leads
- Weather resistant for exterior use
- Accomodates gate misalignment
- No moving parts - low maintenance

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STANDARD FEATURES

M490G

- **Magnetic Bond Sensor (MBS)** monitors the strength of the bond between the lock and armature so you know the door is secure
- **Door Position Switch (DPS)** monitors whether the door is open or closed
- **Universal Mounting Brackets,** for swinging or sliding gate applications
- **Built in voltage spike suppression**
- **½" EMT compression fitting**
- **Special corrosion resistant plating**

M490G Electromagnetic Gate Lock Specifications	
Specifications	**M490/M490G**
Holding Force	Meets or exceeds BHMA standard of 1500 lbs.
Input Voltage (Field Selectable)	12/24 VDC
Current Draw (Amps Standard Unit)	.65A @ 12 VDC .35A @ 24 VDC
Height	3"
Length	11"
Width	1-3/4"
Weight (approximates)	14 lbs.
Temperature	0°- 49° C (32°- 120° F)
Wire Gauge	14-22 AWG

Filler Plates	
Electromagnetic Lock	**M490G**
Length	9"
Width x Height	**Plate No.**
1-1/4" x 1/8"	49G1F
1-1/4" x 1/4"	49G2F
1-1/4" x 3/8"	49G3F
1-1/4" x 1/2"	49G4F
1-1/4" x 5/8"	49G5F
1-1/4" x 3/4"	49G6F
3/4" x 1/2"	49G7F
3/4" x 5/8"	49G8F

Angle Brackets	
Electromagnetic Lock	**M490G**
Length	9"
Width x Height	**Bracket No.**
1" x 1"	49G1A
1-1/2" x 1"	49G2A
1-1/2" x 1-1/2"	49G3A
1-1/2" x 2"	49G4A
1-1/2" x 2-1/2"	49G5A

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M490DE
Delayed Egress Electromagnetic Lock

Overview

The Schlage M490DE Delayed Egress Locking System is designed to meet NFPA 101 Life Safety Code, while providing the same robust, easy to install, security of our M400 Series line of electromagnetic locks. The M490DE has a 15 second delayed egress timer with audible alarm which can be configured to trigger by an internal "plunger switch," or by external contacts, such as an request to exit push bar.

All M400 Series locks have automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. The M490DE is tested and certified to meet or exceed UL special locking arrangements and BHMA 1500lb. hold force requirements.

The M490DE electromagnetic lock comes in two configurations to meet your specific security needs. The M490DE provides basic security and delayed egress functionality, while the M490DEP provides intelligent sensing and reporting features needed to integrate with access control systems.

This easy to install, cost effective solution provides the highest access security and safety.

Features and Benefits

- Bayonet mount makes installation simpler by not requiring magnet to be held overhead while mounting screws are installed
- 15 Second Delay - Activated by internal plunger switch or auxilary imput
- Automatic Voltage Selection
- LED Indication with Audible Alerts
- Release Input
- Reset Input
- Fire Alarm Input
- UL Special Locking Arrangements, ANSI/BHMA 156.23 Grade 1, UL10C Positive Pressure Fire Tests of Door Assemblies Certifications
- 1500 lbs. Hold Force

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STANDARD FEATURES

M490DE/M490DE-2

- **Auto Voltage Selection (AVS)** senses the voltage applied to lock and responds accordingly
- **Internal Plunger Switch** activates delayed egress timer

Additional Options and Accessories

- Herculite Door Bracket (HDB)

M490DEP/M490DEP-2

- **Magnetic Bond Sensor (MBS)** monitors the strength of the bond between the lock and armature so you know the door is secure
- **Door Position Switch (DPS)** monitors whether the door is open or closed
- **Relocking Time Delay**
- **BOCA Compliant** (upon request)

M490DE Electromagnetic Delayed Egress Lock Specifications

Specification	M490DE	M490DE-2
Holding Force	meets or exceeds BHMA standard of 1500 lbs.	meets or exceeds BHMA standard of 1500 lbs. per door leaf
Input Voltage (Standard Unit)	12/24 VDC	
Current Draw (Amps Standard Unit)	.85A @ 12 VDC .55A @ 24 VDC	1.25A @ 12 VDC .76A @ 24 VDC
Height	3"	3"
Length	12 - 1/2"	25 - 1/16"
Width	3 - 1/16"	3 - 1/16"
Weight (approximate)	16 lbs.	32 lbs.
Certifications	UL special locking arrangements, UL10C, ANSI/BHMA156.23	
Temperature	0º-49º C (32º-120º F)	
Wire Gauge	14-22 AWG	

Filler Plates

Electromagnetic Lock	M490DE/M490DE-2
Length	12-1/2″
Width x Height	**Plate No.**
1-1/4″ x 1/8″	4901F
1-1/4″ x 1/4″	4902F
1-1/4″ x 3/8″	4903F
1-1/4″ x 1/2″	4904F
1-1/4″ x 5/8″	4905F
3/4″ x 1/2″	4906F
3/4″ x 5/8″	4907F
3/4″ x 3/4″	4908F

Angle Brackets

Electromagnetic Lock	M490DE/M490DE-2
Length	10-1/2″
Width x Height	**Bracket No.**
1″ x 1″	4901A
1-1/2″ x 1″	4902A
1-1/2″ x 1-1/2″	4903A
1-1/2″ x 2″	4904A
1-1/2″ x 2-1/2″	4905A

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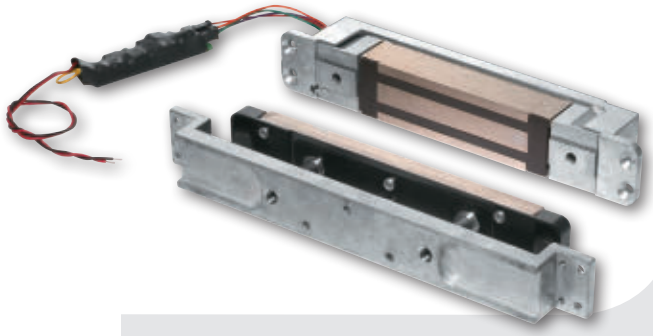
GF3000
Mortise Mounted Shear Lock



Overview

The GF3000 Series Shear Lock features a patented design offering advances over any Shear Lock in the market.

A microprocessor-based control module provides advanced electronic features. This circuitry automatically senses and adjusts input voltage, allowing for operation from 12 to 24 volt DC power sources.

The mortise Shear Lock offers the advantage of a totally concealed locking mechanism providing superior security and appearance. The patented design incorporates locking "tabs" on the magnet assembly with mating grooves in the armature plate. The flexible mounting features allows for normal door and frame movement.

The Shear Lock is ideally suited for commercial grade quality hollow metal doors and frames as well as herculite doors with top rail. Advances in design provide low operating temperatures, making this Shear Lock suitable for use in the growing demand for concealed locks in wood frames.

The GF3000 TRD Model is available when armature adjustment is required from the edge of the door due to flush ceiling conditions. The GF3000BRD model is available when no top rail mounting is available.

Features and Benefits

- Automatic voltage selection 12/24 VDC (Filtered)
- 3000 lbs. of holding force
- Requires filtered, regulated power supply
- Built-in Automatic Relock Switch
- Adjustable time delay on relock, 0-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS) to monitor the secure/not secure condition of the lock
- Optional Door Status Monitor (DSM) to sense the open/closed position of the door
- UL 10C Positive Pressure Fire Tests of Door Assemblies, cUL, CSFM and MEA listed to use on fire labeled openings
- Meet ANSI/BHMA A156.23 standards

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Specifications	
Holding Force	3000 lbs
Current Draw	0.90 Amp @ 12 VDC 0.45 Amp @ 24VDC
Weight	7 lbs
Lock Body: Length x Height x Depth	9-1/2″ x 1-1/2″ x 1-1/2″
w/Mounting Tabs: Length x Height x Depth	11-9/16″ x 1-1/2″ x 1-1/2″
Armature: Length x Height x Depth	8-3/8″ x 1-3/8″ x 1/2″
Armature Bracket: Length x Height x Depth	10-5/8″ x 1-3/8″ x 1″
Certifications	UL 10C Positive Pressure Fire Tests of Door Assemblies ANSI/BHMA A156.23 1500 lbs

ORDERING INFORMATION

GF3000 Adjustable from top edge of door

GF3000TRD Mounting assembly which provides armature adjustable from the latch edge of the door. Recommended with zero clearance condition between top of door and ceiling.

GF3000BRD Mounting assembly to mortise armature into bottom rail of door. Magnet is installed in floor/threshold. Provides solution when no top rail is available.

OPTIONS

DSM/MBS Door Status Monitor/Magnetic Bond Sensor

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GF3000
Surface Mounted Shear Lock

Overview

The GF3000 Series Shear Lock features a patented design offering advances over any Shear Lock on the market.

A microprocessor-based control module provides advanced electronic features. This circuitry automatically senses and adjusts input voltage, allowing for operation from 12 to 24 volt DC power sources.

The surface Shear Lock offers the advantage of a totally concealed locking mechanism, providing superior security and appearance. The patented design incorporates locking "tabs" on the magnet assembly with mating grooves in the armature plate. While the strength afforded by this design is a major advantage, the flexible mounting features are as important. This design allows for normal door and frame movement.

This Surface Shear Lock offers maximum versatility in application. The GF3000SM model provides a low profile, surface mount lock for outswinging doors. The GF3000TJ model provides a low profile, surface mount lock for inswinging doors. It provides a unique mounting solution with no brackets needed, which are standard with direct pull magnets.

The GF3000SM and TJ models feature a black anodized housing with the choice of modular finish plates.

Features and Benefits

- Automatic Voltage Selection 12/24 VDC (filtered)
- 3000 lbs. of holding force
- Requires filtered, regulated power supply
- Built-in Automatic Relock Switch
- Adjustable time delay on relock, 0-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS) to monitor the secure/not secure condition of the lock
- Optional Door Status Monitor (DSM) to sense the open/closed position of the door
- Modular, slide-in in finish plates on SM and TJ models
- UL10C Positive Pressure Fire Test of Door Assemblies, cUL, CSFM and MEA listed to use on fire labeled openings
- Meets ANSI/BHMA 156.23 standards

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Specifications	
Holding Force	3000 lbs
Current Draw	0.90 Amp @ 12 VDC 0.45 Amp @ 24VDC
Weight	8.5 lbs
Lock Housing: **Length x Height x Depth**	9-13/16″ x 1-7/8″ x 2″
Armature Housing: **Length x Height x Depth**	9-13/16″ x 1-1/4″ x 2″
Certifications	UL 10C Positive Pressure Fire Tests of Door Assemblies ANSI/BHMA A156.23

Selections Correspond With the Numbers to the left

1 Model

GGF3000SM	Standard Unit (outswinging doors). Adjustable from top edge of armature. Available in special finishes.
GF3000TJ	Top Jamb Unit (inswinging doors). Magnet mounts on inside top jamb. Adjustable from top edge of armature. Available in special finish.

2. Options

DSM/MBS	Door Status Monitor/Magnetic Bond Sensor

3. Finish (for GF3000SM & GF3000TJ only)

628	US28	Satin Aluminum, Anodized (standard)
335	US19	Satin Black, Anodized
613	US10B	Dark Satin Bronze, Anodized
626	US26D	Satin Chrome
606	US4	Satin Brass
630	US32D	Satin Stainless Steel
612	US10	Satin Bronze
625	US26	Bright Chrome
605	US3	Bright Brass

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320M

Mortise Mount MiniLine™ Electromagnetic Locks

Overview

Schlage provides the industry's most complete selection of electromagnetic locks. The 320M Mortise Mounted Electromagnetic Lock is designed to interface with electronic access control systems, automatic door operators, and fire or hazard sensing systems, to provide egress upon detectable emergency. With no moving parts and a fail safe design, it offers an excellent solution for both security and life safety requirements when connected to the fire alarm circuit.

The 320M has been installed on thousands of locations worldwide including airports, hospitals, nursing homes, schools, universities, libraries, museums, retail and office buildings, laboratories, and government buildings.

The 320M MiniLine is UL listed and engineered to meet the ANSI/BHMA standards for electromagnetic locks.

Features and Benefits

- Mortise mount for sliding doors
- Includes mounting tabs and armature mounting block
- Low maintenance - no moving parts
- Meets security and life safety requirements
- Fields Selectable 12 or 24 VDC operation
- UL listed
- Meets ANSI/BHMA standards
- ATD - Adjustable Time Delay
- DSM - Door Status Monitor
- MBS - Magnetic Bond Sensor

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Specifications	
Holding Force	Meets or exceeds BHMA standard of 500 lbs.
Input Voltage	12/24 VDC
Current Draw	.45A@ 12 VDC .23A @ 24 VDC
Wiring	Wire leads 12″ long
Lock Body: Length x Height x Depth	7″ x 1 3/8″ x 1 7/8″
Armature: Length x Height x Depth	4-1/4″ x 1-1/2″ x 5/8″
Weight	6 lbs.

Note for Wood Frames: Due to higher ambient operating temperatures, it is required that the 12 VDC configuration be used

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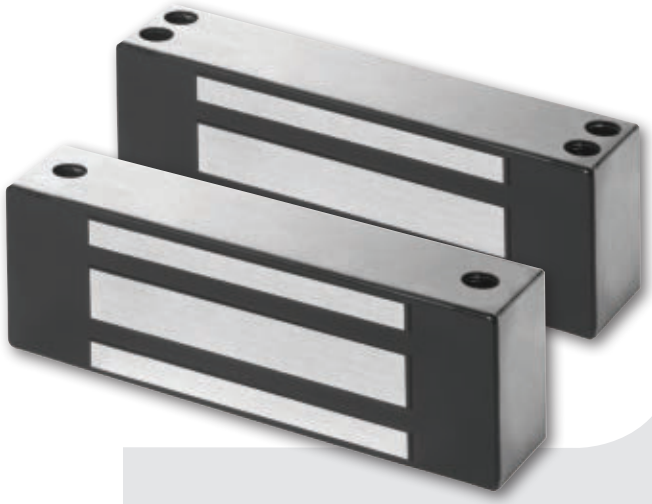
40/70 Series
Electromagnetic Locks



Overview

Schlage introduces the integrator's an answer to retrofit needs for electromagnetics locks. These "Full Featured" electromagnetic locks are easy to stock, easy to select and easy to install. With common templating and standard features, the 40 and 70 Series Electromagnetic Locks for retrofit make sense for virtually every application.

Features and Benefits

- Stainless steel housing - standard
- Low amp draw:
  - 70 Series – .12A @ 24 VDC, 25A @ 12 VDC
  - 40 Series – .15A @ 24 VDC, 32A @ 12 VDC
- Simplified armature installation
- Strong holding forces:
  - 70 Series – BHMA Grade 1 Certified 1000 lb. rating
  - 40 Series – BHMA Grade 1 Certified 500 lb. rating
- Universal Header Bracket (UHB)
- Double magnet available with 70 series
- ANSI/BHMA A156.23 Grade 1
- UL 10C - 1 Hour Fire Rated
- UL1034 Certified: Burglary-Resistant Electronic Locking Mechanisms

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40 Specifications	
Holding Force	BHMA 500 lb rating
Input Voltage	12/24 VDC
Current Draw	.32A @ 12 VDC .15A @ 24VDC
Length	8″
Height	1 7/8″
Depth	1 5/8″
Weight	3.5 lbs.
Certifications	ANSI/BHMA A156.23, UL10C & UL1034

72 Specifications	
Holding Force	BHMA 1000 lb rating per door leaf
Input Voltage	12/24 VDC
Current Draw	.50A @ 12 VDC .25A @ 24 VDC
Length	22″
Height	3″
Depth	1 7/8″
Weight	15 lbs.
Certifications	ANSI/BHMA A156.23, UL10C & UL1034

70 Specifications	
Holding Force	BHMA 1000 lb rating
Input Voltage	12/24 VDC
Current Draw	.25A @ 12 VDC .12 @24 VDC
Length	8″
Height	3″
Depth	1 7/8″
Weight	7.5 lbs.
Certifications	ANSI/BHMA A156.23, UL10C & UL1034

Filler Plates
Filler Plates Available in 628 Satin Aluminum or 335 Satin Black Finishes
1-1/4" x 1/8"
1-1/4" x 1/4"
1-1/4" x 3/8"
1-1/4" x 1/2"
1-1/4" x 5/8"

ORDERING INFORMATION

40	Single Lock
70	Single Lock
72	Double Lock

ACCESSORIES

HDB70	Herculite Door Bracket
HDB40	Herculite Door Bracket
UHB	Universal Header Bracket
HEB	Header Extension Bracket
CWB70	Concrete/Wood Bracket
CWB40	Concrete/Wood Bracket
ASB70	Aluminum Spacer Brackets
ASB40	Aluminum Spacer Brackets
DC70	Dress Cover
DC40	Dress Cover
OSA	1/4″ offset Armature Strike

FINISHES (ACCESSORIES ONLY)

628	US28 Satin Aluminum, Anodized (standard)
605	US3 Bright Brass (Dress Cover Only)
335	US19 Satin Black, Anodized

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PS906
6 amp Power Supply

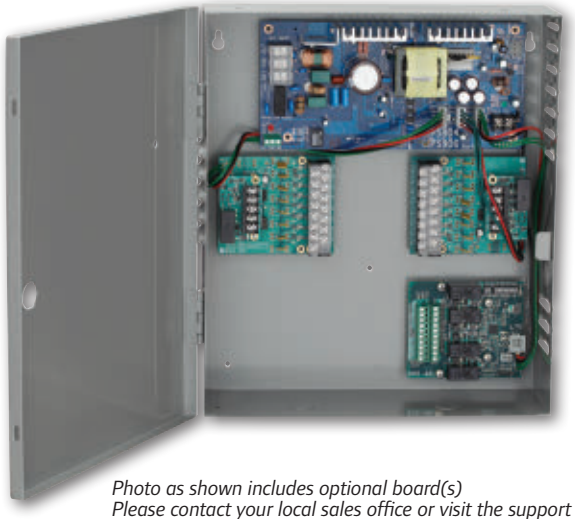

Photo as shown includes optional board(s)
Please contact your local sales office or visit the support section on our website for configuration assistance.

Overview

Schlage's comprehensive line of power supplies and option boards were designed to address the changing needs of the access control market.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This new design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc).

Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.

Features and Benefits

- 6A @ 12/24 VDC output, field selectable with jumper
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Three polarized connectors for distribution boards
- Fused primary input
- AC input and DC output monitoring circuit w/ LED indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

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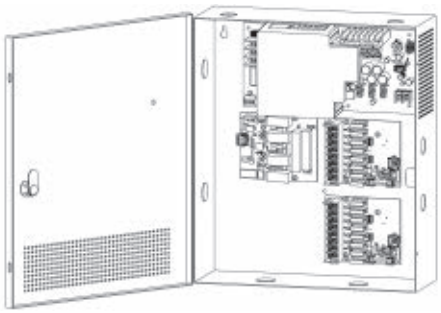
OPTIONS

- Emergency Interface Relay (FA)
  - Must be installed on distribution boards
- Battery Backup
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
  - Field configurable for:
    - Time delay function
    - Auto operator
    - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board



PS906

PS906 Power Supply Specifications	
Specification	**Description**
Input Voltage	120/240 VAC, 50/60 Hz, universal input
Output Voltage	6A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 240mVpp max ripple
Enclosure	Grey / Baked enamel 14"H x 12"W x 4"D Eight 1/2" x 3/4" Knockouts NEMA Grade 1 Hinged cover with lock down screws
Operating Temperature	32º-120º F (0º-49º C)
Certifications	UL 294 RoHS FCC Part 15
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm *(Must be installed on distribution boards)* 900-2Q: 2 Relay QEL control Board 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	6.3A, 250v, 5 x 20mm SLOW-BLOW
Battery Fuse Size	7.5A 32v ATO blade style
DC Output Protection	Overload protection - current limited foldback circuit
Indicators	LED indicators: -AC input (visible on outside of enclosure) -DC output Isolated SPDT contacts to monitor AC power status
Weight (Power Supply)	Approx. 9.0 lbs
Weight (Each Battery)	4.0 lbs
AC Input Termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC Output Termination	2 position terminal block Wire capacity: 12 AWG max.
Distribution board connectors	3
Fire Alarm board connector	No
Keylock	Optional

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PS904

4 amp Power Supply

Photo as shown includes optional board(s)
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Overview

Schlage's comprehensive line of power supplies and option boards were designed to address the changing needs of the access control market.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This new design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc).

Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.

Features and Benefits

- 4A @ 12/24 VDC output, field selectable with jumper
- Class 2 Rated power limited output
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Two polarized connectors for distribution boards
- Fused primary input
- AC input and DC output monitoring circuit w/ LED indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

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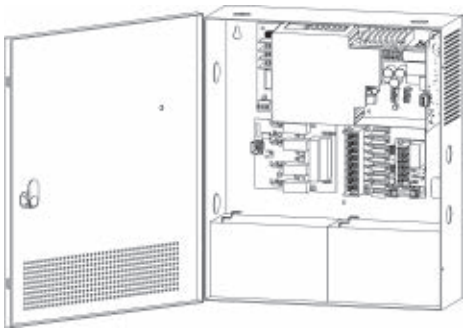
OPTIONS

- Emergency Interface Relay (FA)
  - Must be installed on distribution boards
- Battery Backup
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
  - Field configurable for:
    - Time delay function
    - Auto operator
    - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board



PS904

PS904 Power Supply Specifications	
Specification	**Description**
Input Voltage	120/240 VAC, 50/60 Hz, universal input
Output Voltage	4A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 240mVpp max ripple
Enclosure	Grey / Baked enamel 14"H x 12"W x 4"D Eight 1/2" x 3/4" Knockouts NEMA Grade 1 Hinged cover with lock down screws
Operating Temperature	32º-120º F (0º-49º C)
Certifications	UL 294 Class 2 RoHS FCC Part 15
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm *(Must be installed on distribution boards)* 900-2Q: 2 Relay QEL control Board 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	4A, 250v, 5 x 20mm SLOW-BLOW
Battery Fuse Size	7.5A 32v ATO blade style
DC Output Protection	Overload protection - current limited foldback circuit
Indicators	LED indicators: -AC input (visible on outside of enclosure) -DC output Isolated SPDT contacts to monitor AC power status
Weight (Power Supply)	Approx. 9.0 lbs
Weight (Each Battery)	4.0 lbs
AC Input Termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC Output Termination	2 position terminal block Wire capacity: 12 AWG max.
Distribution board connectors	2
Fire Alarm board connector	No
Keylock	Optional

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PS902
2 amp Power Supply

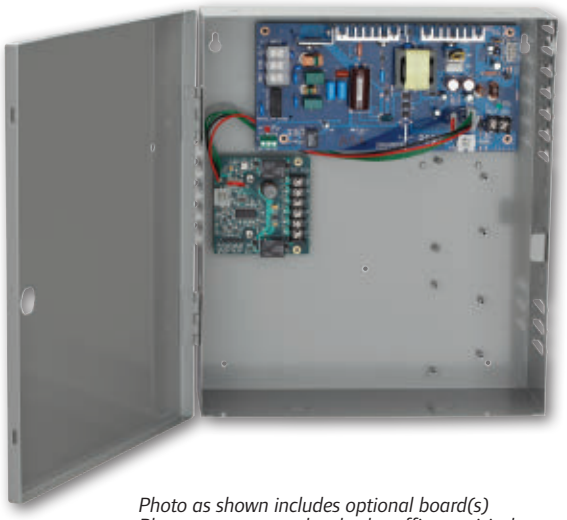

Photo as shown includes optional board(s)
Please contact your local sales office or visit the support section on our website for configuration assistance.

Overview

Schlage's comprehensive line of power supplies and option boards were designed to address the changing needs of the access control market.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This new design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc).

Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.

Features and Benefits

- 2A @ 12/24 VDC output, field selectable with jumper
- Class 2 Rated power limited output
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Single polarized connector for distribution board
- Fused primary input
- AC input and DC output monitoring circuit w/ LED indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

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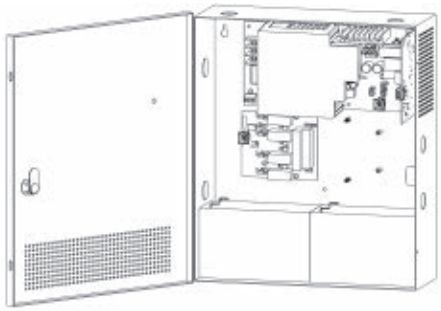
OPTIONS

- Emergency Interface Relay (FA)
- Battery Backup
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
  - Field configurable for:
    - Time delay function
    - Auto operator
    - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board



PS902

PS902 Power Supply Specifications	
Specification	**Description**
Input Voltage	120/240 VAC, 50/60 Hz, universal input
Output Voltage	2A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 240mVpp max ripple
Enclosure	Grey / Baked enamel 14"H x 12"W x 4"D Eight 1/2" x 3/4" Knockouts NEMA Grade 1 Hinged cover with lock down screws
Operating Temperature	32º-120º F (0º-49º C)
Certifications	UL 294 Class 2 RoHS FCC Part 15
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm 900-2Q: 2 Relay QEL control Board 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	3.15A, 250v, 5 x 20mm SLOW-BLOW
Battery Fuse Size	7.5A 32v ATO blade style
DC Output Protection	Overload protection - current limited foldback circuit
Indicators	LED indicators: -AC input (visible on outside of enclosure) -DC output Isolated SPDT contacts to monitor AC power status
Weight (Power Supply)	Approx. 9.0 lbs
Weight (Each Battery)	4.0 lbs
AC Input Termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC Output Termination	2 position terminal block Wire capacity: 12 AWG max.
Distribution board connectors	1
Fire Alarm board connector	Yes
Keylock	Optional

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VON DUPRIN®

PS914

4 amp Power Supply (Von Duprin)

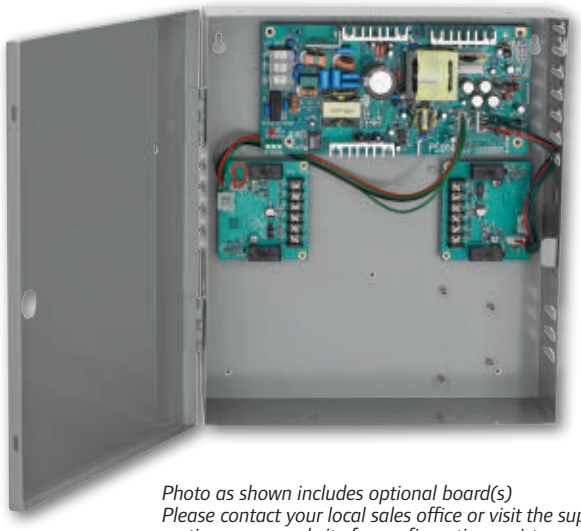

Photo as shown includes optional board(s)
Please contact your local sales office or visit the support section on our website for configuration assistance.

Overview

Von Duprin's power supply and option boards were designed to meet the specific requirements of electrified fire exit devices.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This new design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified panic devices, strikes, card readers, etc).

Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.

Features and Benefits

- 4A @ 12/24 VDC output, field selectable with jumper
- Designed with high in rush current for powering electrified panic devices
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Electronic power limiting foldback circuit for AC current overload protection
- Two polarized connectors for distribution boards
- Fused primary input
- AC status monitor - isolated SPDT contacts
- AC input and DC output LED status indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

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OPTIONS

- Fire Alarm Relay (FA)
  - Must be installed on distribution boards
- Battery Backup
- 2 relay EL panic device control board
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
  - Field configurable for:
    - Time delay function
    - Auto operator
    - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board

PS914Power Supply Specifications	
Specification	**Description**
Input Voltage	120/240 VAC, 50/60 Hz, universal input
Output Voltage	4A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 360mVpp max ripple
Enclosure	Grey / Baked enamel 14"H x 12"W x 4"D Eight 1/2" x 3/4" Knockouts Hinged cover with lock down screws
Operating Temperature	32º-120º F (0º-49º C)
Certifications	UL 294 RoHS FCC Part 15 Class 2
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm *(Must be installed on distribution boards)* 900-2RS: 2 Relay EL panic device control board 900-2Q: 2 Relay QEL panic device control Board 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	6.3A, 250v, 5 x 20mm SLOW-BLOW
Battery Fuse Size	7.5A 32v ATO blade style
DC Output Protection	Overload protection - current limited foldback circuit
Indicators	LED indicators: -AC input (visible on outside of enclosure) -DC output Isolated SPDT contacts to monitor AC power status
Weight (Power Supply)	Approx. 9.0 lbs
Weight (Each Battery)	4.0 lbs
AC Input Termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC Output Termination	2 position terminal block Wire capacity: 12 AWG max.
Distribution board connectors	2
Fire Alarm board connector	No
Keylock	Optional

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620/631 Series
Heavy Duty Pushbuttons

Overview

Schlage Pushbuttons are used to control the ingress and/or egress of a door. The 620 and 631 Series Pushbuttons are easy to install and operate. Their standard and narrow stile plates offer ultimate flexibility. The 620 to 631 Series have multiple button configuration and finish options provide enhanced architectural appeal.

Schlage 620 and 631 Series Pushbuttons also offer significant installer friendly innovations: screw terminal connections for the momentary action models, easy to install L2/ILL optional PC board offering backlit illumination for the cone with green and red LEDs for monitoring purposes. Additional options include: Delayed Action, Double Pole Double Throw, Heavy Duty Plate, with several architectural finishes and extreme duty pushbuttons.

Features and Benefits

- Pushbuttons are available in 1-1/4″, 1-5/8″, and 2-3/4″ sizes
- Two metal 1-1/4″ button options: aluminum with engraved painted red “PUSH TO EXIT”, and red coated aluminum button with engraved “PUSH TO EXIT”
- 631 Push button available in 1-1/4″ metal button, single gang and narrow stile.
- Two models of metal 1-1/4″ button: aluminum with engraved painted red “PUSH TO EXIT” and new red coated aluminum with engraved “PUSH TO EXIT”
- Variety of colors and finishes available

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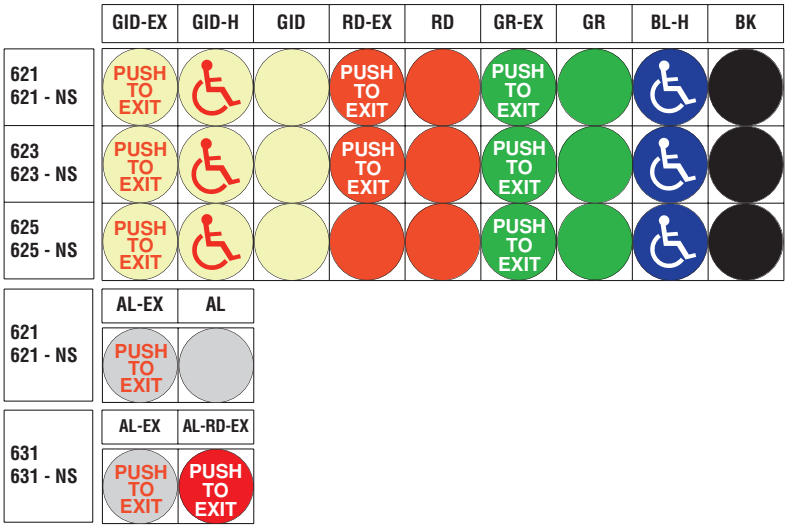
Button Configurations



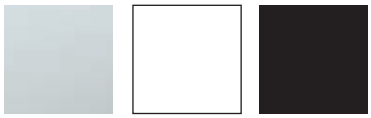
Finishes

SF-626 Satin Chrome *(standard)*

SF-605 Bright Brass

SF-612 Satin Bronze

SF-613 Oil Rubbed Bronze



SF-625 Bright Chrome

SF-1 White Powder Coat

SF-2 Black Powder Coat

Multiple Button Configuration

1-1/4″ Button

1-5/8″ Mushroom Button

2-3/4″ Mushroom Button

1-1/4″ Metal Button

Ordering Information

Selections Correspond With the Numbers to the left

621-GID-DA-SF-626

Model	Button	Options	Finish
1	2	3	4

1 Model

621	1 1/4″ Button, single gang
621-NS	1 1/4″ Button Narrow Stile
623	1 5/8″ Mushroom Button, single gang
623-NS	1 5/8″ Mushroom Button Narrow Stile
625	2 3/4″ Mushroom Button, single gang
625-NS	2 3/4″ Mushroom Button Narrow Stile
631	1 1/4″ Metal Button, single gang
631-N	1 1/4″ Metal Button Narrow Stile

2. Button

GID-EX	Glow-in-the-dark “PUSH TO EXIT”
GID-H	Glow-in-the-dark handicapped symbol
GID	Glow-in-the-dark
RD-EX	Red, “PUSH TO EXIT”
RD	Red
GR-EX	Green, “PUSH TO EXIT”
GR	Green
BL-H	Blue, handicapped symbol
BK	Black
AL-EX-RD	Aluminum button red coated, engraved “PUSH TO EXIT”
AL-EX	Aluminum button, engraved “PUSH TO EXIT”
AL	Aluminum button

3. Options

DA	Delayed Action (0-60 seconds)
AA	Alternate Action Maintained
DP	Double Pole Double Throw (not available with DA option)
L2/ILL	3 LEDs -green/yellow/red concealed within opaque cone (not available for 625/625-NS models)
HDP	Heavy Duty Plate-1/4. thick Cast Zinc (standard - 626 Satin Chrome Finish)

4. Finish

SF-626	Satin Chrome (standard)
SF-605	Bright Brass
SF-612	Satin Bronze
SF-613	Oil Satin Bronze
SF-625	Bright Chrome
SF-1	White Powder Coat
SF-2	Black Powder Coat

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700 Series
Pushbuttons

Overview

Schlage Pushbuttons are used to control the ingress and/or egress of a door. The 700 Series Pushbuttons are easy to install and operate.

Schlage 700 Series Entry Level Pushbuttons are designed to meet commercial applications. Use with egress swinging or sliding doors that are electrically or electronically locked. 700 Series Entry Level Pushbuttons are available for single gang and narrow stile applications. The 709 model includes backlit buttons with "PUSH TO EXIT" or Handicap Symbol to meet ADA requirements.

Features and Benefits

- Single gang and narrow stile
- Standard stainless steel
- Momentary action (standard)
- Options include LEDs, alternate action – maintained (AA)

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700 Specifications	
701 Pushbutton	
Contact Ratings	5A @ 30VAC/UDC, momentary SPDT contacts
Wire Leads	20 awg – 6″ long
709 Pushbutton	
Contact Ratings	5A @ 30VAC/UDC, momentary SPDT contacts
Wire Leads	20 awg – 8″ long
Input requirements with LED option	
Voltage	12/24 VDC
Current Draw	30 mA
Wire Leads	24 awg – 6″ long
Input requirements with ILL option	
Voltage	12 VDC for 709 series only 24 VDC for 701/709 series

ORDERING INFORMATION

701RD	7/8″ Red Mushroom Button
701BK	7/8″ Black Mushroom Button
701RD EX	5/8″ Red Button - Engraved “PUSH TO EXIT”
701RD EX ILL	5/8″ Red Button – Illuminated “PUSH TO EXIT”
709RD EX ILL	2″ Red Square - Illuminated “PUSH TO EXIT”
709GR EX ILL	2″ Green Square – Illuminated “PUSH TO EXIT”
709BLH ILL	2″ Blue Square – Illuminated Handicapped Symbol

OPTIONS

L2 Two LEDs, red and green, dual voltage

AA Alternate Action – Maintained (not available for 709 models)

NS Narrow Stile plate (not available for 709 models)

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740 Series
Emergency Break Glass Releases

Overview

Schlage 740 Series Emergency Break Glass Releases are designed for use as emergency releases of non-designated egress doors such as in individual and partitioned laboratories, secluded testing areas, or other isolated work rooms that are purposely provided with exit doors. In perimeter protection systems that involve the central control of electric locking devices, an on-site emergency release may be required. The "break glass" concept may be preferred over the pull station, because it is less vulnerable to misuse or tamper actuation.

The 740 Series Emergency Break Glass units consist of a replacement Break glass cartridge, that normally holds the plunger-activated switch depressed until the cartridge lens is broken. When the lens is broken the plunger moves forward and alters the switch contact position. Four replacement lens disks are provided with each assembly. The small hammer is attached to the Break Glass Assembly via a mounting clip along with a 12" chain, to insure it will not detach from the assembly.

Features and Benefits

- Surface mount in a standard 3-gang enclosure
- Compatible with all Fail Safe type electronic locking systems
- An effective alternative to the standard pull box
- Stainless steel standard finish
- Models with LED or audible alarm
- Clearly marked signage indicating purpose of the release

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740 Specifications - Contact Box from "Z" switch	
Contact Rating	6A @ 120 VAC Normally Open (NO) Normally Closed (NC) contacts with color-coded leads
LED	12/24 VDC
Horn	3-18 mA
Input	6-28 VDC
Decibles	80 dB @ 2ft.

ORDERING INFORMATION

740 – Includes break glass switch assembly and hammer mounted to a silk-screened 3-gang stainless switch plate

741 – Includes an attached indicator light with red lens

742 – Includes a Sonalert horn for 6-24 VDC operation attached to the plate

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660 Series
Mini Station Control

Overview

The 660 Series Mini Station Control is designed for concealed desk application, and it is used to release an electric or electronic locking mechanism from a remote location. The 660 Series Mini Station Control is mounted in a mini aluminum box, 2″ x 2″ x 1″. The 660 is available with a momentary action pushbutton or maintained action toggle switch. Both can be surface mounted. A typical application is under a desk to release an entrance door

Features and Benefits

- Surface mount application
- Choice of maintained or momentary action
- Compact size
- Recommended for concealed desk application

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Specifications	
Switch contact rating:	6 AMP @ 128 VAC
Length	2″
Width	2″
Height	1

ORDERING INFORMATION

660-T4 SPDT Maintained Toggle

660-PB PB SPDT Momentary Pushbutton (DPDT Optional)

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650 Series
Keyswitches

Overview

Schlage 650 Series Keyswitches utilize and innovative magnetic spring design which allows installers to configure both clockwise and counterclockwise key turn direction as well as momentary or maintained action in seconds. Single gang and narrow stiles are available with numerous options which include: Heavy Duty Plate, Weather Resistant Cover (single gang size only), 2 LED lights – green/red, Anti-Tamper Switch and Schlage Everest Cylinder. In addition to the standard (626) Satin Chrome finish, there are five additional architectural finishes to choose from.

Features and Benefits

- Easy to install and maintain
- Single gang and narrow stile offer ultimate flexibility
- Multiple options

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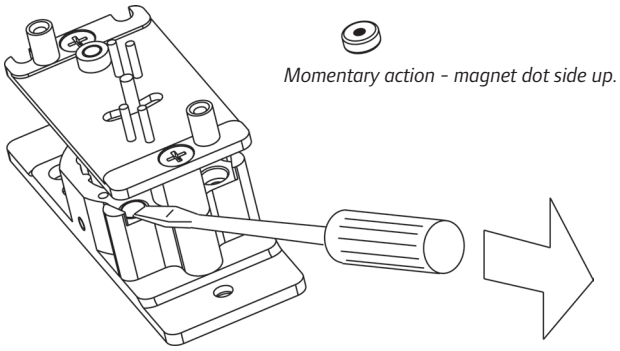
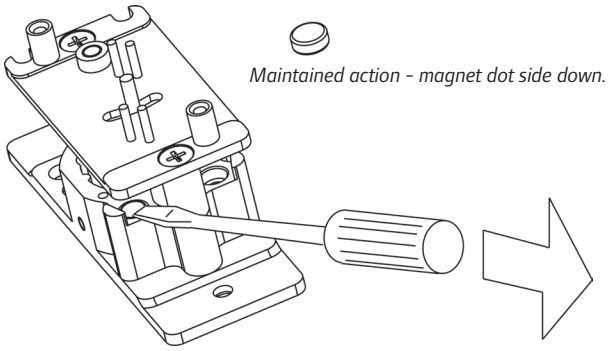
Innovative magnetic spring technology allows installers to configure models in seconds

MOMENTARY ACTION



Momentary action - magnet dot side up.

MAINTAINED ACTION



Maintained action - magnet dot side down.

Specifications

Standard keyswitch

- 5 amp@250 VAC,
- dual voltage,
- SPDT contacts

ATS switch closes when cover is on 0.025A@28VDC

LED Indicator Lights operate at 12/24 VDC 0.025A@28VDC

ORDERING INFORMATION

653-04	SPDT maintained single direction
653-05	SPDT momentary single direction
653-14	DPDT maintained single direction
653-15	DPDT momentary single direction
653-1414	(2) DPDT maintained bi-direction
653-1415	DPDT maintained x DPDT momentary
653-1515	(2) DPDT momentary bi-direction
653-041	SPDT maintained x key remove one position
653-0404	(2) SPDT maintained bi-direction
653-0405	SPDT maintained x SPDT momentary
653-141	DPDT maintained x key remove one position
653-0505	(2) SPDT momentary bi-direction

OPTIONS

L2	2 LEDs green and red, dual voltage
NS	Narrow Stile - stainless steel plate (1 3/4″ x 4 1/2″)
ATS	Anti-Tamper Switch
HDP	Heavy Duty Plate 1/4″ thick cast zinc (standard 626 Satin Chrome Finish with anti tamper plugs)
WP	Weather Resistant Cover fits 1 1/8″ cylinder only (not available with NS and L2 Options)
CYL	1-1/4″ Schlage Everest® Mortise Cylinder & 1/8″ spacer ring (keyed different)
CYL-KA	1-1/4″ Schlage Everest Mortise Cylinder & 1/8″ spacer ring (keyed alike)

Note: 650 Series Keyswitches operate with either a 1-1/8″ or 1-1/4″ cylinder having a straight type cam. 1-1/4″ cylinders require a 1/8″ blocking/spacer ring (included with the CYL and CYL-KA options).

FINISH

SF-626	Satin Chrome (standard)
SF-605	Bright Brass
SF-612	Satin Bronze
SF-613	Oil Satin Bronze
SF-625	Bright Chrome
SF-2	Black Powder Coat

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672 Series
TouchBar

Overview

The 672 TouchBar is a request to exit device which releases electromagnetic or electronic locks when the bar is depressed. Designed for easy installation, smooth operation and maximum durability, the 672 TouchBar offers unmatched features and user benefits.

The "Push to Exit" signage provides an obvious exit indication for building occupants and the simplified design allows for reversing the signage in the field. The new pivoting bar design allows 1/4" activation and the 2-1/4" low profile provides ample clearance through the door - notably less than others in the industry.

The 672 TouchBar Request to Exit Device is easy to install and simple to wire. The device's rugged cast ramped end caps deflect blows and provide extra durability.

- 1/4" Movement activates immediate release
- DPDT (standard)

Features and Benefits

- Heavy duty aluminum extrusion with powder coat cast metal end caps - Maximum durability
- Field reversible, field sized
- Quick install brackets / Universal mounting system for aluminum, hollow metal and wood doors
- Low profile for greater clearance through door
- "PUSH TO EXIT" signage designates opening
- Glow in the Dark (GID) "PUSH TO EXIT" option

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ORDERING INFORMATION

Door Size

36″, 42″ or 48″

Finishes

628 Satin Anodized Aluminum (standard)
313 Dark Satin Bronze Anodized Aluminum

TouchPads

RD Black with red “PUSH TO EXIT”
GID Black with Glow in the Dark “PUSH TO EXIT”

Handing

RHR Right Hand Reverse
LHR Left Hand Reverse -Field Reversible

Options

WD
Sexnut door kit for heavy duty wood door and hollow metal door applications

AR
18″ x 1/2″ armored door cord (less wire)

SHK
Aluminum door mounting shim kit includes brackets shims and screws for narrow stile aluminum doors.*

* *Note: Screw pack has self-drilling and self-tapping screws for aluminum and wood door applications and rivnuts for hollow metal door applications.*

672 TouchBar Electrical Specifications	
Input Voltage	12 or 24 VDC maximum current draw .25 Amps
Switch	DPDT contacts rated 4 Amps @ 30 VDC
Wiring	6 Conductor Cable - 20 AWG (standard)

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692 Series
SmartBar™

Overview

The 692 SmartBar is an electronic switching device with no moving parts, which serves as a non-latching request to exit bar at and egress door. It allows one motion egress at doors equipped with electromagnetic or electronic locks, with "no prior knowledge" required by the user. Touching the SmartBar at any point on the bar activates internal circuitry which controls power to the locking device. No moving parts results in low maintenance and long life.

The 692 SmartBar provides two directionally opposed infrared detection circuits to sense an exit request. As a person touches the bar the light beam is broken. The patent pending redundant system provides a high level of life safety and peace of mind to the end user.

An audible alarm is standard. This feature provides a security alarm to alert when there is a prolonged unlocked condition caused by a continued break in the light beam. This feature is desirable in applications requiring monitoring of security conditions or delayed egress.

- Dual Infrared detection circuits – patent pending
- No Moving Parts – One Motion Egress
- Audible alarm standard, alerts prolonged unlock condition
- DPDT relay standard – single access control panel or auxiliary device

Features and Benefits

- Heavy duty aluminum extrusion with cast metal end caps - Maximum durability
- Field reversible, field sized
- Quick install brackets / Universal mounting system for aluminum, hollow metal and wood doors
- Low profile for greater clearance through door
- "PUSH TO EXIT" signage designates opening
- Glow in the Dark "PUSH TO EXIT" option

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692 SmartBar Electrical Specifications	
Input Voltage	12 or 24 VDC maximum current draw .5 Amps
Switch	DPDT contacts rated 4 Amps @ 30 VDC
Wiring	8 Conductor Cable - 20 AWG (standard)

ORDERING INFORMATION

Door Size

36″, 42″ or 48″

Finishes

628 Satin Anodized Aluminum (standard)
313 Dark Satin Bronze Anodized Aluminum

TouchPads

RD Black with red "PUSH TO EXIT"
GID Black with Glow in the Dark "PUSH TO EXIT"

Handing

RHR Right Hand Reverse
LHR Left Hand Reverse -Field Reversible

Options

WD
Sexnut door kit for heavy duty wood door and hollow metal door applications

AR
18″ x 1/2″ armored door cord (less wire)

SHK
Aluminum door mounting shim kit includes brackets shims and screws for narrow stile aluminum doors.*

* *Note: Screw pack has self-drilling and self-tapping screws for aluminum and wood door applications and rivnuts for hollow metal door applications.*

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800 Series

Remote and Local Monitoring Stations

Overview

800 Series Local & Remote Monitoring Station

The 800 Series monitoring stations can provide monitoring for a single zone with up to 2 LED indicators.

801 Series Local & Remote Monitoring Stations

The 801 unit includes an audible and visual indication of lock status and delay activation. Interfaces with electromagnetic locks with magnetic bond sensor (MBS) option. Unit mounts in a standard single gang electrical box.

The 801-KS fulfills a code requirement stating that a local signal assures users that a delayed egress system is functional. The unit includes an audible and visual indication of lock status and delay activation. Provides a Single Pole, Double Throw (SPDT) momentary x SPDT maintained contact arrangement keyswitch for legal release and reset of the system, which interfaces with a standard 1-1/4″ mortise cylinder with standard straight cam. Interfaces with electromagnetic locks with magnetic bond sensor (MBS) option. Unit mounts in a standard double gang electrical box.

Features and Benefits

800 Series Local & Remote Monitoring Station

- Up to 2 LED Indicators

801 Series Local & Remote Monitoring Stations

- 801-KS Option

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800 Specifications	
Operating Power:	12/24 VDC
LED Operating Power:	6-28 VDC
LED Current Draw:	30 mA ea.
Audible Input:	10-28 VDC
Audible Current Draw:	3-14 mA
Decibel Rating:	80 dB @ 2 ft.
Single Gang Unit	
Length:	2-3/4"
Width:	1-1/2"
Height:	4-1/2"
Finish:	Stainless Steel

800L1	One (1) LED Indicator - red, green, and amber
800L2	Two (2) LED Indicators - red, green, and amber
800A	Audible Sounder

801 Specifications	
Operating Power:	12/24 VDC
LED Operating Power:	6-28 VDC
LED Current Draw:	30 mA ea.
Audible Input:	10-28 VDC
Audible Current Draw:	3-14 mA
Decibel Rating:	80 dB @ 2 ft.
Single Gang Unit 801* Local or Remote Monitoring System	
Length:	2-3/4"
Width:	1-1/2"
Height:	4-1/2"
Finish:	Stainless Steel
Double Gang Unit 801-KS* Local or Remote Monitoring System with Keyswitch (less cylinder)	
Length:	4-9/16"
Width:	1-15/16"
Height:	4-1/2"
Finish:	Stainless Steel
Keyswitch Contacts:	5A/250 VAC

*Note: 801/801-KS requires MBS on locking device.

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8200 Series
Consoles

Overview

Schlage 8200 Series desk consoles provide door control and monitoring for up to eight zones. Designed to meet a wide range of security requirements, the 8200 Series can control and monitor electric strikes, electromagnetic locks, electromechanical exit devices or other electric locks. The console can also be used for surveillance of monitoring devices.

The circuit boards inside the console are shipped for four or eight zone applications. This design allows for momentary or maintained switch operation. Pushbuttons control and monitor assigned zones, and a signaling horn provides an audible alert of any conditions change that is associated with the red indicator lamp. Console control can be disabled with the security keyswitch.

Features and Benefits

- Slope front design, with anodized face plate and durable housing
- Each station provides maintained or momentary Single Pole, Double Throw (SPDT) pushbutton switch
- Red and green indicator lamps
- Security keyswitch
- Signaling horn
- Alarm reset button
- 24 VDC operation

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SYSTEM DESIGN GUIDE

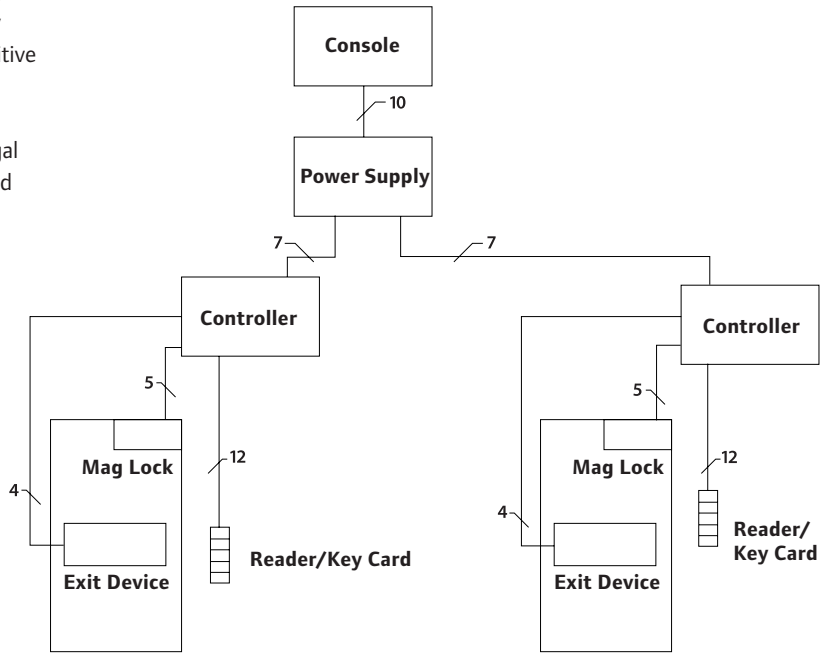
There are a number of applications where and 8200 Series Console is used to monitor and control multiple door openings. It is ideal for use at a guard or nurse station. (An example of a riser diagram for a two door nurse's station console is shown below.)

DESCRIPTION OF SYSTEM OPERATION

Two single doors, each normally closed and secured by a magnetic lock. Magnetic lock to include Magnetic Bond Sensor (MBS) for remote monitoring of secure/ not-secure condition. Legal access to be provided by keypad system. Egress to be provided by touch sensitive exit bars. Remote control and monitoring to be by a slope front desktop console. Each of two stations shall provide a momentary pushbutton switch for legal release, a red indicator for "not-secure" condition and a green indicator for "secure" condition.

Specifications	
Switches (momentary or maintained)	1.0 amps 24 VDC
Lamps #85 Red/Green	04 amps @24 VDC
Terminal Block	18/22 gauge wire
Alarm output	0.5 amps @ 24 VDC (breaker protected)
Temperature Range	32° to 120°F (0° to 49°C)
Input Voltage	24 VDC, ±15%

Riser Diagram



ORDERING INFORMATION

Last Digit Indicates Number of Zones

4 Station Console
8204

8 Station Console
8208

PUSHBUTTON FUNCTION

Select pushbutton function by zone.
Select M (momentary) or A (alternate action, maintain) for each zone.

	1	2	3	4	5	6	7	8
8204	_	_	_	_				
8208	_	_	_	_	_	_	_	_

ACCESSORIES

Field Installable Push Buttons

8200MS – Momentary Switch Assembly

8200 MA – Alternate Action (Maintained) Switch Assembly

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Scan II™

Passive Infrared Motion Sensors

Overview

The Scan II™ is a Passive Infrared Detector specifically designed for "request to exit" applications. It has an adjustable relay latch time, is internally pointable, and provides two Form "C" sets of relay contacts.

The enclosure design consists of a three piece, high impact ABS plastic enclosure with fresnel lens and is available in white or black. The coverage area of Scan II™ is up to 8 by 10 feet (2.4m by 3m). Coverage is dependent upon mounting height and pattern angle. Pattern Pointability is ± 14° @ vertical. Surface mounting height range is from 7 to 15 feet (2.1m to 4.5m). The unit also features an externally visible activation LED.

Features and Benefits

- Output – Two Form "C" relay contacts rated 1A @ 30 VDC for DC resistive loads
- Relay Latch Time is adjustable up to 60 seconds
- The relay mode can be programmed by the installer to reset when the timer expires or to remain activated until motion stops. The fail safe/fail secure mode can also be selected.
- 12/24 VDC, 26 mA @ 12 VDC or 24 VDC
- Output Two Form "C" relay contacts rated 1A @ 30 VDC for DC resistive loads
- Operating Temperature -20°F to 120°F (-29°C to 49°C)
- Size 1-1/2" (38mm) H x 6 1/4" (159mm) W x 1-1/2" (38mm) D
- UL Listed

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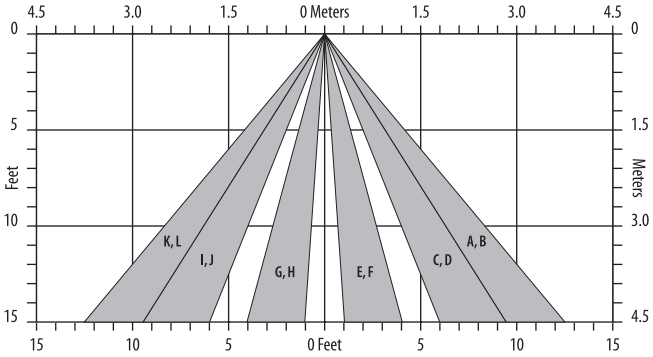
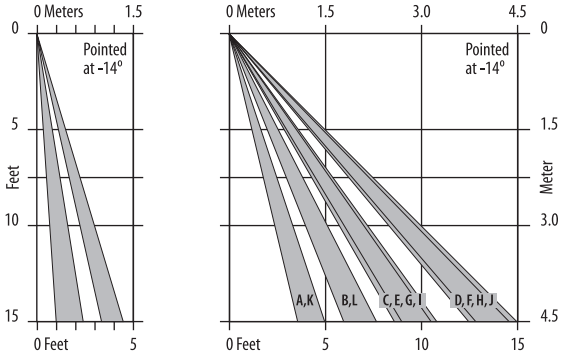
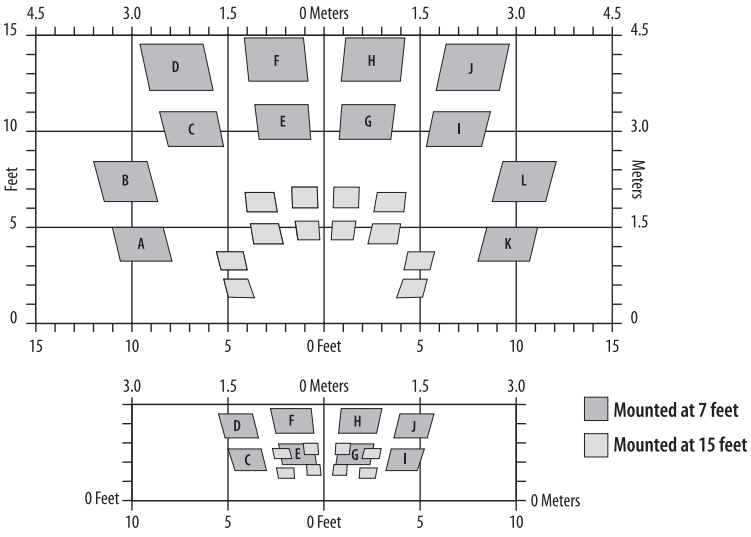


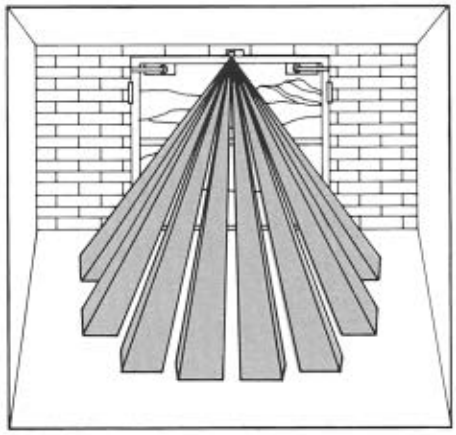
Front View



Side View



Standard Pattern
Shown wall mounted, angled 14° down.



Standard Pattern
Shown wall mounted, angled 14° down.

ORDERING INFORMATION

Scan II – B	Black
Scan II – W	White

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Electronic Horns

Overview

Electric horns are designed for use as an immediate local audible warning device incorporated in a security system. 1910 Selica Horns have eight combinations of volume, tone, and code that are easily user configurable. Strobe and latching combinations are also available.

Units are flush and surface mountable using a standard one or two gang electrical box. Surface and flush mounting kits are included with all horns.

Features and Benefits

- All horns are off white in color and come with a skirt for a clean finish.
- Designed for indoor use only.
- Available in four models:
  - 1910-1 Horn 12/24 VDC
  - 1910S-1 Horn with Strobe 24 VDC
  - L1910-1 Horn with Latching 24 VDC
  - L1910S-1 Horn with Strobe and Latching 24 VDC
- Current Draw:
  - Less than 14 mA @ 12 V
  - Less than 28 mA @ 24 V
  - Less than 71 mA @ 24 V, with strobe
- Operating Temperature: 32ºF to 120ºF
- Anechoic Room @30 V 102 dba
- UL Reverbrant Room @30 V 88 dba

ORDERING INFORMATION

1910-1	12/24 VDC Horn
1910S-1	24 VDC Horn with Strobe
L1910-1	24 VDC Horn with Latching
L1910S-1	24 VDC Horn with Strobe and Latching

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Door Position Switches

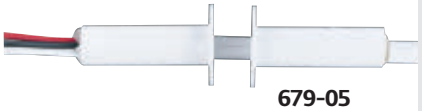
Overhead Door, Floor Mount Magnetic Switch **674-OH**

Overview

Door position switches are used to detect the open or closed status of an opening and then send this status to a control panel. They come in a variety of shapes and sizes and are designed for monitoring door positions, roof hatches, gates etc.

Concealed SPDT Magnetic Switches

For Wood Doors and Frames
0.3 Amps @ 30 VDC

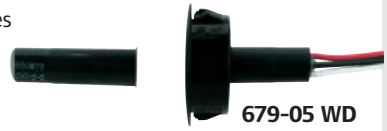


679-05

For Hollow Metal Doors and Frames
0.3 Amps @ 30 VDC

679-05 HM

For Wood Doors and Metal Frames
0.3 Amps @ 30 VDC



679-05 WD

Concealed/Flush Mount Magnetic Switches
For aluminum, wood and hollow metal doors 0.25 Amps @ 30 VDC UL Listed

7764

Surface Mount Magnetic Switches
For aluminum, wood and hollow metal doors 0.25 Amps @ 30 VDC UL Listed

7766

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ORDERING INFORMATION

674-OH	Overhead Door Floor Mount
679-05	Wood Door and Frame
679-05HM	Hollow Metal Door and Frame
679-05WD	Wood Door and Metal Frame
7764	Concealed/Flush Mount
7766	Surface Mount

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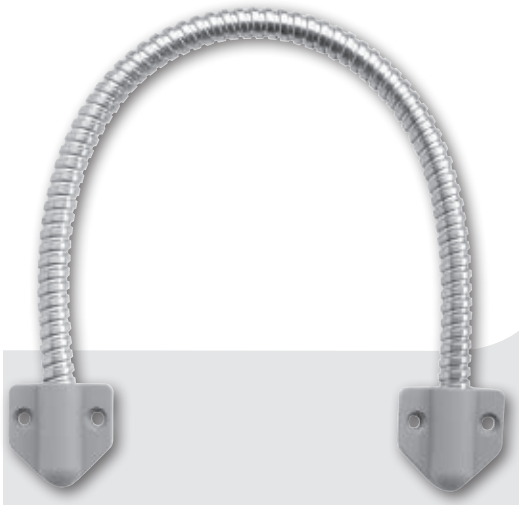
Armored Door Cords
with Caps



Overview

Used when installing electric exit devices or electric locks, armored door cords provide a simple and economical solution for transferring power from frame to door.

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Specifications

Acceptable Wire Size Combinations

- Five 18 gauge
- Two 18 gauge and four 20 gauge
- Two 18 gauge and seven 22 gauge
- Seven 20 gauge
- Twelve 22 gauge

5/16" interior diameter;
3/8" outside diameter flexible door cord

Model	Description
788-12	12" x 3/8" less wires (inswinging)
788C-12	12" x 3/8" with 20" 4-Conductor wire, 20 gauge wire
788-18	18" x 3/8" less wires (outswinging)
788C-18	18" x 3/8" with 26" 4-Conductor wire, 20 gauge wire

3/8" interior diameter;
1/2" outside diameter flexible door cord

Acceptable Wire Size Combinations

Model	Description
798-12	12" x 1/2" less wires (inswinging)
798C-12	12" x 1/2" with 20" 4-Conductor wire, 20 gauge wire
798-18	18" x 1/2" less wires (outswinging)
798C-18	18" x 1/2" with 26" 4-Conductor wire, 20 gauge wire

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PB405 and PB405S

Electrified Dead Bolt Locks

Overview

The PB405 PowerBolt is a mortise, right angle deadbolt with a .61″ bolt and a .67″ throw. It is available fail safe PB405 or fail secure PB405S.

NOTE: Electromechanical locks not recommended where life safety may be compromised, or where panic bar hardware is the only means of egress.

Mortise mount electric bolts furnished in Satin Aluminum Finish.

Features

- 12/24V DC
- Magnetic door sensor
- Built in relocking option
- Fail-safe, or fail-secure

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Specifications

PB405 Electric Dead Bolt Lock (Fail Safe)

1. Door sensor
2. 12V/24V DC
3. Current Draw: 0.9A @ 12 VDC, 0.45A @ 24 VDC; 12/24 VDC dual voltage, field selectable
4. Fail-safe type (Power to lock)
5. Built-in Relocking option
6. Operation delay time: 0 sec., 3 sec., 5 sec., 9 sec.
7. Bolt diameter: 0.61 in
8. Bolt throw: 0.67 in
9. Weight: 1.9lbs
10. Dimension: 7.87 in (L) x 1.26 in (W) x 1.57 in (D)

PB405S Electric Dead Bolt Lock (Fail Secure)

1. Door sensor
2. 12V/24V DC.
3. Current Draw: 0.9A @ 12 VDC, 0.45A @ 24 VDC; 12/24 VDC dual voltage, field selectable
4. Fail-secure type (Power to open.), MOV surge protection.
5. Operation delay time: 0 sec., 3 sec., 5 sec., 9 sec.
6. Built-in relocking option
7. Bolt diameter: 0.61 in
8. Bolt throw: 0.67 in
9. Weight: 1.9lbs
10. Dimension: 7.87 in (L) x 1.26 in (W) x 1.57 in (D)

ORDERING INFORMATION

405 - Rectangular Front, Fail Safe

405S - Rectangular Front, Fail Secure

Fail Secure Lock – Requires power to unlock

Fail Safe Lock – Requires power to lock

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Appendix

This section of the Electronic Access Control catalog includes:

- Resource Guides
- Solution Sheets
- Wiring Diagrams

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AD-Series Resources

Literature

Location: **www.schlage.com/ad-series**

CLICK HERE

- Utilize "search" on AD-Series page to locate each piece using the description in parentheses
  - Benefits Brochure (Benefits Brochure)
  - Selection Guide (Selection Guide)
  - Mini-Brochure (ES-5542)
  - Market Application Sheets
    - Higher Education (ES_5528)
    - K-12 (ES_5529)
    - Healthcare (ES_5527)

Selection Guide

Mini-Brochure

- Datasheets
  - AD-200 (004442)
  - AD-250 (004436)
  - AD-300 (004448)
  - AD-400 (004446)
  - AD-301 FIPS 201-1 Compliant (004869)
  - AD-401 FIPS 201-1 Compliant (004870)
  - SUS on HHD (004443)
  - Proximity or Smart Keyfobs (004227)
  - Exit Trim Companion Sheet (found in technical library)
  - Software Feature Compatibility Matrix (found in technical library)

Web & Interactive Tools

Location: **www.schlage.com/ad-series**

CLICK HERE

- Service and Support: includes Contact Us page, 150 FAQ's, & Technical Library
- Interactive Benefits Overview: Learn about the flexible, scalable, and adaptable features
- Interactive Product Tour: View product highlights and features in the 360° tour
- Interactive Product Selector: Configure an AD-Series lock to fit your needs

Product Selector

Benefits Overview

Product Tour

Training

Location: **YouTube** and **IRU**

CLICK HERE

- AD-Series e-Learning Courses on IRU
  - Today Meets Tomorrow - value proposition
  - Explore the Details - product information
  - Make the Case - return on investment

http://schlage.com/onlinecourses

For guest access enter your username and password.
First time users click on "Don't have a login?" for registration.

- 27 AD-Series "How to Videos" are now available to view on the AD-Series YouTube Channel
  - http://www.youtube.com/user/SchlageAD
- Specialty formatted videos are available to download to your HHD at:
  - www.schlage.com/ad-series
    > Service & Support > Download "How To" Videos

YouTube

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AD-Series Resources

Technical Documents — Location: www.schlage.com/support

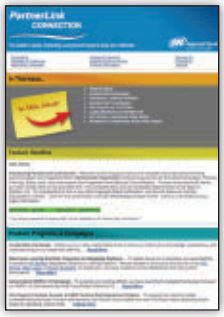
CLICK HERE

- The Technical Library contains:
  - Templates
    - Organized by Cylindrical, Mortise, Mortise Deadbolt, and 993/Exit
    - Retrofit Overlay Template available
  - User Guides (found under Installation Manuals)
    - Organized by AD-400, AD-300, AD-250, AD-200, AD-Series Exit Trim, PIM400-TD2, PIM400-485, HHD, SUS, and PIB300-2D
  - Installation Manuals
    - Organized by Cylindrical, Mortise, and Exit
  - Application Notes/Technical Bulletins
  - Firmware & Software
    - AD Firmware Package
    - Schlage SUS Software
    - Note: Check for updates on a regular basis
  - Also found within Technical Library
    - Brochures/Sales Materials
    - Datasheets and Solution Sheets
    - How To Videos
    - A&E Specs and More

Distributor & Channel Partner Tools — Location: PartnerLink

CLICK HERE

- Registered Users: http://partnerlink-admin.ingersollrand.com/Pages/AD-Series.aspx
- New Users: Go to http://partnerlink.ingersollrand.com and click on the new user link
  - AD-Series can be found at: PartnerLink > Product Info > Access Control &Video > AD-Series
- Tools not available on the public web:
  - Parts Guides
  - Cross-Reference Tools
  - Weights & Dimensions
  - Pricebooks
  - PartnerLink Connection Newsletter
  - And more



Additional Resources

- "How To" App for AD-Series

FREE DOWNLOAD
CLICK HERE

Available in Android Market

FREE DOWNLOAD
CLICK HERE

Available on the App Store

- EAC Catalog
  http://epub.securitytechnologies.com
- Security Technologies Page:
  http://w3.securitytechnologies.com/irst/Pages/default.aspx
- AD-Series Software Integrations:
  http://partnerlink-admin.ingersollrand.com/ProductInformation/AccessControl/AD-Series/Pages/AD-Series.aspx

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SCHLAGE

CO-Series Resources

Literature

Location: **www.schlage.com/support**

CLICK HERE

- Brochures
  - Flipbook (004122)
  - Mini Brochure (ES-5916)
- Data Sheets
  - CO-100 (004186)
  - CO-200 (004185)
  - CO-250 (004184)
  - Schlage Utility Software (SUS) on Handheld Device (HHD) (004443)
  - Proximity or Smart KeyFobs (004227)
  - Exit Trim Companion Sheet (004183)
  - Software Feature Compatibility Matrix (004074)

Mini Brochure

Flip Book

Web & Interactive Tools

Location: **www.schlage.com**

CLICK HERE

- CO-Series web page can be found at: schlage.com > For Your Business > Products > Locks > Electronic Locks & System Components > CO-Series
- Interactive Product Selector
- Service and Support: Includes Contact Us page, FAQ's & Technical Library
- Interactive Product Tour: View product highlights and features in the 360° product tour

Product Selector

FAQ

360° Product Tour

Training

Location: **IRU and CO Web Page**

CLICK HERE

- CO-Series e-Learning Courses on Ingersoll Rand University (IRU)
  - Get to Know the CO

- CO-Series How To Videos

schlage.com/onlinecourses

For guest access enter your username and password.
First time users click on "Don't have a login?" for registration.

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CO-Series Resources

Technical Documents — Location: www.schlage.com/support

CLICK HERE

- The Technical Library contains:
  - Templates
    - Organized by Cylindrical, Mortise, Mortise Deadbolt, and Exit Trim
    - Retrofit Overlay Template available
  - User Guides (found under Installation Manuals)
    - Organized by CO-100, CO-200, CO-250, CO-Series Exit Trim, Handheld Device (HHD), and Schlage Utility Software (SUS)
  - Installation Manuals
    - Organized by Cylindrical, Mortise, and Exit Trim
  - Application Notes/Technical Bulletins
  - Firmware & Software
    - CO-Series Firmware Package
    - Schlage SUS Software
    - Note: Check for updates on a regular basis
  - Also found in Technical Library
    - Brochures/Sales Materials
    - Data Sheets
    - How To Videos (Coming Soon)
    - And More

Distributor & Channel Partner Tools — Location: PartnerLink

CLICK HERE

- Registered Users: http://partnerlink-admin.ingersollrand.com/ProductInformation/AccessControl/ElectronicLockingPortfolio/CO-Series/Pages/CO-Series.aspx
- New Users: Go to http://partnerlink.ingersollrand.com and click on the new user link
  - CO-Series can be found at: PartnerLink > Product Info > Access Control & Video > Electronic Locking Portfolio > CO-Series
- Tools not available on schlage.com:
  - PowerPoint Presentations
  - Image Library
  - Marketing Documents
  - Technical Bulletins
  - PartnerLink Connection Newsletter
  - And More

Additional Resources — Location: www.schlage.com

CLICK HERE

- "How To" App for CO-Series

FREE DOWNLOAD
CLICK HERE

Available in Android Market

FREE DOWNLOAD
CLICK HERE

Available on the App Store

- Security Technologies Page: http://w3.securitytechnologies.com/irst/Pages/default.aspx

- EAC Catalog http://epub.securitytechnologies.com

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Credential Resources

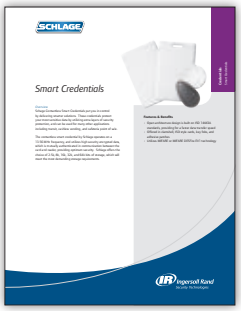
Literature

Location: www.schlage.com

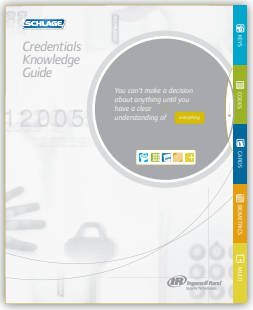
CLICK HERE

- Credentials Knowledge Guide
- Readers and Credentials Brochure
- Data Sheets
  - Flexible Options Smarter Choices Chart
  - Smart Card Credentials (004992)
  - Multi-Technology Credentials (004994)
  - Proximity Credentials (004996)
  - Proximity & Smart Keyfobs with iButton Option
  - Wiegand Cards (SWIEG)

Smart Cards Data Sheet



Credentials Knowledge Guide



Articles & White Papers

Location: www.schlage.com

CLICK HERE

- Articles
  - Why Smart Cards and Multi-Technology Readers are a Smart Choice
  - Why Smart Cards and Multi-Technology Readers are a Smart Choice for Integrators
- White Papers
  - Basic Overview of Smart Card Technology
  - Harnessing the Power of Multi-Technology Readers
  - Key Management Systems: A Vital Element
  - Proximity Technology Provides Limited Security
  - Sorting Through Credential Technology Choices

Training

Location: IRU

CLICK HERE

- Credentials e-Learning Courses on IRU
  - How Smart is Your Card?
  - Credential Choices

http://mylearning.ingersollrand.com/lmt/xlr8login.login?site=st-dist

For guest access enter your username and password.
First time users click on "Don't have a login?" for registration.

Web & Interactive Tools

Location: www.schlage.com

CLICK HERE

- Service and Support
- Technical Library
  - Brochures
  - Data Sheets

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Credential Resources

Distributor & Channel Partner Tools

Location: PartnerLink

CLICK HERE

- Registered Users: http://partnerlink-admin.ingersollrand.com/ProductInformation/ReadersandCredentials/Credentials/Pages/Credentials.aspx
- New Users: Go to http://partnerlink.ingersollrand.com and click on the new user link
  - Credentials can be found at: PartnerLink > Product Info > Readers & Credentials > Credentials
- Tools not available on the public web:
  - Sales PowerPoints
  - Webinar PowerPoints
  - Cross-Reference Charts
  - Technology Charts
  - Catalogs & Pricebooks
  - And more!

A & E Specifications

Location: www.schlage.com

CLICK HERE

- aptiQ™ Smart Cards Using MIFARE DESFire™ EV1
  - SXF8420 16k bit aptiQ™ Smart Clamshell Card
  - SXF8440 32k bit aptiQ™ Smart Clamshell Card
  - SXF8480 64k bit aptiQ™ Smart Clamshell Card
  - SXF8520 16k bit ISO aptiQ™ Smart Card
  - SXF8520M1 16k bit ISO aptiQ™ Smart Card with Magnetic Stripe
  - SXF8540 32k bit ISO aptiQ™ Smart Card
  - SXF8540M1 32k bit ISO aptiQ™ Smart Card with Magnetic Stripe
  - SXF8580 64k bit ISO aptiQ™ Smart Card
  - SXF8580M1 64k bit ISO aptiQ™ Smart Card with Magnetic Stripe
  - SXF8720 16k bit aptiQ™ PVC Patch
  - SXF8740 32k bit aptiQ™ PVC Patch
  - SXF8780 64k bit aptiQ™ PVC Patch
- MIFARE® Smart Cards
  - SXF9420 2.5k bit Clamshell MIFARE® Smart Card
  - SXF9520 2.5k bit ISO MIFARE® Smart Card
  - SXF9520MS 2.5k bit ISO MIFARE® Smart Card with Magnetic Stripe
  - SXF9551 8k bit ISO MIFARE® Smart Card
  - SXF9551MS 8k bit ISO MIFARE® Smart Card with Magnetic Stripe
  - SXF9558 32k bit ISO MIFARE® Smart Card
  - SXF9558MS 32k bit ISO MIFARE® Smart Card with Magnetic Stripe
  - SXF9651 8k bit MIFARE® Smart Keyfob
  - SXF9751 8k bit MIFARE® PVC Patch
  - SXF9758 32k bit MIFARE® PVC Patch
- Proximity Cards
  - SXF7410 Clamshell Proximity Card
  - SXF7510 ISO Proximity Card
  - SXF7510MS ISO Proximity Card with Magnetic Stripe
  - SXF7610 Proximity Keyfob
  - SXF7710 Proximity PVC Patch
- Dual-Technology Keyfobs
  - IBF-110 Combo Keyfob, 125 kHz Proximity and iButton
  - IBF-151 8k bit MIFARE® Combo Keyfob with iButton
  - IBWB-110 Combo Keyfob, 125 kHz Proximity without iButton
  - IBWB-151 8k bit MIFARE® Combo Keyfob without iButton

Additional Resources

Location: www.schlage.com

CLICK HERE

- Security Technologies Page: http://w3.securitytechnologies.com/Products/credentials/Pages/default.aspx

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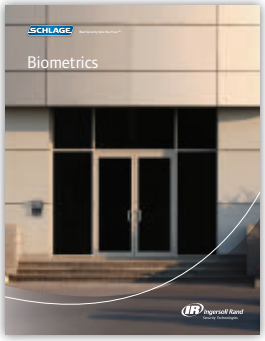
Biometric HandKey Resources

Literature

Location: securitytechnologies.ingersollrand.com

CLICK HERE

- Utilize "search" on HandKey page to locate each piece using the description in parentheses
  - Biometrics Brochure (ES-5524)
  - Antimicrobial brochure (IR-GN-1562)
  - Quick Reference Sheet (ES-5367)
    - HandKeyII (104535)
    - HandKey ID3D-R (IR AC-1487)
    - HandReader Accessories (ES-5370)
    - Enclosure Options (ES-5278)
    - HandNet for Windows (104933)



Web & Interactive Tools

Location: securitytechnologies.ingersollrand.com

CLICK HERE

- Service and Support: includes Contact Us page and Technical Library
- Case Studies: Learn about applications using HandReaders

Training

Location: YouTube and securitytechnologies.ingersollrand.com

CLICK HERE

- Training Services and Available Course Information
  - HandKey Hardware Course
  - HandNet for Windows Software Course
- Schlage Biometrics videos are now available to view on the Biometrics Playlist on SchlageSecurity's You Tube Channel

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Biometric HandKey Resources

Technical Documents

Location: www.schlage.com/support

CLICK HERE

- The Technical Library contains:
  - Installation Manuals
    - Organized by reader series type
  - Application Notes/Technical Bulletins
    - For our most common requests
  - Training information
  - Brochures and Sales Materials
  - Datasheets

Distributor & Channel Partner Tools

Location: PartnerLink

CLICK HERE

- Registered Users: Biometrics information can be found at: PartnerLink > Product Info > Biometrics > Access Control
- New Users (PartnerLink is only accessible by registered distributor-partners): Go to http://partnerlink.ingersollrand.com and click on the new user link
- Tools not available on the public web:
  - Sales PowerPoints
  - Webinar PowerPoints
  - Pricebooks
  - Whitepapers
  - And more!

Additional Resources

- "How To" App for Schlage Electronic Security - includes Biometrics, AD-Series and CO-Series Products. Features include:
  - How-To Videos
  - User Guides
  - Installation Guides
  - Datasheets
  - Tech Notes
- Security Technologies Page: http://w3.securitytechnologies.com/irst/Pages/default.aspx

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Security Technologies

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SCHLAGE

Networked Access Control Solution

bright blue® *and AD-Series Electronic Locks*

Looking for a security solution that is affordable, flexible and easy to install and manage? Schlage has combined intelligent web-based access management with integrated electronic locks to deliver a cost-effective solution ideal for small to medium sized facilities.

With the **bright blue**® access control system from Schlage, changes such as adding or deleting users can be made from virtually any laptop or desktop computer. The **bright blue**® system features a user friendly interface, standardized reports and video integration; your system can be up and running in no time at all.

Installation of the hardware is simplified since Schlage AD-Series integrated locks combine all of the components typically found around the door, such as the credential reader door position switch and the request-to-exit switch. Designed to be modular, Schlage AD-Series locks can easily be upgraded in the future to meet your changing security and technology requirements.

By electronically scheduling lock and unlock times you will improve security and productivity. By issuing electronic credentials, like aptiQ™ smart cards from Schlage, you not only know who gained access where and when but you reduce the costs associated with re-keying. When you invest in electronic access control within your facility you increase security, add convenience and save money over time.

System Overview

- **bright blue**® supports up to 32 doors and up to 5,000 users
  - Convenient web-based application
  - Remote access and administration
  - No software to install and no dedicated PC required
  - Holiday and event scheduling
  - Video management options
- For AD-400 Wireless applications:
  - Communicates to the **bright blue**® controller via PIM400-485-SBB (RS485); each supports up to 16 devices
  - 900 MHz communication between AD-400 and PIM400 for secure, encrypted transmission
  - Patent-Pending Wireless Lockdown feature (10 seconds or less) preserves 2 year battery life
- For AD-300 Hardwired applications:
  - Directly communicates via RS485 connection to the **bright blue**® panel
- AD-Series available with seven reader options
  - All card readers available + PIN (4-digit)
- Supports Classroom/Storeroom function
  - Office function supported with RS485 connection only
- Available chassis options: Cylindrical, Mortise, and Exit Trim
- AD-Series: ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10C

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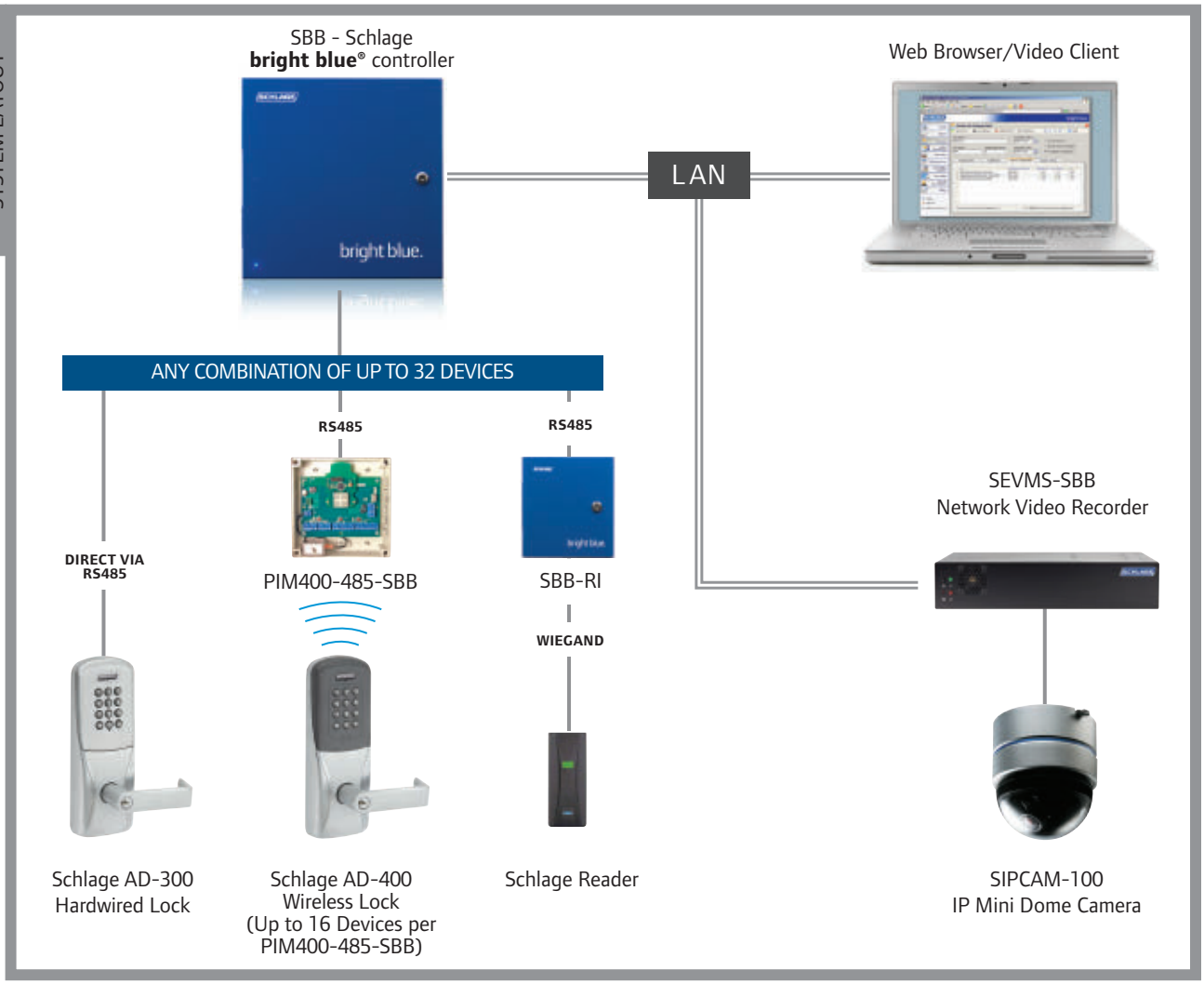
Security Technologies

bright blue® access control system by Schlage supports up to 32 online devices including Schlage's AD-Series hardwired and wireless electronic locks as well as standard readers and video management.

SYSTEM LAYOUT



NOTE: Complete specifications and certifications are detailed on individual data sheets which can be found on www.schlage.com/support

Connect multiple facilities that reside on the same LAN :

Extend the reach of your system with the bright blue Network Reader Interface (SBB-NRI). The SBB-NRI is IP-based and connects directly to your network so it can be located at any remote opening or facility that is on the same network as your **bright blue®** controller.

Keep an eye on your facility with integrated video management.

Video security is a powerful crime and theft deterrent, and gives you a visual record of every person who comes in and out of your facility. Our video options can be easily integrated in your bright blue system, giving you the utmost in safety and security.

Video Management System Features:

- Supports up to 8 cameras
- Remote multi-user video management software included
- View video of card transactions at any door
- Quickly search for video by cardholder name, credential ID, or transaction type
- User friendly; allows for advanced search, playback and save capabilities, video motion detection by camera and more

SIPCAM-100
IP Mini Dome Camera

SEVMS-SBB
Network Video Recorder

Schlage **bright blue®** and AD-Series System Capabilities:

Schlage bright blue® and AD-Series System		
	AD-400	**AD-300**
Connection to bright blue® system	PIM400-485-SBB	Direct RS485
System Capacity At The Controller		
Number of Doors	32	32
System Capacity at the Lock		
Number of Users	5,000	5,000
Holidays	100	100
1st Person In	Yes	Yes
Time Zones	100	100
Degraded Cache Mode in Lock**	Yes**	Yes**
Readers (see supported card formats to the right)		
Keypad Only	Yes	Yes
Magnetic Stripe Card	Yes	Yes
Multi-Technology - 125 kHz Proximity & 13.56 MHz Smart Card	Yes (Smart Card up to 32 bit)	Yes (Smart Card up to 32 bit)
PIV & PIV-I Card Compatible	No	No
Card + PIN Code *	Up to 4 digit PIN*	Up to 4 digit PIN*
Status Monitors		
Request to Exit	Yes	Yes
Door Position Switch	Yes	Yes
Interior Cover Tamper Guard	Yes	Yes
Lock/Unlock Status Clutch Position*	Yes*	Yes*
Mechanical Key Override (ATK)*	Yes*	Yes*
Request to Enter	Yes	No
Deadbolt Position	No	No
Low Battery Status	Yes*	N/A
Battery Voltage Level*	Yes*	N/A
Communication Status	Yes	Yes
Remote Lockdown (from host)*	Yes (<10 secs)*	Yes
Remote Unlock (from host)	No	Yes
Interior Push Button* °	Yes*°	Yes*°
Lock Functions		
Classroom/Storeroom	Yes	Yes
Office/Toggle*°	Yes*°	Yes*°
Privacy	No	No
Apartment	No	No
Credential Attributes		
Normal Credential	Yes	Yes
Toggle Credential	Yes	Yes
Pass Through Credential	Yes	Yes
Visitor/One Time Use Credential	No	No
Freeze Credential	No	No
Lock Down Credential	Yes	Yes

Supported Proximity Card Formats in bright blue® access control system:

- 26-bit standard format
- 34-bit Geoffrey/ Schlage
- 35-bit XceedID® Proximity (site code and Badge ID compatible with C-1000, parity calculated differently)
- 35C - 35-bit XceedID® Proximity format compatible with corporate 1000
- 37-bit XceedID® Proximity
- HID® 35-bit (Corporate 1000)
- MIFARE® 32-bit serial number without parity bits

Supported Smart Card Formats in bright blue® access control system:

- 26-bit standard format
- 34-bit Geoffrey/ Schlage smart cards
- 35-bit XceedID® smart cards (site code and Badge ID compatible with C-1000, parity calculated differently)
- 35C - 35-bit XceedID® smart cards compatible with corporate 1000
- 37-bit XceedID® smart cards
- 40-bit XceedID® smart cards
- HID® 35-bit (Corporate 1000)
- MIFARE® 32-bit serial number without parity bits
- HID iCLASS® 40-bit (CSN Only, 32-bits only, no site code)

* *Enhanced features that are only available in the upgraded versions of bright blue® v2.1 or higher*

** *If enabled, grants access to last 113 unique user IDs, option to expand to 1,000. Or, use facility/ site codes instead of user IDs. No events are captured in audit trail when operating in cache mode.*

° *Requires RS485 Connection to bright blue® controller*

Customize Your AD-Series

AD-Series Electronic Locks from Schlage are built from the ground up to provide more options, more functionality and more compatibility than any other solution on the market today. Designed to suite with the most popular lever styles and finishes, Schlage AD-Series can be configured to accept most major key systems.

Cylinder Compatibility	Full Size (key-in-lever 6 pin)	Full Size (key-in-lever7 pin)	FSIC (6 & 7 pin)	SFIC (6 & 7 Pin)
Schlage	●		●	●
Falcon®	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options
⬟ = less cylinder only, only with Sparta and Rhodes levers
▲ = less cylinder only
Note: See pricebook for specific configurations.

Exit Device Trim (AD-300/400-993):

The AD-300 and AD-400 exit trims are exclusively compatible with exit devices made by Ingersoll Rand when using the low current request to exit switch (RX-LC part # 050281 for98/99 & Von Duprin 22/22F Rim/SVR devices & part # 650359 for Falcon 25 Rim devices)

AD-Series Chassis and Functions with **bright blue**® access control system	Classroom/ Storeroom	Office	Privacy	Apartment
Cylindrical	Yes	Yes*	No	No
Mortise	Yes	Yes*	No	No
Mortise Deadbolt	N/A	N/A	N/A	N/A
Exit Trim	Yes	No	No	No

** Requires RS485 connection Note: See pricebook for function descriptions*

Configure Your Lock:

We have created a web-based product selector tool that can help you configure your AD-Series lock to meet your needs. To check out the tool, please visit www.schlage.com

AD-Series Credential Reader Compatibility:

- **Multi-Technology**
  - Proximity
  - Smart Card
  - + KEYPAD
- **Multi-Technology**
  - Proximity
  - Smart Card
- **Magnetic Stripe**
  - + KEYPAD
- **Magnetic Stripe**
- **Magnetic Stripe (Swipe)**
  - + KEYPAD
- **Magnetic Stripe (Swipe)**
- **Keypad**

Networked Solutions

Complete Your System

At Schlage, we understand that each facility has unique security requirements. Our extensive line of products, flexible options and ability to adapt to your existing environment make it easy to find a solution that will fit your security needs.

Complete your access control system with readers and credentials, biometric hand geometry readers, system components, HHD programming device and other wireless accessories including the TK400 Wireless Portable Signal Test Kit.

HHD

TK400

Readers and Credentials

HandKey II

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Security Technologies

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SCHLAGE

Enterprise Security Solution

Security Management System (SMS) with AD-Series Electronic Locks

Are you looking for a high security access control solution that is both flexible and scalable? Schlage's SMS Enterprise system paired with Schlage's AD-Series electronic locks is the right solution for you.

Schlage SMS delivers a fully integrated access control solution including alarm monitoring, photo ID badging and video surveillance. It's perfect for large, multi-site or global organizations and provides you with an unparalleled level of flexibility by supporting an unlimited number of users, readers, credentials and other devices. We make it affordable by including multiple modules such as badging, visitor management and reporting in a single software package. In addition, there are no annual licensing fees and no software fees when you add more doors or users to your system. Further accelerate your ROI by combining SMS with Schlage's AD-Series electronic locks.

Schlage AD-Series integrated locks combine all of the components typically found around the door, such as the reader, door position switch and the request to exit switch into one device which simplifies installation and saves money. Schlage AD-Series integrated locks are available in hardwired and wireless configurations which can be outfitted with seven (7) credential reader options. Designed to be modular, Schlage AD-Series locks can easily be upgraded in the future to meet your changing security and technology requirements.

System Capabilities – Summary

- Security Management System
  - Fully integrated access control, video surveillance, alarm monitoring, visitor management and photo ID badging
  - Supports offline and online devices within the same environment
  - Manage multi-site facilities either centrally or individually
  - One, Five, Ten or Twenty-Five client packages
- For AD-400 Wireless applications:
  - Communicates to the controller (SSRC or SRCNX-R) via PIM400-485-SMS (RS485); supports up to 16 devices per PIM400
  - 900 MHz communication between AD-400 and PIM400 for secure, encrypted transmission
  - Patent-Pending Wireless Lockdown/Unlock feature (10 seconds or less) preserves 2 year battery life
- For AD-300 Hardwired applications:
  - Communicates to the controller (SSRC or SRCNX-R) via direct RS485 connection; SSRC supports up to 8 AD-300 devices while SRCNX-R can support any combination of up to 16 devices
- AD-Series available with seven reader options; all card readers available + PIN (4-digit).
- Supports Classroom/Storeroom function
- Available chassis options: Cylindrical, Mortise, Mortise Deadbolt, and Exit Trim
- AD-Series: ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10C

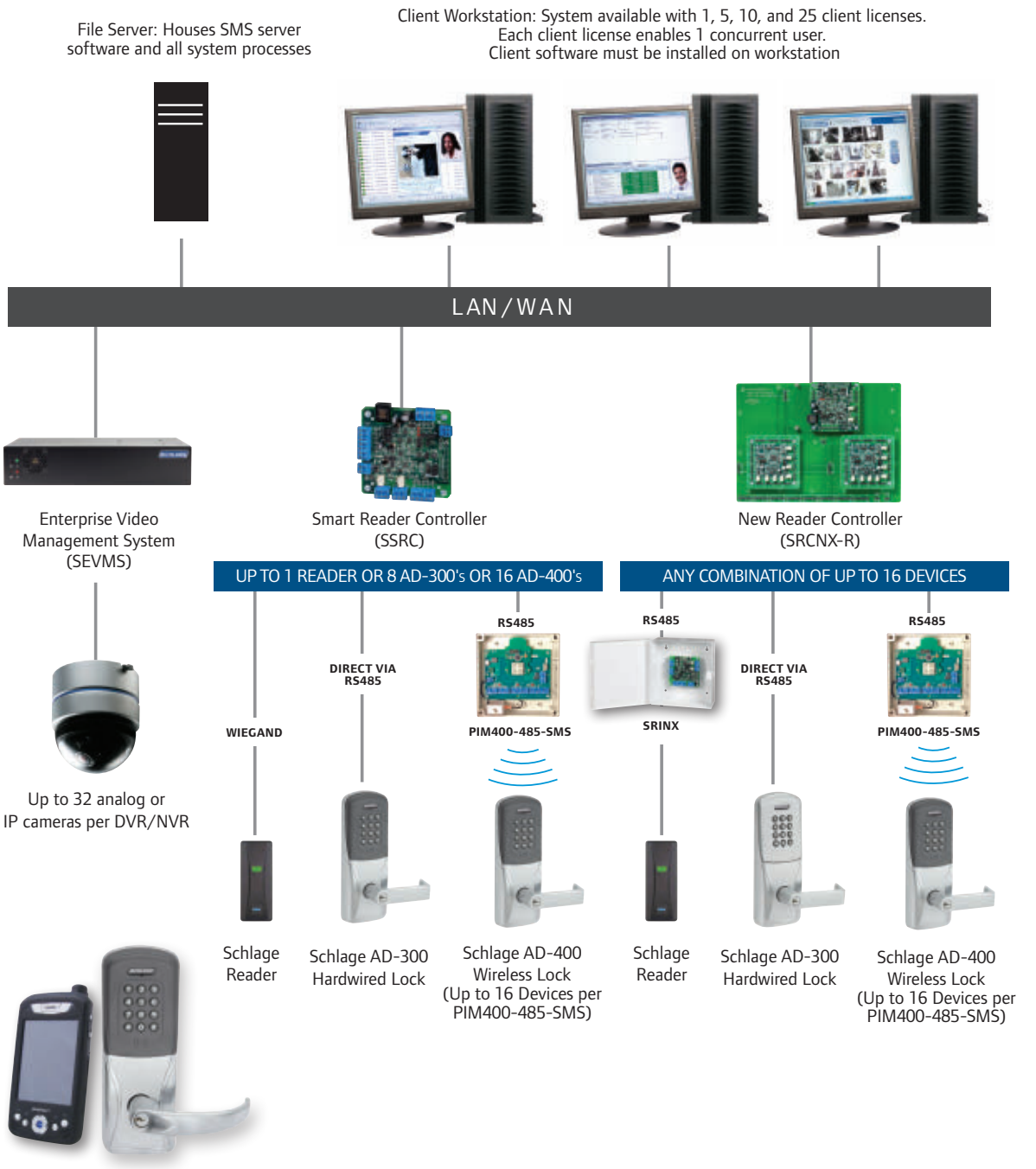
Ingersoll Rand
Security Technologies

Schlage Enterprise Solutions

Schlage delivers a powerful, client-server based solution that meets the security needs and budget of any facility.

- Manage online and offline solutions in the same system including CO-200 and AD-200
- Integrated access control, alarm monitoring, digital video, photo ID badging, visitor management and more
- Multiple hardware options for a solution that is flexible, scalable and affordable
- Supports an unlimited number of cardholders, devices and video recorders
- Customizable reports provide you with comprehensive information about your users, doors and system
- Card transactions can be associated with video clips and badging photos for fast incident recognition and/or resolution

SYSTEM LAYOUT



AD-200 Standalone Locks

- Manage access rights, time zones and holidays with SMS Enterprise Software
- Utilize HHD Handheld Device to configure locks and transfer updates & audits between software and locks

Schlage Enterprise Video Solutions:

- Multiple hardware and storage configurations
- SMS supports an unlimited number of NVR/DVRs
- Automatically associate digital video to access transactions
- Optional encoder converts analog cameras to streaming digital video

NOTE: Complete specifications and certifications are detailed on individual data sheets which can be found on www.schlage.com/support

Schlage Enterprise Solutions System Capabilities:

	AD-200 (Standalone)	AD-300	AD-400
Number of Doors	Unlimited	Unlimited	
System Capacity At The Controller			
Number of Devices per SSRC	N/A	8 (Direct via RS485)	16 (via PIM400-485-SMS)
Number of Devices per SRCNX-R	N/A	Any Combination of up to 16 devices	
System Capacity At The Lock			
Number of Users	5000	Unlimited	
Holidays	32	Unlimited	
1st Person In	Yes	Yes	
Time Zones	8	Unlimited	
Degraded Cache Mode in Lock*	N/A	Yes*	
Readers (see supported card formats to the right)			
Keypad Only	Yes		
Magnetic Stripe Card	Yes		
Multi-Technology - 125 kHz Proximity & 13.56 MHz Smart Card	Yes (Smart Card up to 32 bits)		
PIV & PIV-I Card Compatible	No		
Card + PIN	3 to 6 Digit PIN	Up to 4 digit PIN	
Status Monitors			
Request to Exit	N/A	Yes	
Door Position Switch	N/A	Yes	
Interior Cover Tamper Guard	N/A	Yes	
Lock/Unlock Status Clutch Position	N/A	Yes	
Mechanical Key Override (ATK)	Yes	Yes	
Request to Enter	N/A	Yes	No
Low Battery Status	Yes	N/A	Yes
Battery Voltage Level	N/A	N/A	Yes
Communication Status	N/A	Yes	Yes
Remote Lockdown (from host)	N/A	Yes	Yes (<10 secs)**
Remote Unlock (from host)	N/A	Yes	Yes (<10 secs)**
Lock Functions			
Classroom/Storeroom	Yes		
Office/Toggle	Yes	No	
Privacy	Yes	No	
Apartment	Yes	No	
Credential Attributes			
Normal Credential	Yes	Yes	
Toggle Credential	Yes	No	
Pass Through Credential	Yes	No	
Visitor/One Time Use Credential	Yes	No	
Freeze Credential	Yes	No	
Lockdown Credential	No	No	

Supported Proximity Card Formats in SMS Enterprise:

- 26-bit standard format
- 34-bit Geoffrey/ Schlage
- 35-bit XceedID® Proximity (site code and Badge ID compatible with C-1000, parity calculated differently)
- 35C - 35-bit XceedID® Proximity format compatible with corporate 1000
- 37-bit XceedID® Proximity
- HID® 35-bit (Corporate 1000)
- MIFARE® 32-bit serial number without parity bits

Supported Smart Card Formats in SMS Enterprise:

- 26-bit standard format
- 34-bit Geoffrey/ Schlage smart cards
- 35-bit XceedID® smart cards (site code and Badge ID compatible with C-1000, parity calculated differently)
- 35C - 35-bit XceedID® smart card compatible with corporate 1000
- 37-bit XceedID® smart cards
- 40-bit XceedID® smart cards
- HID® 35-bit (Corporate 1000)
- MIFARE® 32-bit serial number without parity bits
- HID iCLASS® 40-bit (CSN Only, 32-bits only, no site code)

Notes:

* *If enabled, grants access to last 113 unique user IDs, option to expand to 1,000. Or, use facility/ site codes instead of user IDs. No events are captured in audit trail when operating in cache mode.*

Note: Shaded boxes indicate enhanced features that are only available in SMS v5.3.5 or higher

** *Wake-up Radio over PIM400-485 on up to 16 doors requires implementation of specific RSI commands. Also available on PIM400-TD2.*

Customize Your AD-Series

AD-Series Electronic Locks from Schlage are built from the ground up to provide more options, more functionality and more compatibility than any other solution on the market today. Designed to suite with the most popular lever styles and finishes, Schlage AD-Series can be configured to accept most major key systems.

Cylinder Compatibility	Full Size (key-in-lever 6 pin)	Full Size (key-in-lever7 pin)	FSIC (6 & 7 pin)	SFIC (6 & 7 pin)
Schlage	●		●	●
Falcon®	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options
⬟ = less cylinder only, only with Sparta and Rhodes levers
▲ = less cylinder only
Note: See pricebook for specific configurations.

AD-Series Chassis and Functions	Classroom/ Storeroom	Office	Privacy	Apartment
Cylindrical	Yes	Yes* (AD-200 Only)		
Mortise	Yes	Yes* (AD-200 Only)		
Mortise Deadbolt	N/A	Yes* (AD-200 Only)		
Exit Trim	Yes	No	No	No

** Requires RS485 connection. Note: See pricebook for function descriptions.*

Exit Device Trim (AD-300/400-993):

The AD-300 and AD-400 exit trims are exclusively compatible with exit devices made by Ingersoll Rand when using the low current request to exit switch (RX-LC part # 050281 for 98/99 & Von Duprin 22/22F Rim/SVR devices & part # 650359 for Falcon 25 Rim devices)

Configure Your Lock:

We have created a web-based product selector tool that can help you configure your AD-Series lock to meet your needs. To check out the tool, please visit www.schlage.com

AD-Series Credential Reader Compatibility:

- **Multi-Technology**
  - Proximity
  - Smart Card
  - + KEYPAD
- **Multi-Technology**
  - Proximity
  - Smart Card
- **Magnetic Stripe**
  - + KEYPAD
- **Magnetic Stripe**
- **Magnetic Stripe (Swipe)**
  - + KEYPAD
- **Magnetic Stripe (Swipe)**
- **Keypad**

Networked Solutions

Complete Your System

At Schlage, we understand that each facility has unique security requirements. Our extensive line of products, flexible options and ability to adapt to your existing environment make it easy to find a solution that will fit your security needs.

Complete your access control system with readers and credentials, biometric hand geometry readers, system components, HHD programming device and other wireless accessories including the TK400 Wireless Portable Signal Test Kit.

HHD

TK400

Readers and Credentials

HandKey II

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Security Technologies

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Standalone Access Control Solution

SMS Express and AD-200, CO-200 or CT5000

Schlage's standalone access control solutions deliver the convenience and efficiency you desire at a fraction of the cost of a networked system. With the Schlage SMS Express solution, system installation, set-up and management are a breeze. And, if you decide in the future that you need real time access control, alarm monitoring, visitor management or video recording – Schlage offers a selection of powerful online integrated solutions to fit your budget.

Save even more time and money on installation with AD-Series and CO-Series electronic locks. Their innovative integrated design combines components typically found around the door, such as the credential reader, request-to-exit switch and door position switch. Therefore there are no wires to run and labor is greatly reduced. An easy-to-use handheld device transfers information from the system to the lock. The handheld device can also be used to retrieve audits from devices.

Need help deciding between the AD-Series and CO-Series? The AD-Series is the ideal solution if you want flexibility. The modular design of the AD-Series allows you to upgrade from standalone to networked if your needs change in the future. The AD-Series also allows you to upgrade credential readers. The CO-Series is preferable if you do not expect your needs to change. CO-Series options are factory orderable rather than upgradable like the AD-Series.

For applications that require an around-the-door solution, the CT5000 offline single opening controller is available. It is an ideal solution for narrow stile applications because it can support up to two separate Wiegand readers as well as interface with peripheral devices such as automatic operators, electric strikes, and electromagnetic locks. If networked functionality is required in the future, the CT5000 can be upgraded to a WRI400.

SMS Express

- Supports up to 2000 Users/Audits with 50 Locks or 1000 Users/Audits with 100 Locks
- Supports up to 8 times zone and up to 16 holidays
- Set up to 16 auto unlock schedules per system (up to 8 per lock)

AD-200

- Upgradable credential and communication modules
- Available with choice of keypad, magnetic stripe and multi-technology readers (reads both 125 kHz proximity and 13.56 MHz smart)
- All card readers available with keypad for dual authentication (card + PIN)
- Classroom/Storeroom, Office, Apartment and Privacy functions
- UL 294 listed, ANSI/BHMA A156.25 and ANSI/BHMA Grade 1 certified

CO-200

- Available with choice of keypad, magnetic stripe and proximity readers (125 kHz)
- All card readers available with keypad for dual authentication (card + PIN)
- Classroom/Storeroom, Office and Privacy functions
- UL 294 listed, ANSI/BHMA A156.25 and ANSI/BHMA Grade 1 certified

CT5000

- Supports up to two Wiegand reader inputs
- Has three form C relay outputs for strike, auxiliary and alarm
- Can be upgraded to WRI400 if networked capability is required in the future
- UL 294 listed

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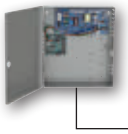
System Diagram

SYSTEM LAYOUT

Interior Facility Doors
AD-200, CO-200: Integrated offline locks store time zones access rights and audits.

Handheld Programming Device
Used to configure locks and transfer audits from locks to the software.

SMS Express 4.0 or higher
Software running on computer.



PS902
Power Supply

CT5000 Offline Controller

Automatic Operator

Perimeter Facility Door

LCN
856 Push Button

SXF1550
Proximity Reader

Credentials

** Example shown is a typical standalone access control opening with an automatic operator.*

Benefits

- Cost-effective, simple means of controlling access within your facility.
- Online solutions available if your needs should change.
- New users or access points can be entered into the system in seconds.
- Comprehensive reporting on audit trails retrieved, access attempts, etc.

Complete Your System

- The Schlage Utility Software (SUS) on the Handheld Programming Device (HHD) provides an easy way to retrieve audits and transfer information between your access control software and electronic locks.
- The combo proximity keyfobs with iButton® option is available which allows you to manage proximity and iButton® technologies in the same facility.
- Schlage offers many contactless, keypad and magnetic stripe readers that are compatible with the CT5000.
- We offer a complete portfolio of credentials including smart, proximity and magnetic stripe. Multi-technology credentials are also available.

Readers and Credentials

Combo iButton® & Proximity Keyfob

NOTE: Complete specifications are detailed on individual data sheets which can be found on www.schlage.com/support

System Capabilities:

SMS Express** Standalone/Offline Solutions	Offline Controller		Integrated Standalone Electronic Locks			
	CT5000*		CO-200		AD-200	
System Capacity						
Number of Doors	50	100	50	100	50	100
Number of Users/Audits	2000	1000	2000	1000	2000	1000
Holidays	16					
1st Person In	Yes					
Time Zones	8					
Readers						
Keypad Only	Yes					
Magnetic Stripe Card	Yes					
125 kHz Prox Card	Yes					
13.56 MHz Smart Card	Yes†		No		Yes†	
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card	Yes†		No		Yes†	
PIV II (FIPS 201) Card	No					
Card + PIN	Yes (3-6 digit PIN)					
Status Monitors						
Request to Exit	Yes - Locally		No			
Door Position Switch	Yes - Locally		No			
Mechanical Key Override (ATK)	No		Yes - Software			
Battery Status (Normal, Low, Critical)	N/A		Yes - SUS			
Battery Voltage Level	N/A		Yes - SUS			
Remote Release	Yes - Locally		No			
Lock Functions						
Classroom/Storeroom	N/A		Yes			
Office/Toggle	N/A		Yes			
Privacy	N/A		Yes			
Apartment	N/A		No		Yes	
Credential Attributes						
Normal Credential	Yes					
Toggle Credential	Yes					
Pass Through Credential	Yes					
Visitor/One Time Use Credential	Yes					
Freeze Credential	Yes					

SMS Express Supported Card Formats

- 26 Bit
- 34 Bit
- 35 Bit
- 35 Bit XceedID®
- 36 Bit XceedID®
- 37 Bit XceedID®
- 37 Bit
- 37 Bit No FC
- 40 Bit XceedID® (EV1)

The following readers are UL 294 list for use with CT5000:

- Essex Electronics model KTP-162
- Mercury Security models MR-5 and MR-20
- XceedID models XF-1050, XF-1100, XF-1500, XF-1550 and XF-2100

Legend

Yes-Locally: This capability is available locally at the controller

Yes-Software: This capability is monitored and reported in the SMS Software audit

Yes-SUS: This capability is monitored by the SUS

† *Additional card formats may be supported. Verify compatibility by using the CRP-2 enrollment reader or by calling technical support for verification*

* *CT5000 is an offline single opening controller that can support up to two seperate Wiegand reader inputs; grid references system capacity of access control software-- this may be limited by choice of reader.*

** *Features such as the expanded number of users and audits are only available in the updated SMS Express v4.0. Previous versions did not include AD-Series and CO-Series lock type labels.*

AD-Series & CO-Series Compatibility

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605
Bright Brass

606
Satin Brass

612
Satin Bronze

643e
Aged Bronze

Cool tone finishes

619
Satin Nickel

625
Bright Chrome

626
Satin Chrome

626AM
Satin Chrome with Antimicrobial

Cylinder Compatibility

Key-in lever design accepts many popular models of standard, SFIC and FSIC cylinders.

Cylinder Compatibility	Full Size (key-in-lever 6 pin)	Full Size (key-in-lever 7 pin)	FSIC (6 & 7 pin)	SFIC (6 & 7 Pin)
Schlage	●		●	●
Falcon®	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options
⬟ = less cylinder, only with Sparta and Rhodes levers
▲ = less cylinder only
Note: See pricebook for specific configurations.

Exit Device Compatibility

Exit trim utilizes universal hardware to simplify installation of offline trim to a variety of exit devices

Cylinder Compatibility		Rim	SVR	CVR	Mortise
Von Duprin®	98/99 and 98/99XP	✓	✓	✓	✓
Von Duprin®	22/22F	✓	✓		
Falcon®	25	✓			
Corbin Russwin®	5000	✓			
Precision™ 21 (2100 converts to 21 with Precision's BP21 kit)		✓			
Yale®	7000	✓			
Dorma®	9300	✓			
Sargent®	80	✓			

Available AD-200 Readers

- **Multi-Technology**
  - Proximity
  - Smart Card
  - + KEYPAD
- **Multi-Technology**
  - Proximity
  - Smart Card
- **Magnetic Stripe**
  - + KEYPAD
- **Magnetic Stripe**
- **Magnetic Stripe (Swipe)**
  - + KEYPAD
- **Magnetic Stripe (Swipe)**
- **Keypad**

Available CO-200 Readers

- **Keypad**
- **Proximity**
- **Proximity**
  - + KEYPAD
- **Magnetic Stripe (Swipe)**
- **Magnetic Stripe (Swipe)**
  - + KEYPAD

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SCHLAGE

Open Architecture Solution

OEM Software with AD-Series Wireless and Hardwired Locks

The AD-Series Electronic Locking platform is designed to be open and flexible. With its open architecture, the AD-Series can be seamlessly integrated into most access control systems.

Schlage AD-Series electronic locks combine all of the components typically found around the door; such as the reader, door position switch and the request-to-exit switch into one device; which simplifies installation and saves money.

Schlage AD-Series electronic locks are available in hardwired and wireless configurations. The AD-300 locks are hardwired and provide the benefits of a traditional access control solution. The AD-400 locks are wireless and provide many of the key benefits without having to run wires directly to each opening.

The AD-Series can be customized with seven (7) different credential reader options including keypad, magnetic stripe, and multi-technology which reads both proximity and smart cards. All card readers are available with keypad for multi-factor authentication, support is dependent on a ccess control software. Designed to be modular, readers can easily be upgraded in the future to meet your changing credential needs.

System Capabilities – Summary

- System Capabilities:
  - As determined by OEM software provider
- AD-400 Wireless Applications:
  - Communicates to the controller via PIM400-TD2 (Wiegand or Clock & Data); each supports up to 2 devices
  - 900 MHz communication between AD-400 and PIM400 for secure, AES-128 bit encrypted transmission
  - Patent-pending Wireless lockdown feature (10 seconds or less) preserves up to 2 year battery life
- AD-300 Hardwired Applications:
  - Communicates to the controller via PIB300-2D (Wiegand or Clock & Data); each supports up to 2 devices
- AD-Series available with seven reader options including
  - Keypad
  - Magnetic Stripe
  - Multi-Technology (reads both 125 kHz and 13.56 MHz)
  - All card readers available + PIN (if supported by access control software)
- AD-Series chassis options: Cylindrical, Mortise, Exit Trim
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10C

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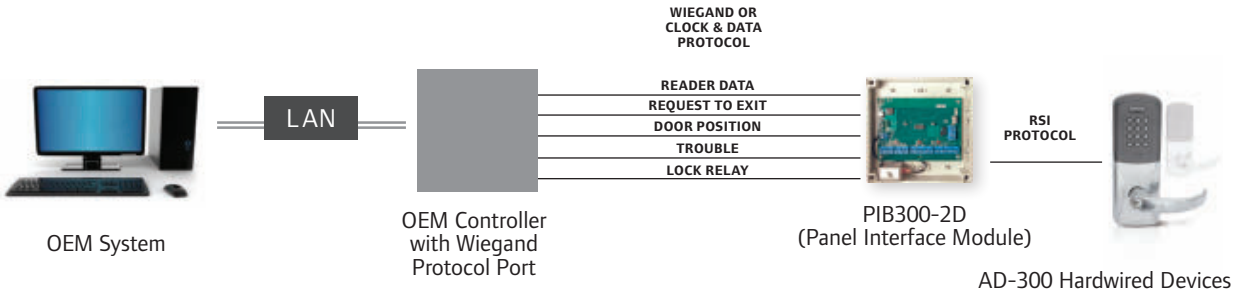
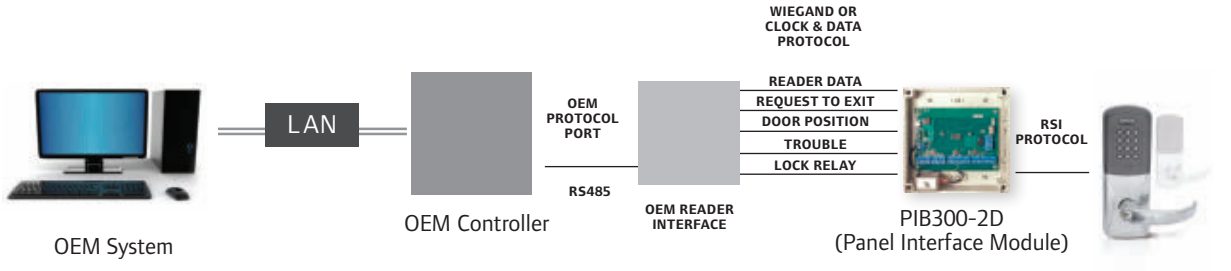
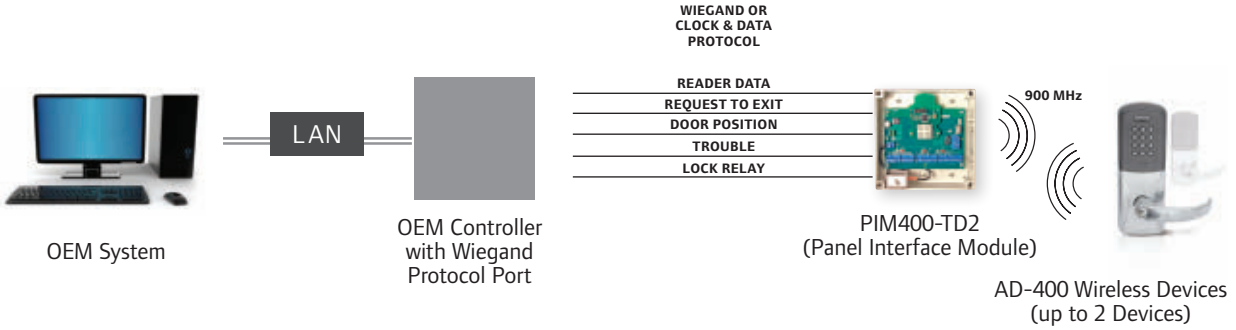
SYSTEM ARCHITECTURE

AD-300 Hardwired System utilizing Wiegand Protocol Port or RS485 Port

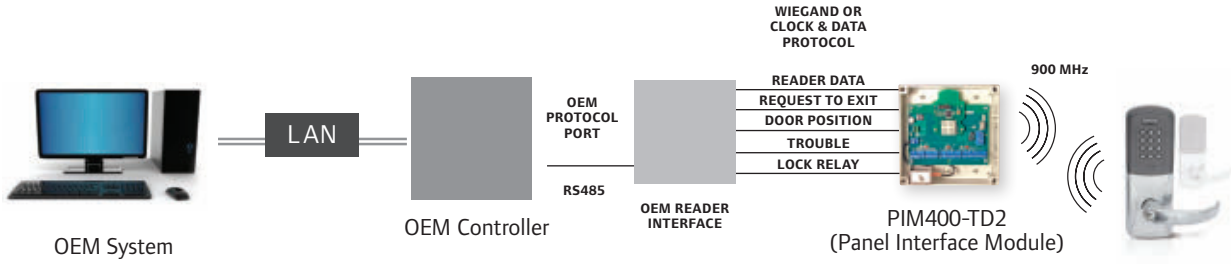




AD-400 Wireless System utilizing Wiegand Protocol Port or RS485 Port



Wireless range up to 200' in building construction, up to 1000' line of sight.



NOTE: Complete specifications and certifications are detailed on individual data sheets which can be found on www.schlage.com/support

System Capabilities		
	AD400	**AD300**
	PIM400-TD2	PIB300-2D
Device Capacity at the PIM400:		
Number of Wireless Devices per PIM400	Up to 2	N/A
Number of Locks per PIB300	N/A	Up to 2
Other Requirements		
RLBD Dry Contact Relay Board**	Consult your access control system provider for capability	
Reader Interface/Gateway		
Readers (see supported credential formats to the right):		
Keypad Only	Consult your access control system provider for capability	
Magnetic Stripe Card		
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card		
PIV & PIV-I Card Compatible*		
Card + PIN		
Status Monitors:††		
Request to Exit	Yes	
Door Position Switch	Yes	
Interior Cover Tamper Guard	Yes	
Lock/Unlock Status Clutch Position	No	
Mechanical Key Override (ATK)	No	
Request to Enter	Consult system provider	
Low Battery Status	Consult system provider	N/A
Battery Voltage Level	No	N/A
Communication Status	Yes	
Remote Lockdown (from host)	Yes (<10 secs)†	Yes
Remote Unlock (from host)	Yes (<10 secs)†	Yes
Deadbolt Position	No	
Interior Push Button	No	
Lock Functions		
Classroom/Storeroom	Yes	

Supported Proximity Cards (125 kHz):
- AWID® Proximity
- GE/CASI® ProxLite™
- HID® Proximity
- Schlage
- XceedID®

Supported Smart Cards (13.56 MHz):
- MIFARE®
- aptiQ™ smart cards using MIFARE DESFire™ EV1
- PIV & PIV-I Compatible*

Supported Smart Cards (13.56 MHz) - Reads Card Serial Number Only:
- MIFARE DESFire®
- HID iCLASS®

All of the above as supported by OEM Access Control System

Notes:

* *FIPS 201 Compliant Option Available: The AD-Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201 Compliance. Specific components are required, please see the AD- 401 data sheet or AD-301 data sheet for complete details.*

** *Requires RLBD Dry Contact Board for supervised inputs. If supervised inputs are required our optional plugin relay board (RLBD) is required for the PIM400-TD2 and PIB300-2D. If unsupervised inputs are allowed then the RLBD is not needed (however, it can still be used if the client requires supervised inputs for the installation).*

† *Wake-up on Radio over PIM400-TD2 on up to 2 doors requires configuration via SUS.*

†† *Chart represents default functionality in AD-Series devices*

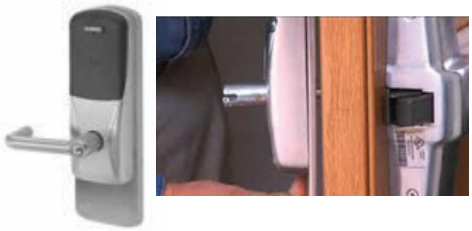
AD-Series Credential Reader Compatibility:

- **Multi-Technology**
  - Proximity
  - Smart Card
  - KEYPAD
- **Multi-Technology**
  - Proximity
  - Smart Card
- **Magnetic Stripe**
  - KEYPAD
- **Magnetic Stripe**
- **Magnetic Stripe (Swipe)**
  - KEYPAD
- **Magnetic Stripe (Swipe)**
- **Keypad**

AD-Series Electronic Locks from Schlage are built from the ground up to provide more options, more functionality and more compatibility than any other solution on the market today. Designed to suite with the most popular lever styles and finishes, Schlage AD-Series can be configured to accept most major key systems.

Mortise Lock
(AD-300/400-MS)

Cylindrical Lock
(AD-300/400-CY)



Exit Device Trim (AD-300/400-993)
The AD-300 and AD-400 exit trims are exclusively compatible with exit devices made by Ingersoll Rand when using the low current request to exit switch (RX-LC part # 050281 for Von Duprin 98/99 & Von Duprin 22/22F Rim/SVR devices & part # 650359 for Falcon 25 Rim devices)

Configure Your Lock:

We have created a web-based product selector tool that can help you configure your AD-Series lock to meet your needs. To check out the tool, please visit www.schlage.com.

Cylinder Compatibility	Full Size (key-in-lever 6 pin)	Full Size (key-in-lever 7 pin)	FSIC (6 & 7 pin)	SFIC (6 & 7 pin)
Schlage	●		●	●
Falcon®	▲	⬟		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options
▲ = less cylinder only
⬟ = less cylinder, only with Sparta and Rhodes levers
Note: See pricebook for specific configurations.

Lever styles

Standard cylinders shown, SFIC and FSIC also available.

Sparta

Rhodes

Athens

Tubular

Warm tone finishes

605
Bright Brass

606
Satin Brass

612
Satin Bronze

643e
Aged Bronze

Cool tone finishes

619
Satin Nickel

625
Bright Chrome

626
Satin Chrome

626AM
Satin Chrome with Antimicrobial

Open Architecture Solutions

Complete Your System

At Schlage, we understand that each facility has unique security requirements. Our extensive line of products, flexible options and ability to adapt to your existing environment make it easy to find a solution that will fit your security needs.

HHD

TK400

Readers and Credentials

Complete your access control system with readers and credentials, biometric hand geometry readers, system components, HHD programming device and other wireless accessories including the TK400 Wireless Portable Signal Test Kit.

HandKey II

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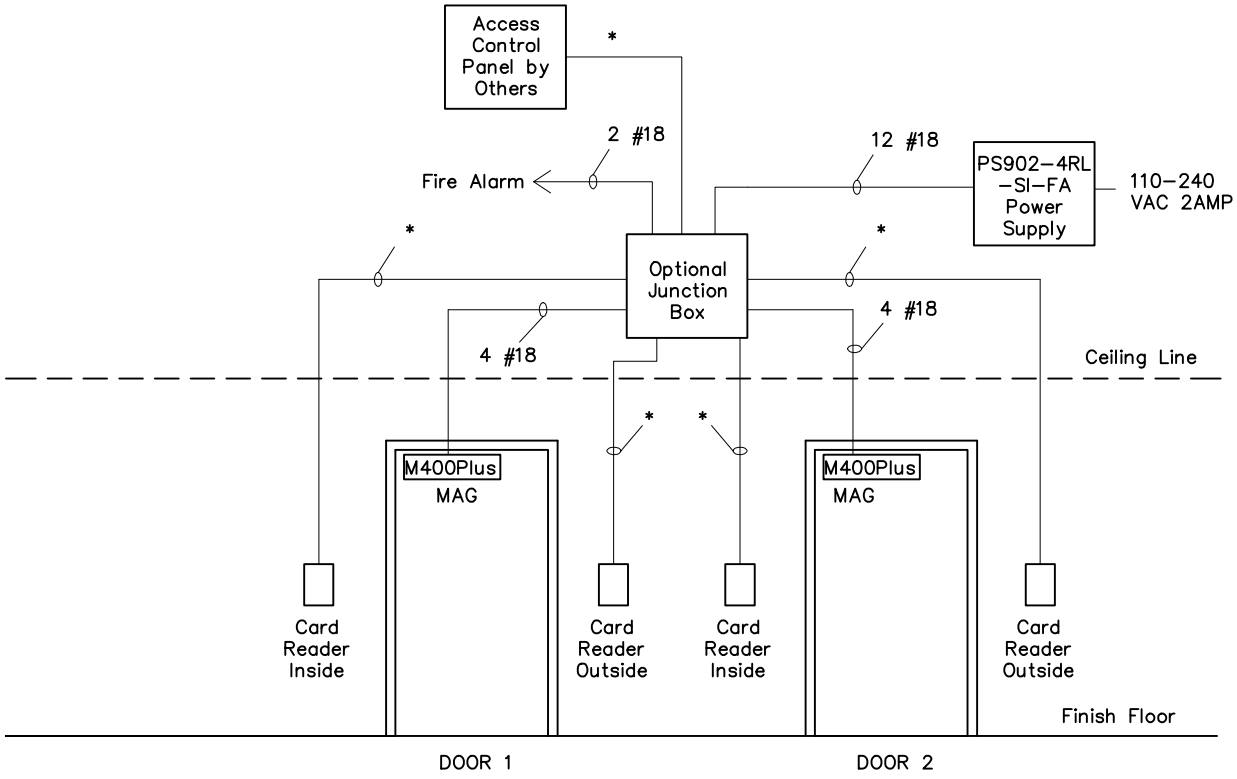

2 Door Security Interlock

Drawing not to scale

Notes:

1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) * Conductor count to be determined by access control panel provider.

Function:
Door 1 and 2 shown locked and closed.
Unlocking door 1 prevents door 2 from unlocking until door 1 is closed.
Unlocking door 2 prevents door 1 from unlocking until door 2 is closed.
Fire alarm unlocks both doors.

Type
Interlock Doors

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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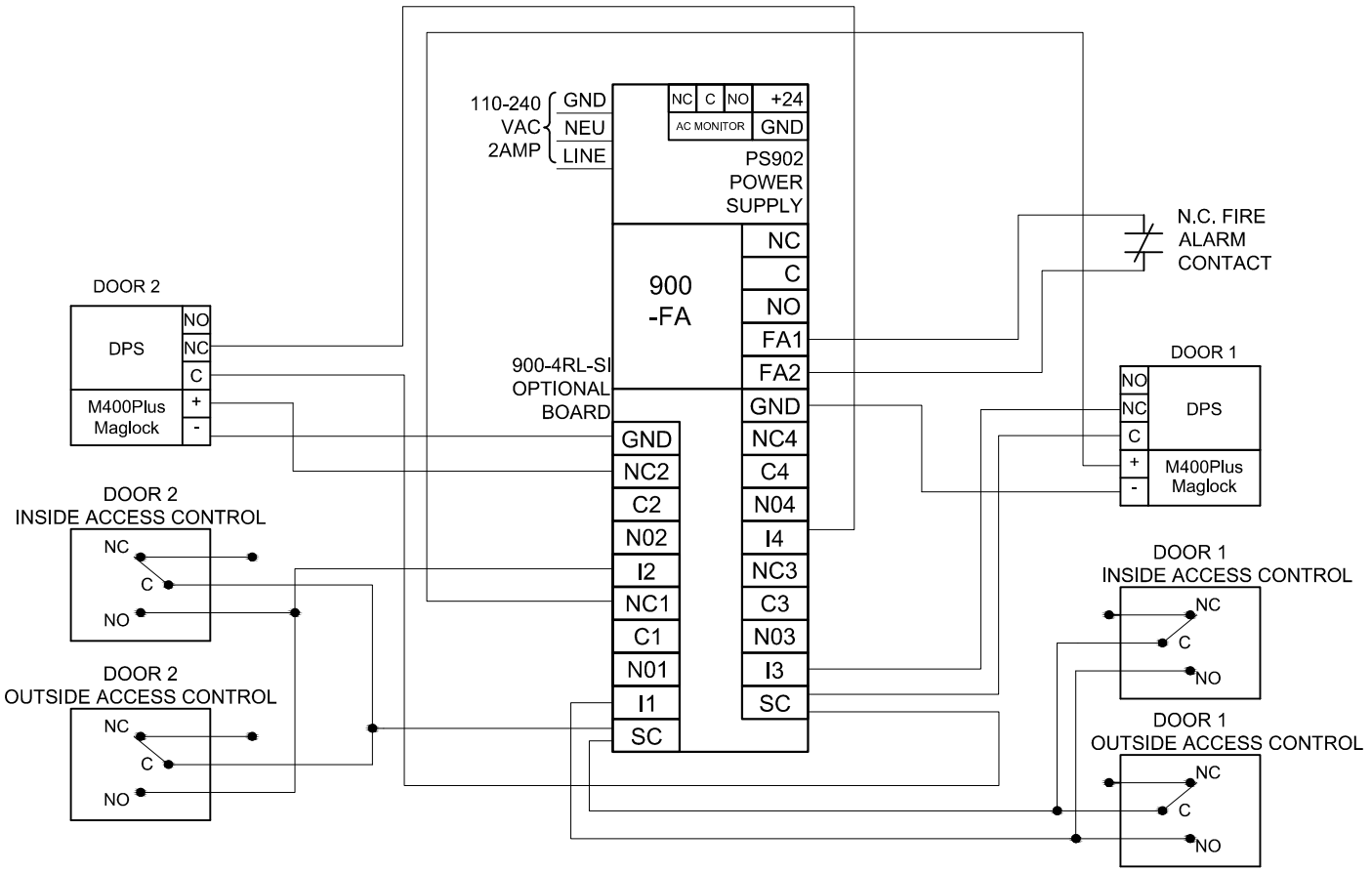
2 Door PS902–4RL–SI–FA x 2 M400 Plus Maglocks x 4 Card Reader

Drawing Type:	Drawing Number:	Rev.
Riser	104967	B



Drawing not to scale

2 Door Security Interlock

Notes:

1) All low voltage wiring to be standard, multi-conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door 1 and 2 shown locked and closed.
Unlocking door 1 prevents door 2 from unlocking until door 1 is closed.
Unlocking door 2 prevents door 1 from unlocking until door 2 is closed.
Fire alarm unlocks both doors.

Type
Interlock Doors

Drawn	08-09-11
Checked	08-12-11
Approved	08-12-11

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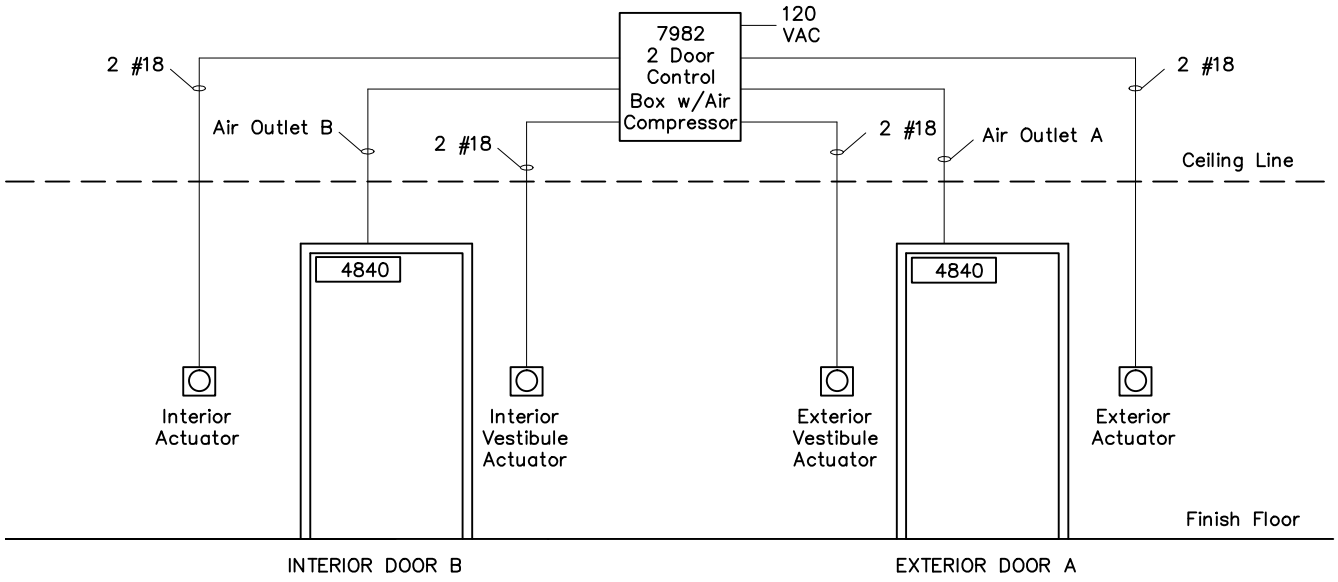
2 Door PS902-4RL-SI-FA x 2 M400 Plus Maglocks x 2 Card Reader

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104967	B



Drawing not to scale

Notes:

1) All low voltage wiring to be standard, multi-conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed. Depressing interior vestibule actuator opens interior door. Depressing exterior vestibule actuator opens exterior door. Depressing interior actuator opens interior door and then exterior door in sequence. Depressing exterior actuator opens exterior door and then interior door in sequence. Free egress at all times.

Type
2 Single Doors

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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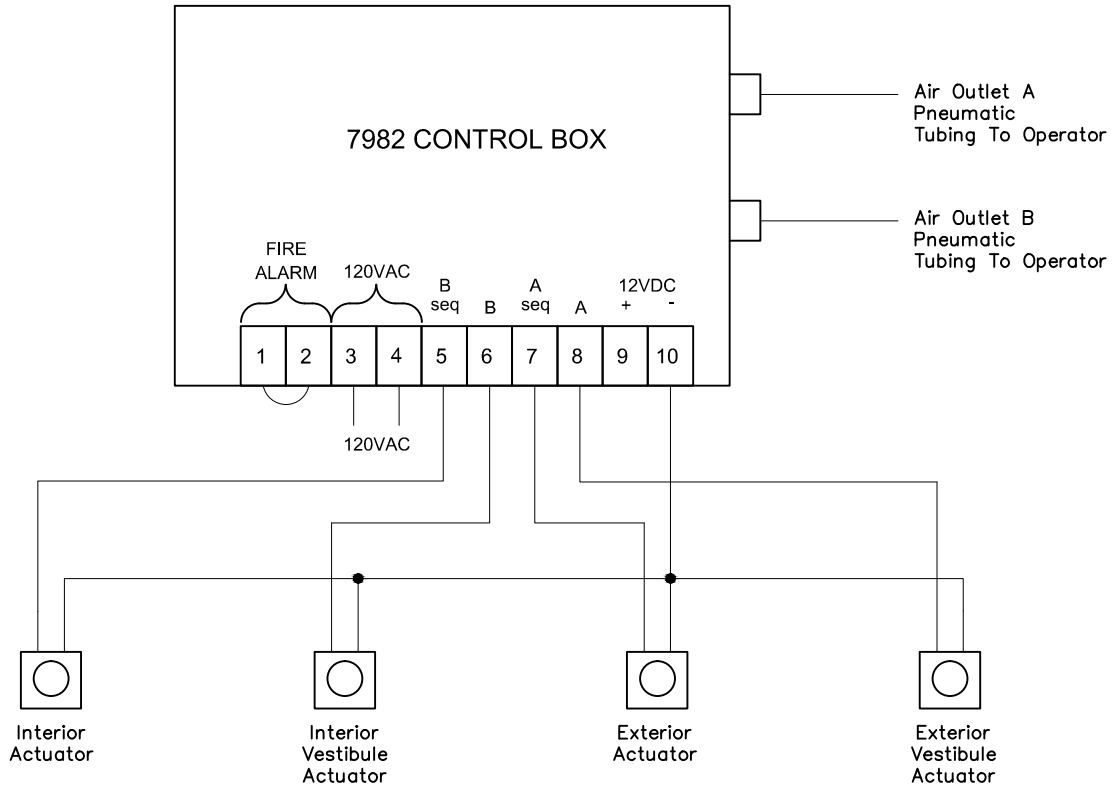
Security Technologies

2 Single Doors 7982 Controller x 2 4840 x 4 Pushbutton

Drawing Type:	Drawing Number:	Rev.
Riser	104968	B



Drawing not to scale

Notes:

1) All low voltage wiring to be standard, multi-conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed. Depressing interior vestibule actuator opens interior door. Depressing exterior vestibule actuator opens exterior door. Depressing interior vestibule actuator opens interior door and then exterior door in sequence. Depressing exterior vestibule opens exterior door and then interior door in sequence. Free egress at all times.

Type
2 Single Doors

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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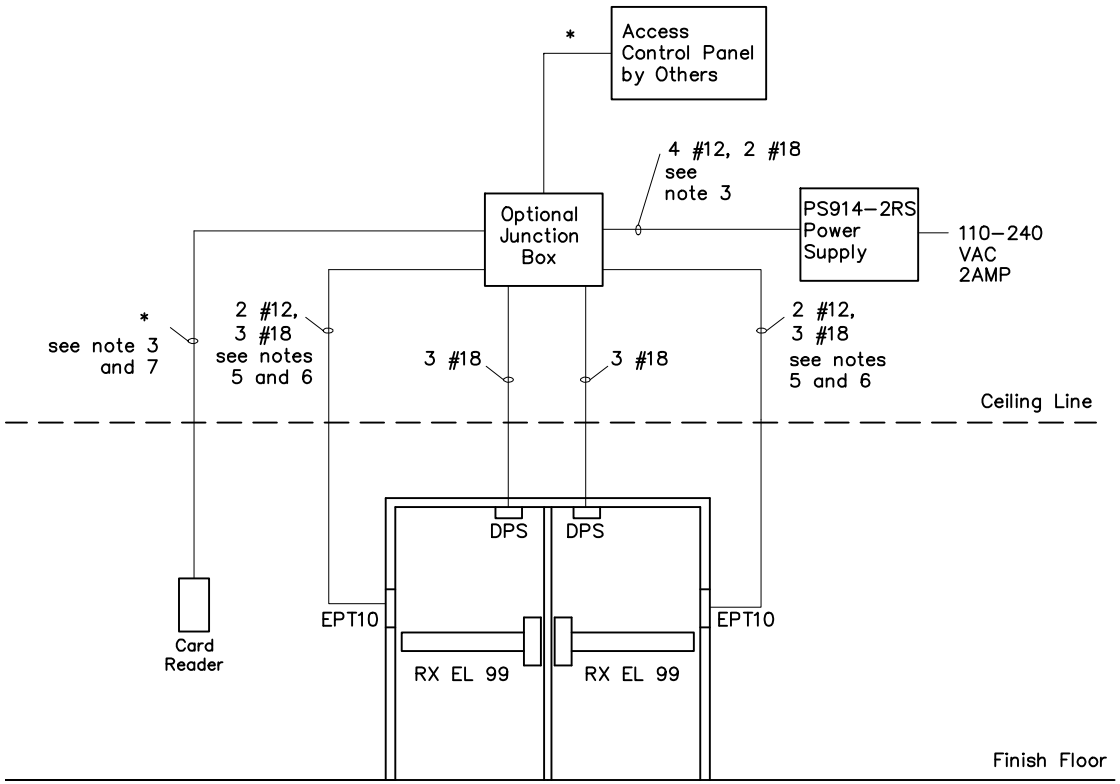
2 Single Doors 7982 Controller x 2 4840 x 4 Pushbuttons

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104968	B



Drawing not to scale

Notes:

1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #12 gauge wire for distances up to 200' from EPT to PS914.
6) Use #14 gauge wire for distances up to 100' from EPT to PS914
7) * Conductor count to be determined by Access Control Panel provider.

Function:

Door normally closed and locked by access control system. Valid card read retracts electric panic devices to allow entry. Free egress at all times.

Door position and RX switches to be monitored by access control system.

Type

Pair Doors

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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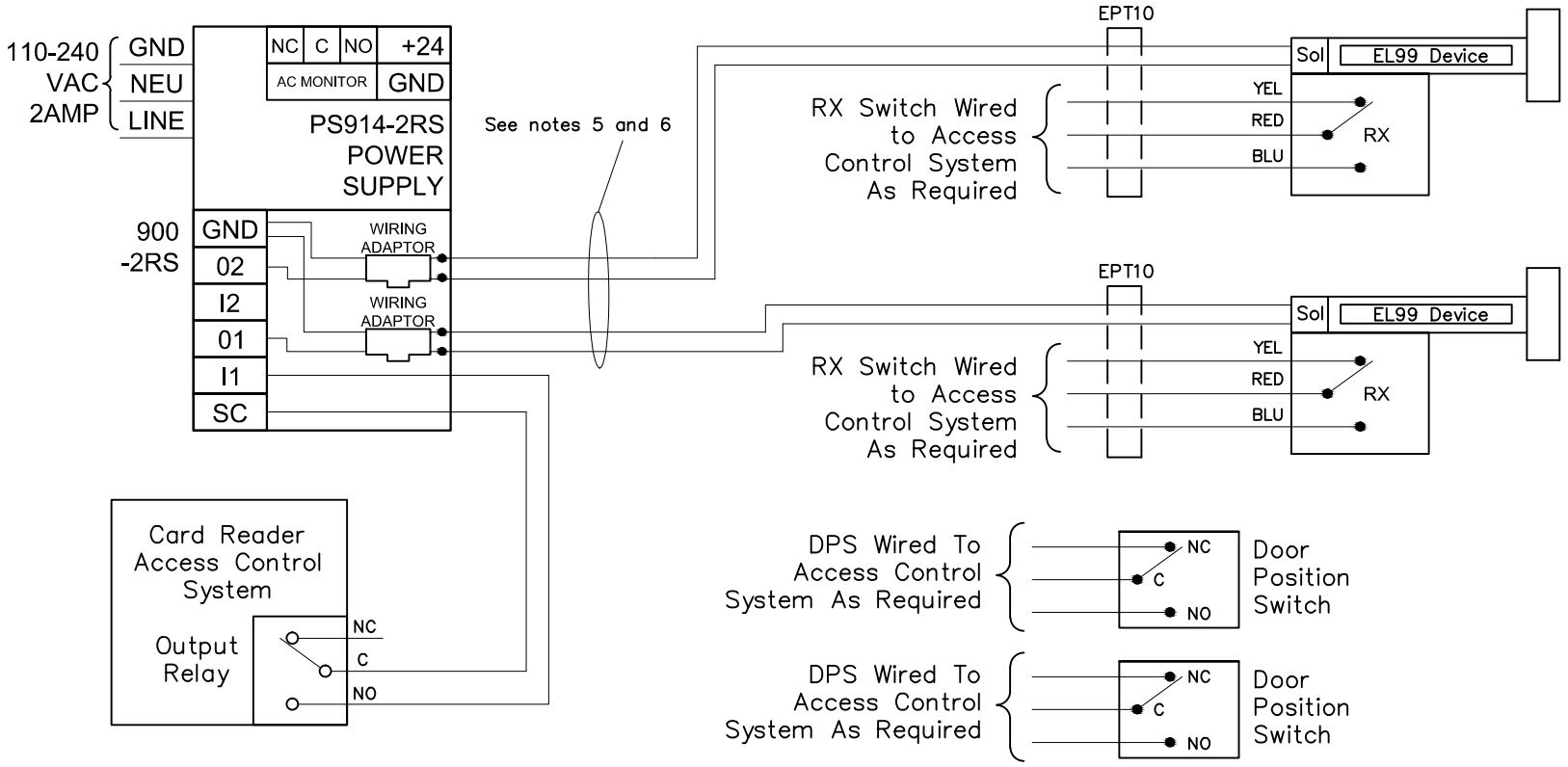
Pair PS914–2RS x 2 RX EL 99 Card Reader x 2 DPS

Drawing Type:	Drawing Number:	Rev.
Riser	104969	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi-conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #12 gauge wire for distances up to 200' from EPT to PS914.
6) Use #14 gauge wire for distances up to 100' from EPT to PS914

Function:
Door normally closed and locked by access control system. Valid card read retracts electric panic devices to allow entry. Free egress at all times.

Door position and RX switches to be monitored by access control system.

Type
Double Doors

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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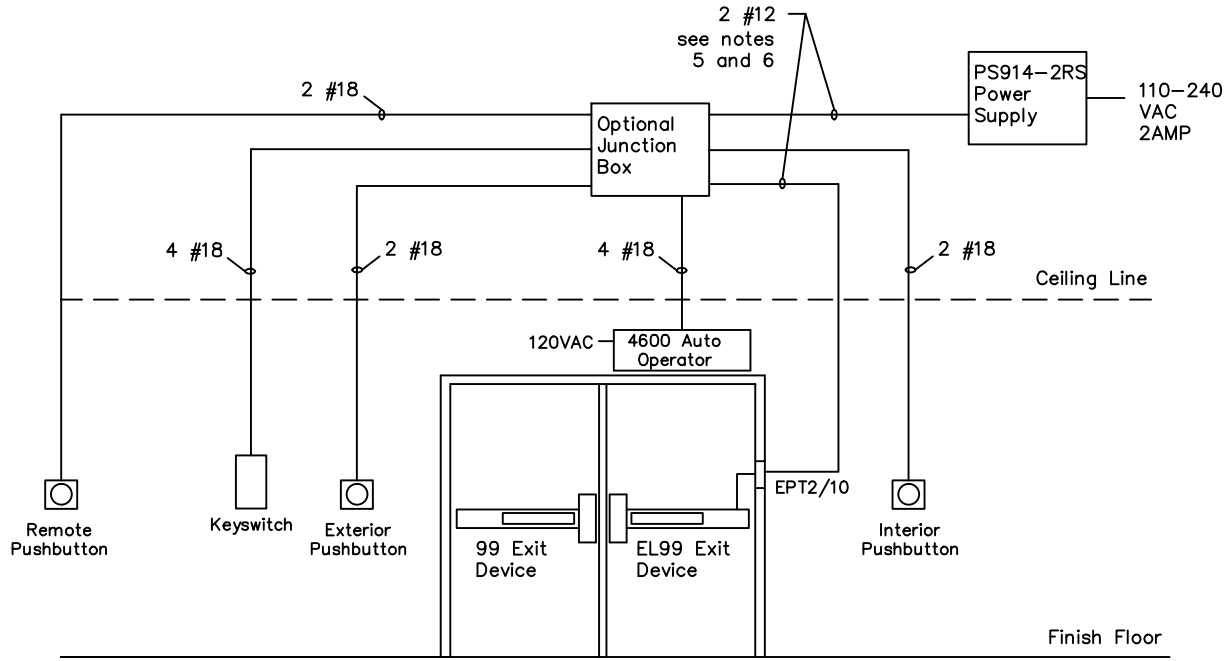
Security Technologies

Pair PS914-2RS x 2 RX EL 99 Card Reader x 2 DPS

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104969	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #12 gauge wire for distances up to 200' from EPT to PS914.
6) Use #14 gauge wire for distances up to 100' from EPT to PS914.

Function:
Door normally closed and locked.
Keyswitch retracts latch and enables exterior pushbutton.
Interior and remote pushbutton are always active to retract the electric latch and automate door.
Free egress at all times.

Type

Double Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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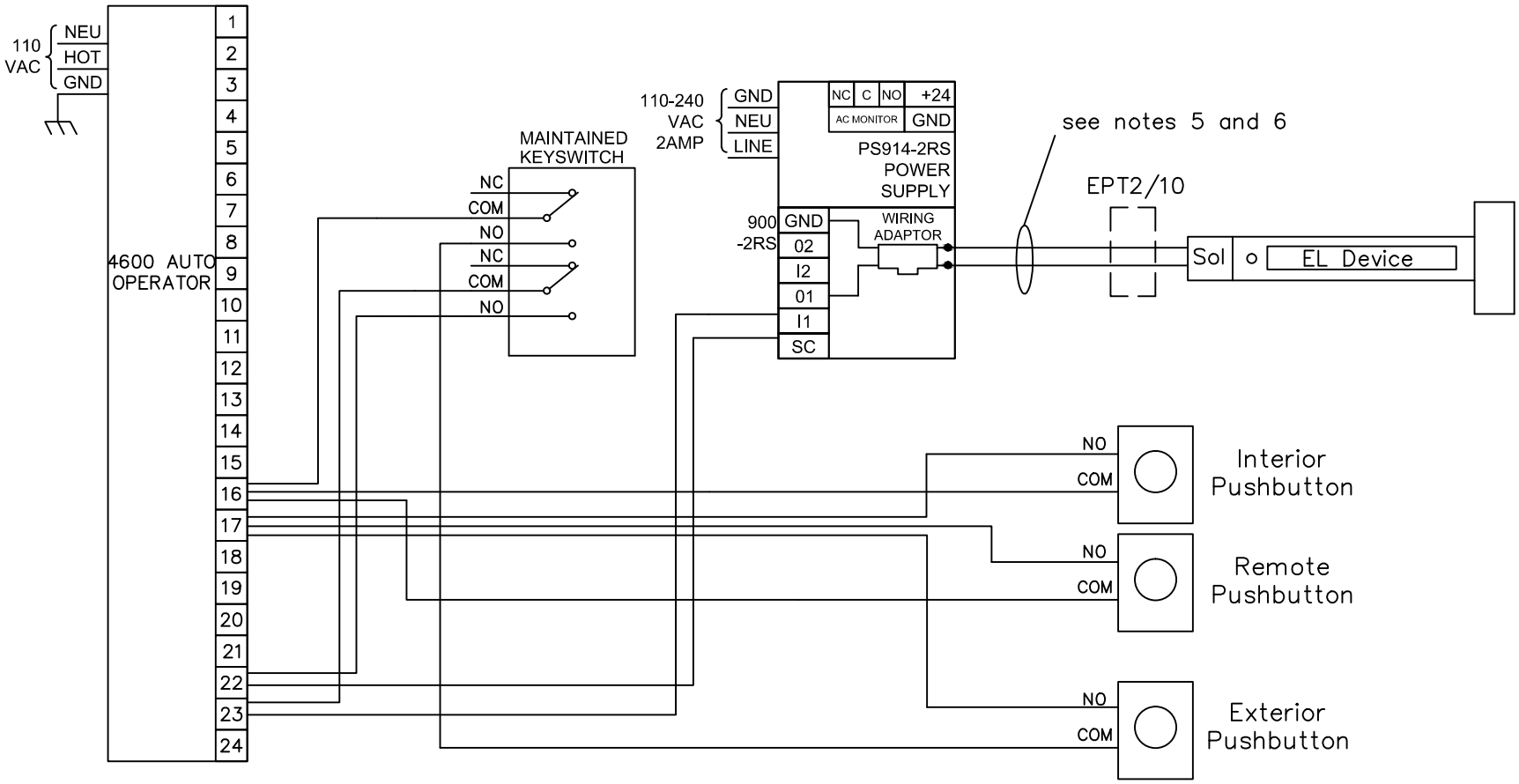
Security Technologies

Pair PS914–2RS EL 4640 2xPB Keyswitch x Remote PB

Drawing Type:	Drawing Number:	Rev.
Riser	104970	A



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi-conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #12 gauge wire for distances up to 200' from EPT to PS914.
6) Use #14 gauge wire for distances up to 100' from EPT to PS914.

Function:
Door normally closed and locked.
Keyswitch retracts latch and enables exterior pushbutton.
Interior and remote pushbutton are always active to retract the electric latch and automate door.
Free egress at all times.

Type
Double Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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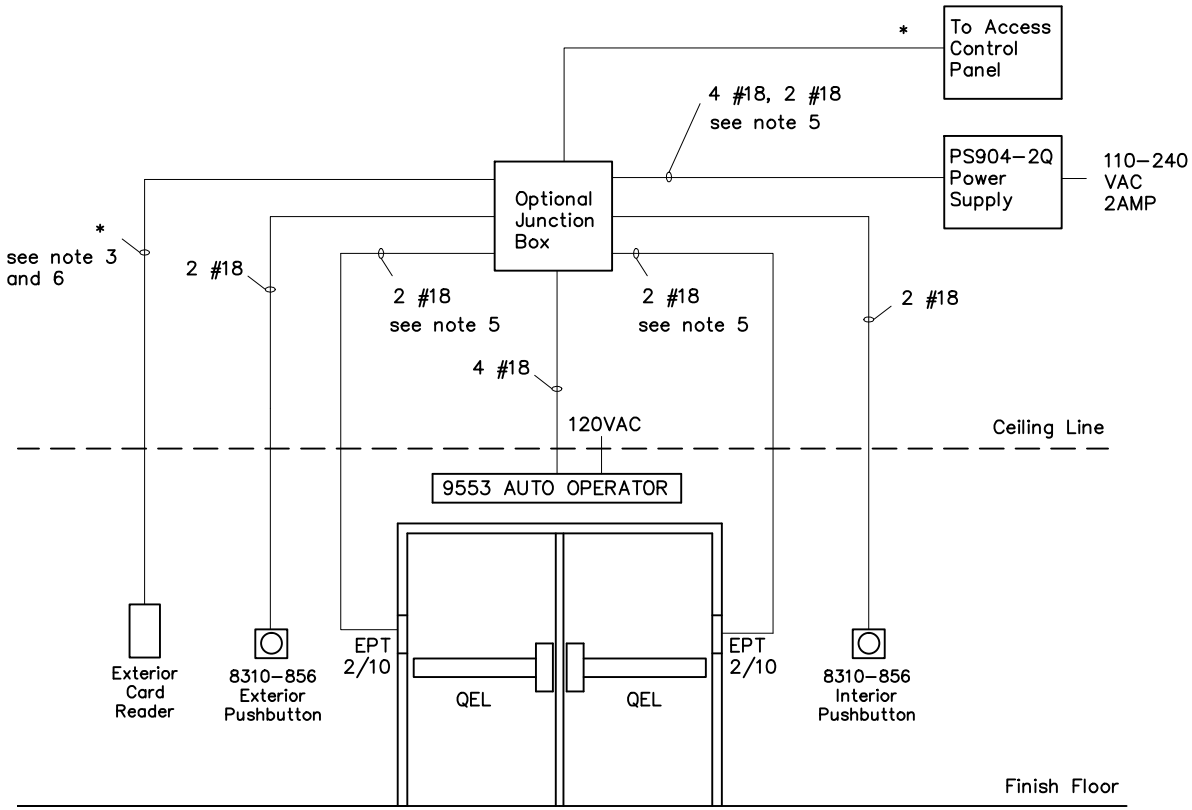
Pair PS914-2RS EL 4640 2xPB Keyswitch x Remote PB

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104970	A



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #18 gauge wire for distances up to 200' from EPT to PS904.
6) * Conductor count to be determined by Access Control Panel provider.

Function:
Door normally closed and locked. Valid card outside retracts latch and enables exterior pushbutton. Depressing interior pushbutton retracts latch and automates door operator.
Free egress at all times.

Type
Double Door

Drawn	08–09–11
Checked	08–12–11
Approved	08–12–11

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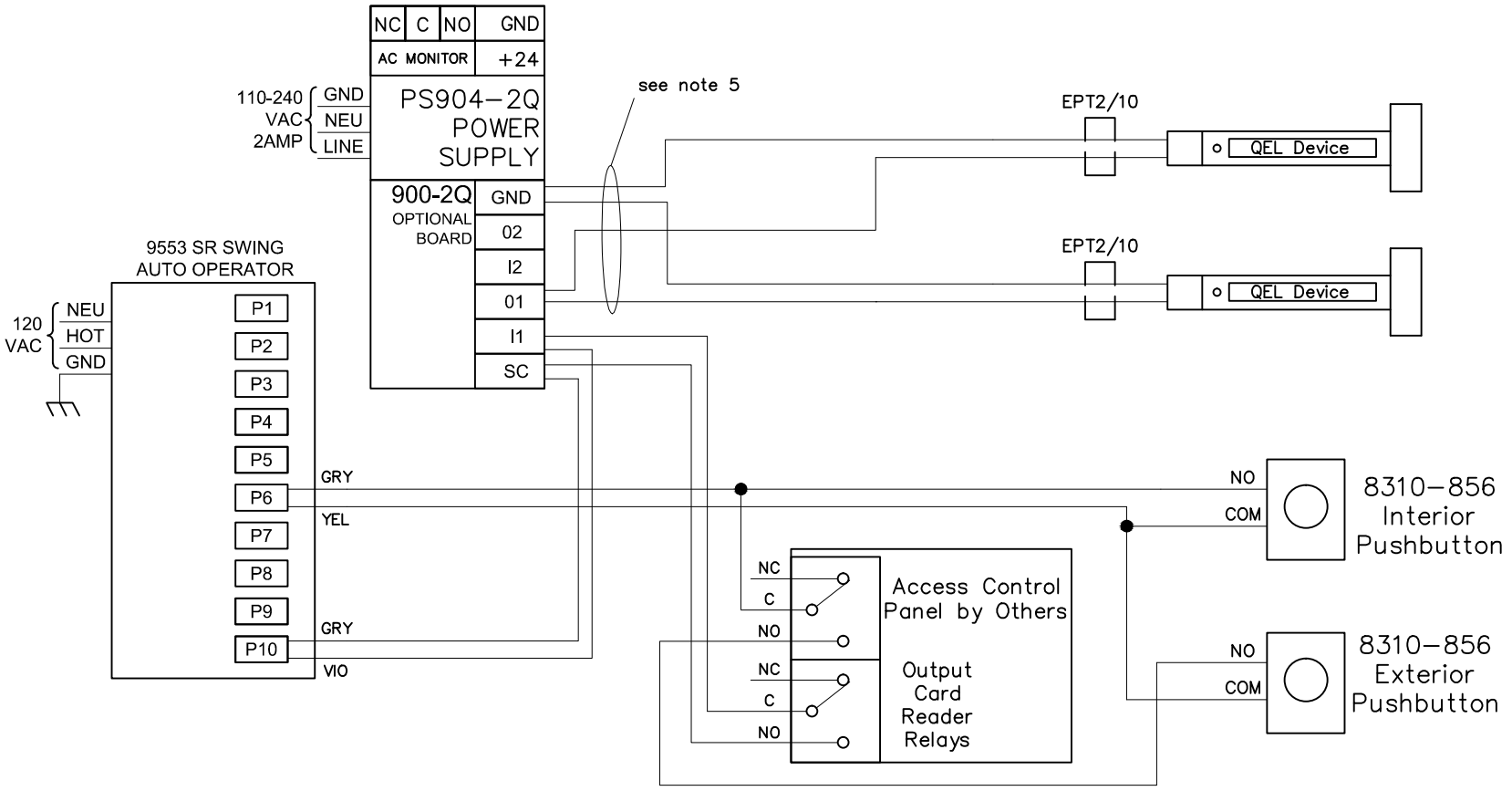
Pair with Mullion PS904–2Q x 2 QEL99
Card Reader 9553 x 2 8310–856

Drawing Type:	Drawing Number:	Rev.
Riser	104971	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #18 gauge wire for distances up to 200' from EPT to PS902.

Function:
Door normally closed and locked. Valid card outside retracts latch and enables exterior pushbutton. Depressing interior pushbutton retracts latch and automates door operator.
Free egress at all times.

Type
Double Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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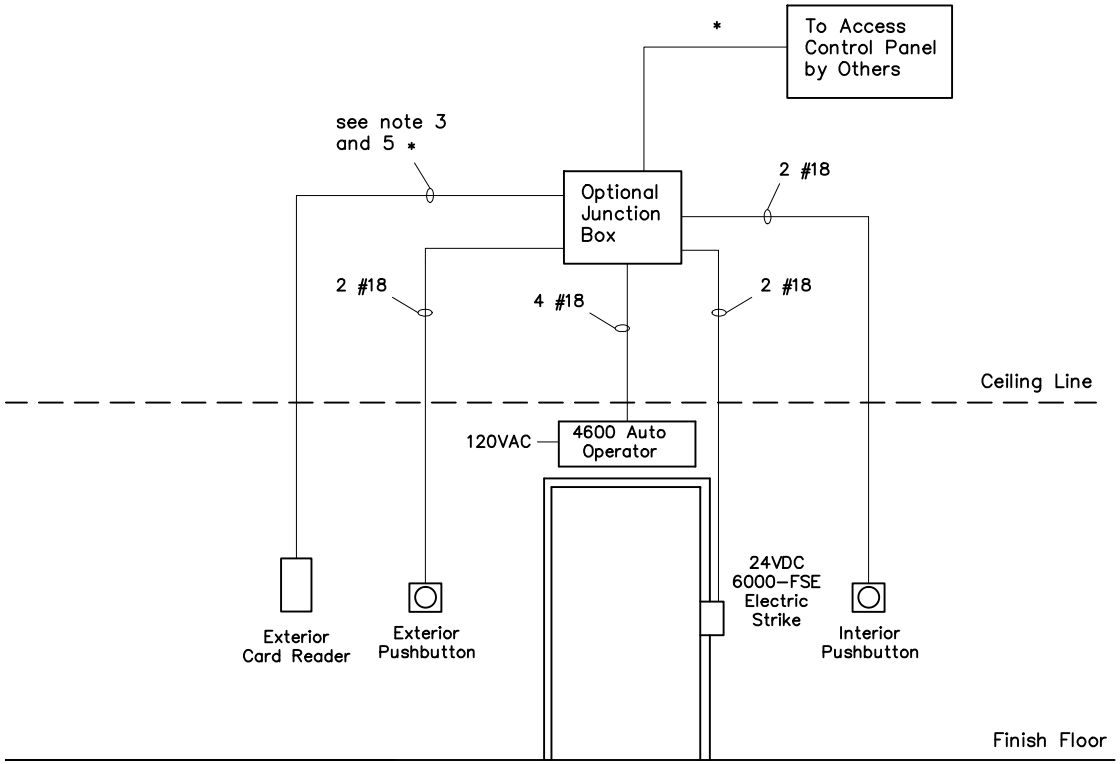
Security Technologies

Pair with Mullion PS904–2Q x 2 QEL99
Card Reader 9553 x 2 8310–856

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104971	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi-conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) * Conductor count to be determined by Access Control Panel provider.

Function:
Door normally closed and locked.
Valid access control read enables exterior actuator.
Depressing exterior actuator unlocks electric strike and automates door.
Depressing interior actuator unlocks electric strike and automates door.
Free egress at all times.

Type
Single Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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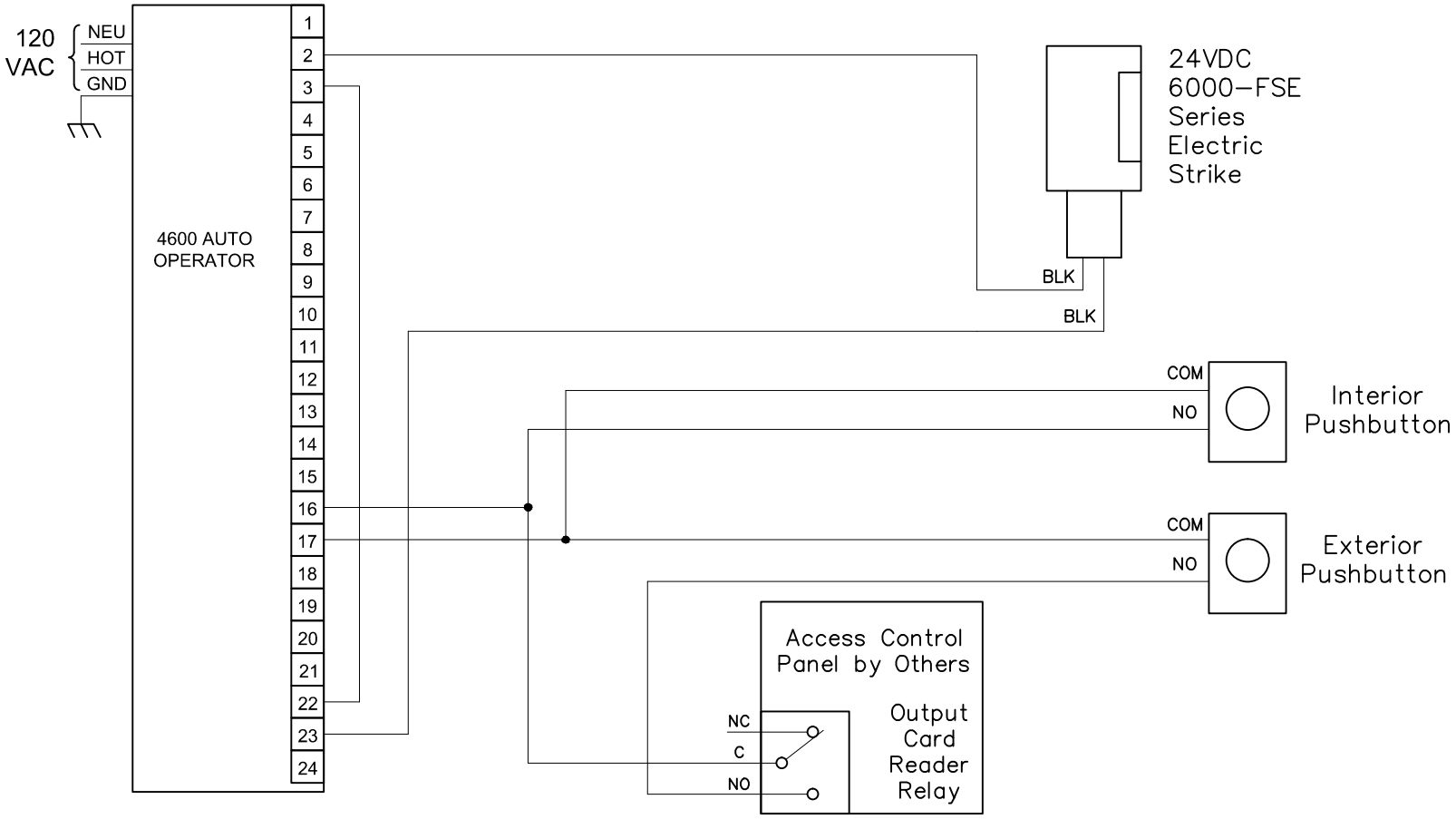
Security Technologies

Single 4600 AO 6000 FSE Electric Strike x 2 PBxCard Reader

Drawing Type:	Drawing Number:	Rev.
Riser	104972	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed and locked.
Valid access control read enables exterior actuator.
Depressing exterior actuator unlocks electric strike and automates door.
Depressing interior actuator unlocks electric strike and automates door.
Free egress at all times.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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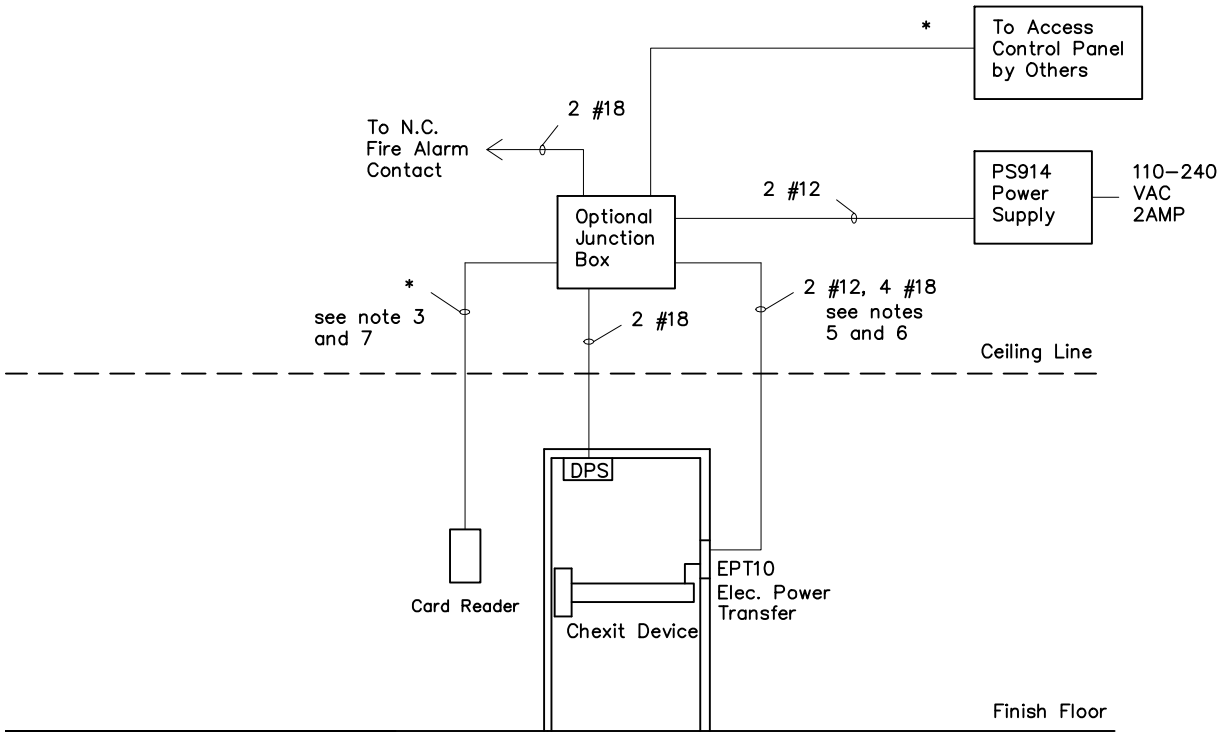
Single 4600 AO 6000 FSE Electric Strike x 2 PBxCard Reader

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104972	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #12 gauge wire for distances up to 200' from EPT to PS914.
6) Use #14 gauge wire for distances up to 100' from EPT to PS914.
7) * Conductor count to be determined by Access Control Panel provider.

Function:
Door normally closed and locked.
Valid card read unlocks latch and disarms alarm.
Pushing on locked panic device initiates a 15 second irreversible delay and audible alarm.
After the 15 second delay, the device unlocks and allows egress.
Activation of the fire alarm will immediately release the exit device. Access Control to shunt alarm allowing non alarmed exiting.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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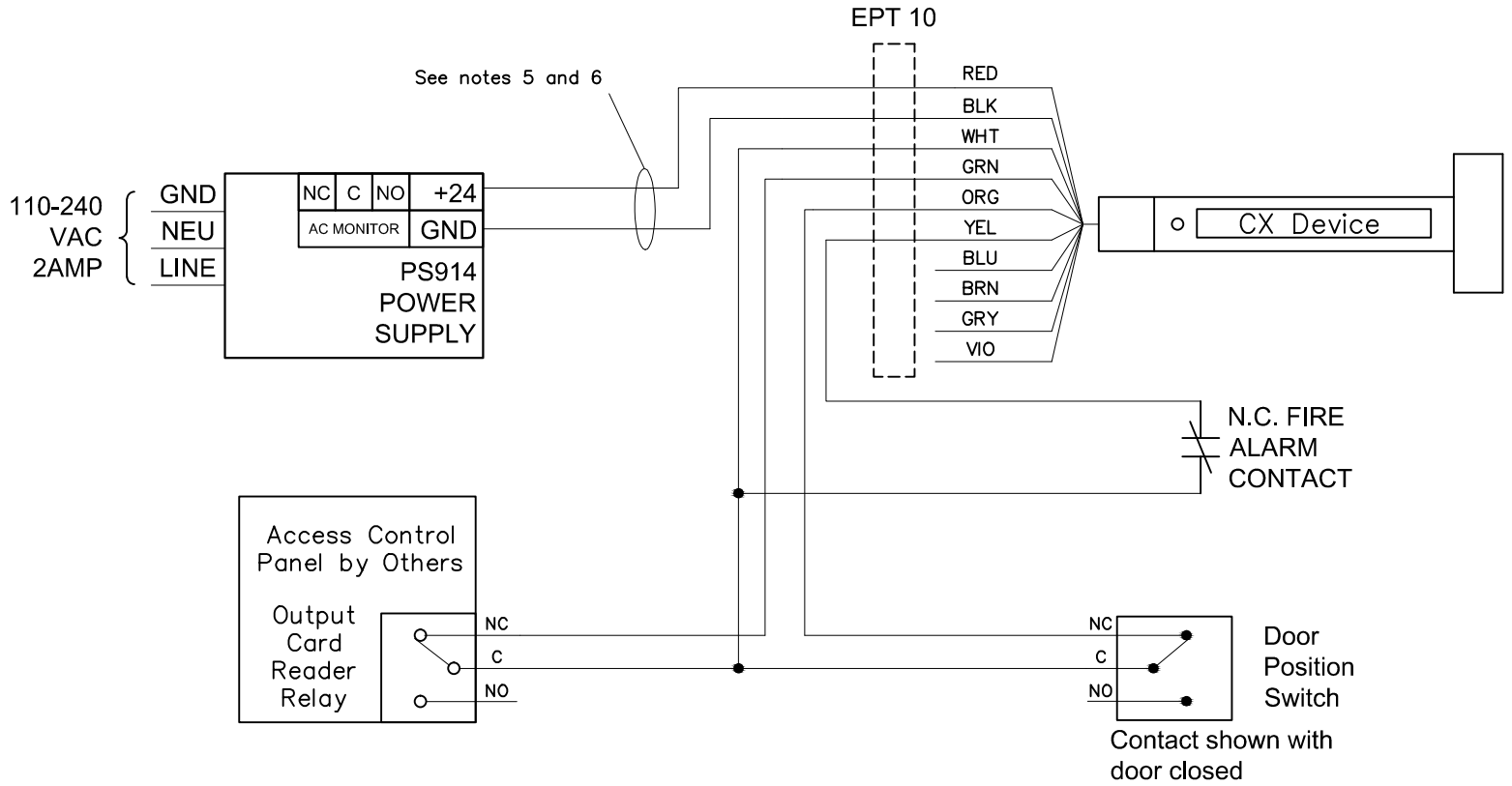
Single PS914 CX99 EPT10 DPS Card Reader

Drawing Type:	Drawing Number:	Rev.
Riser	104973	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #12 gauge wire for distances up to 200' from EPT to PS914.
6) Use #14 gauge wire for distances up to 100' from EPT to PS914

Function:
Door normally closed and locked.
Valid card read unlocks latch and disarms alarm.
Pushing on locked panic device initiates a 15 second irreversible delay and audible alarm.
After the 15 second delay, the device unlocks and allows egress.
Activation of the fire alarm will immediately release the exit device. Access Control to shunt alarm allowing non alarmed exiting.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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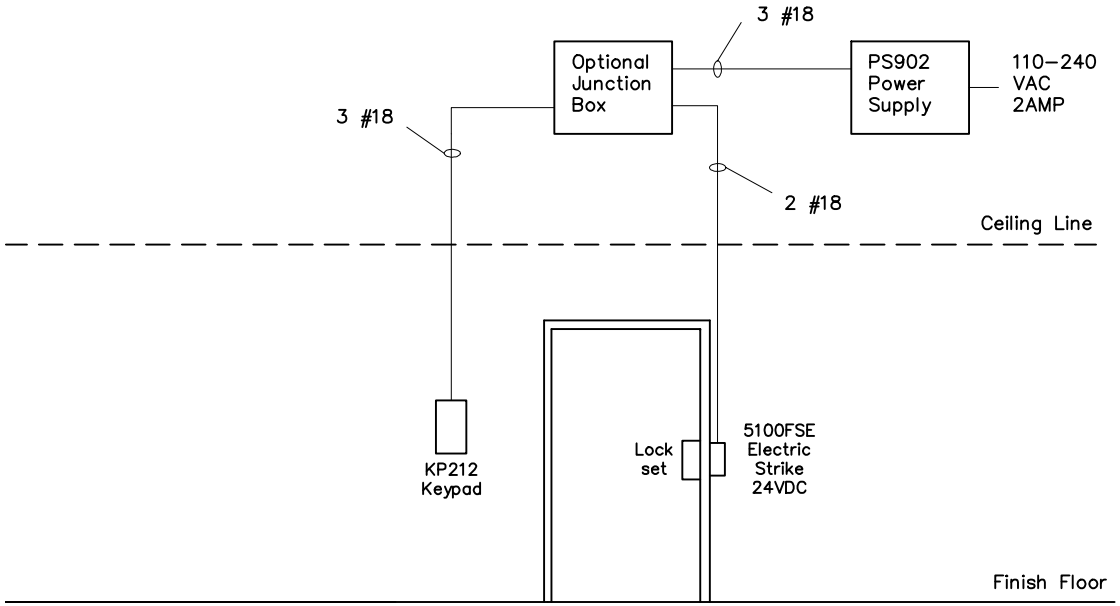
Security Technologies

Single PS914 CX99 EPT10 DPS Card Reader

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104973	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed and locked.
Valid PIN number at KP212 keypad unlocks electric strike.
Free egress at all times.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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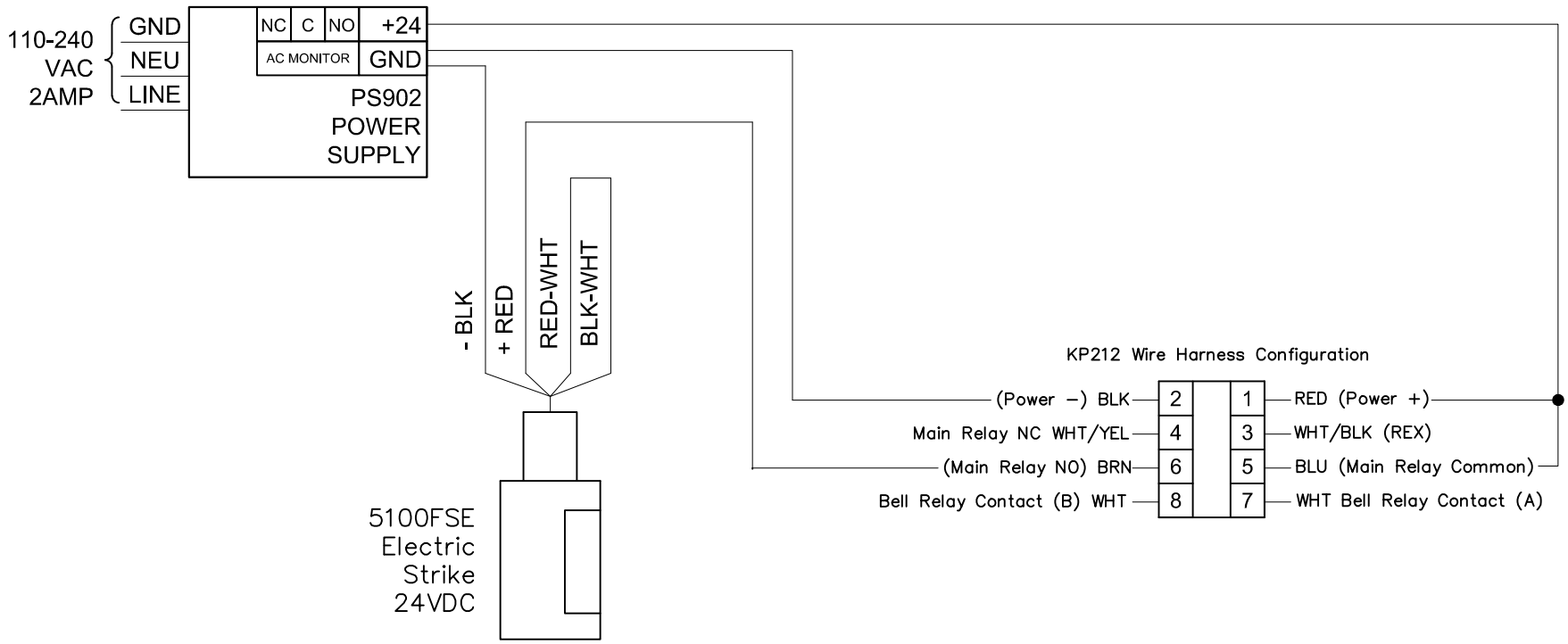
Security Technologies

Single PS902 5100 FSE Electric Strike

Drawing Type:	Drawing Number:	Rev.
Riser	104974	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi−conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed and locked.
Valid PIN number at KP212 keypad unlocks electric strike.
Free egress at all times.

Type
Single Door

Drawn	08−09−11
Checked	08−10−11
Approved	08−10−11

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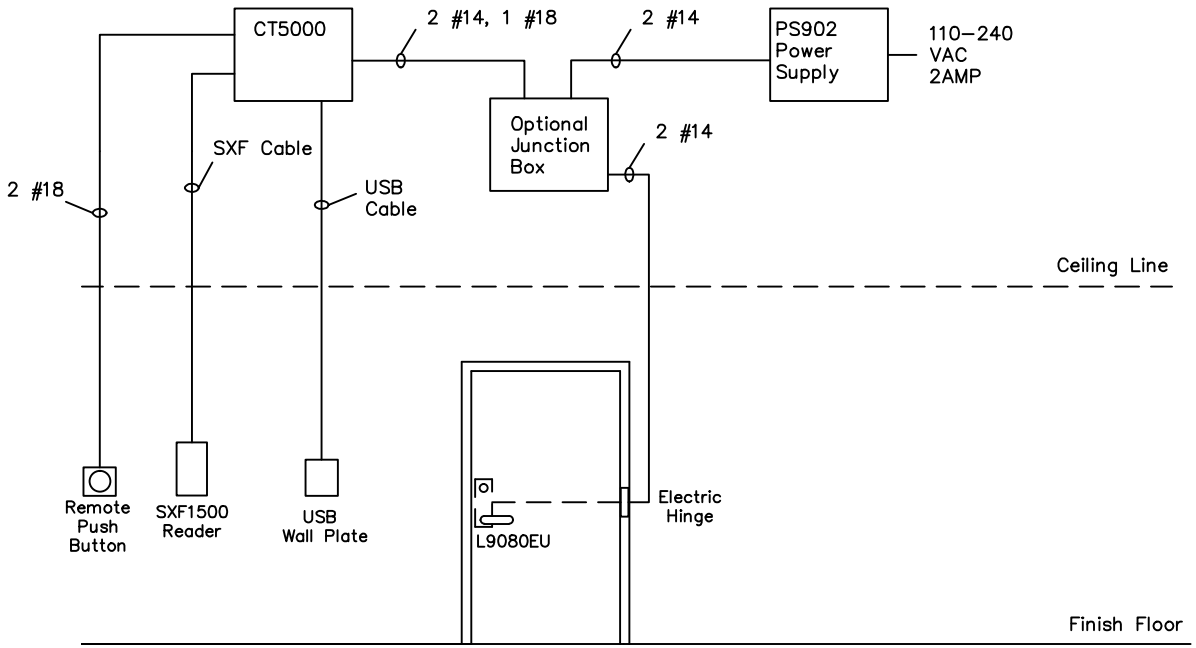
Security Technologies

Single PS902 5100 FSE Electric Strike

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104974	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed and locked.
Valid card read unlock mortise lock.
Remote release pushbutton unlocks mortise lock.
Free egress at all times.

Type
Single Door

Drawn	08–09–10
Checked	08–12–11
Approved	08–12–11

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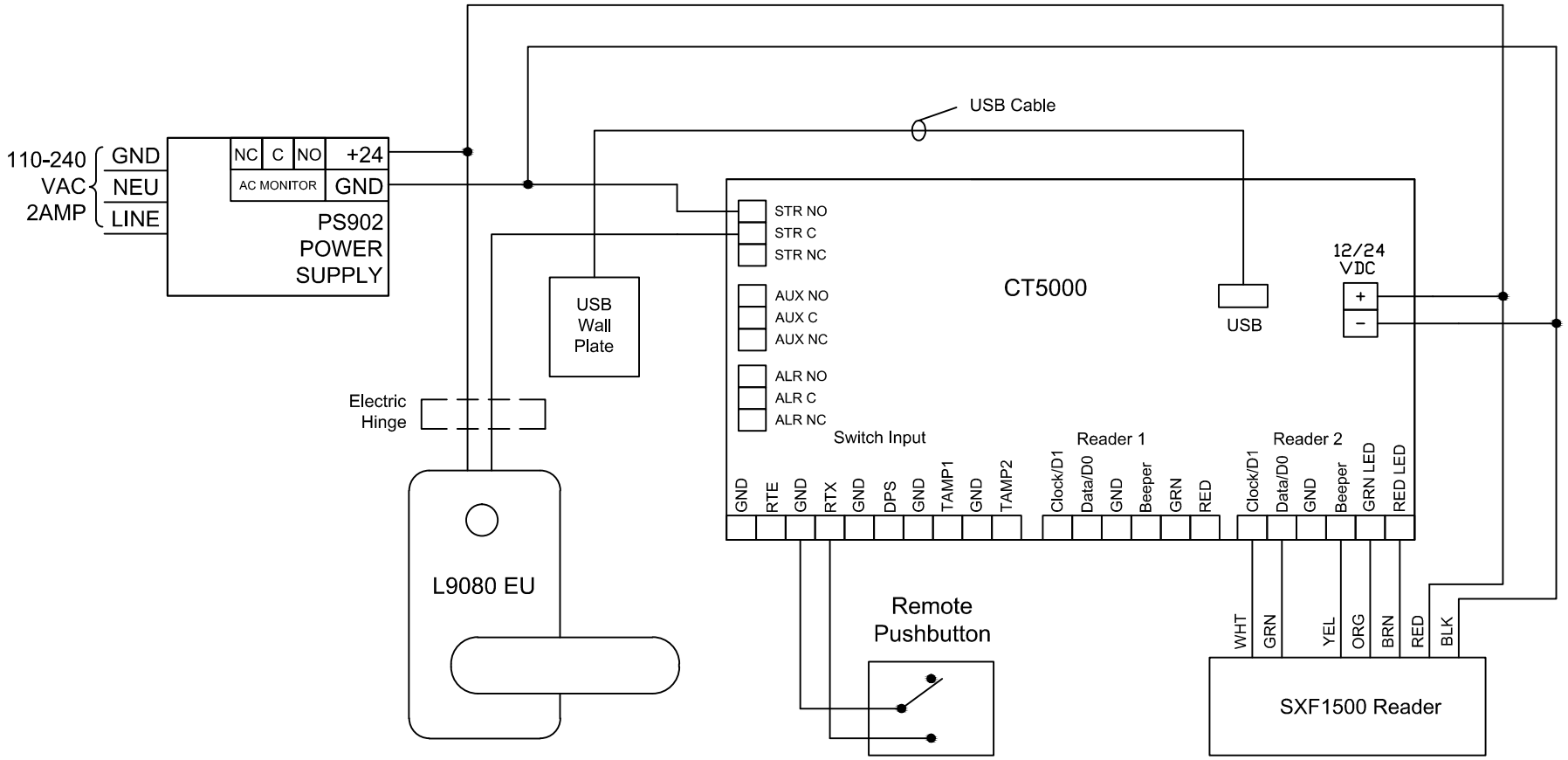
Security Technologies

Single PS902 L9080EU CT5000 SXF1500 Remote PB

Drawing Type:	Drawing Number:	Rev.
Riser	104975	A



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi-conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed and locked.
Valid card read unlock mortise lock.
Remote release pushbutton unlocks mortise lock.
Free egress at all times.

Type
Single Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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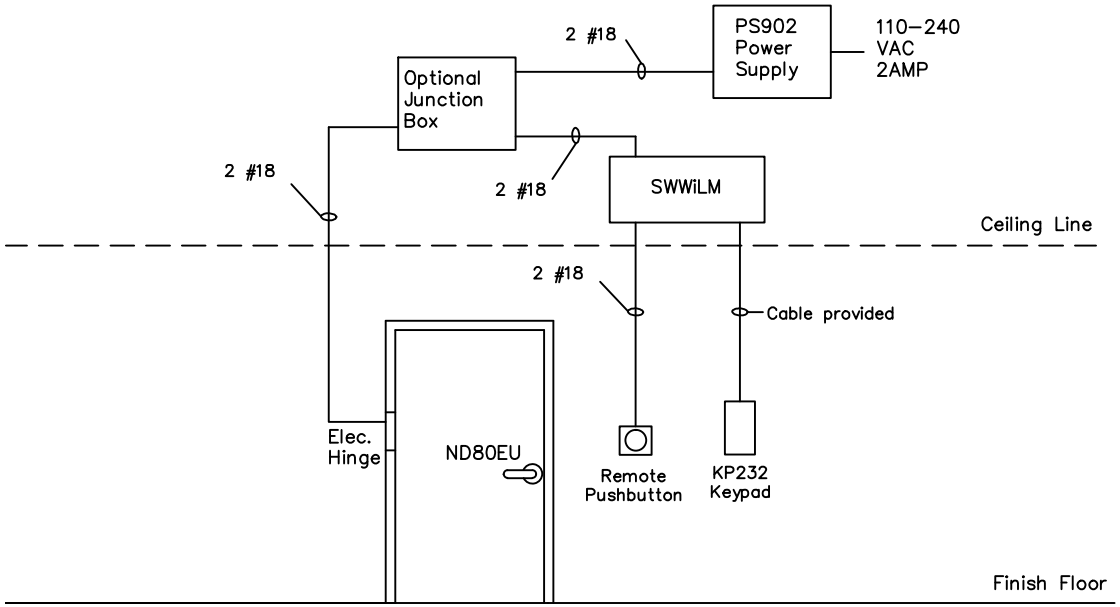
Single PS902 L9080EU CT5000 SXF1500 Remote PB

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104975	A



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed and locked.
Valid PIN number unlocks door.
Free egress at all times.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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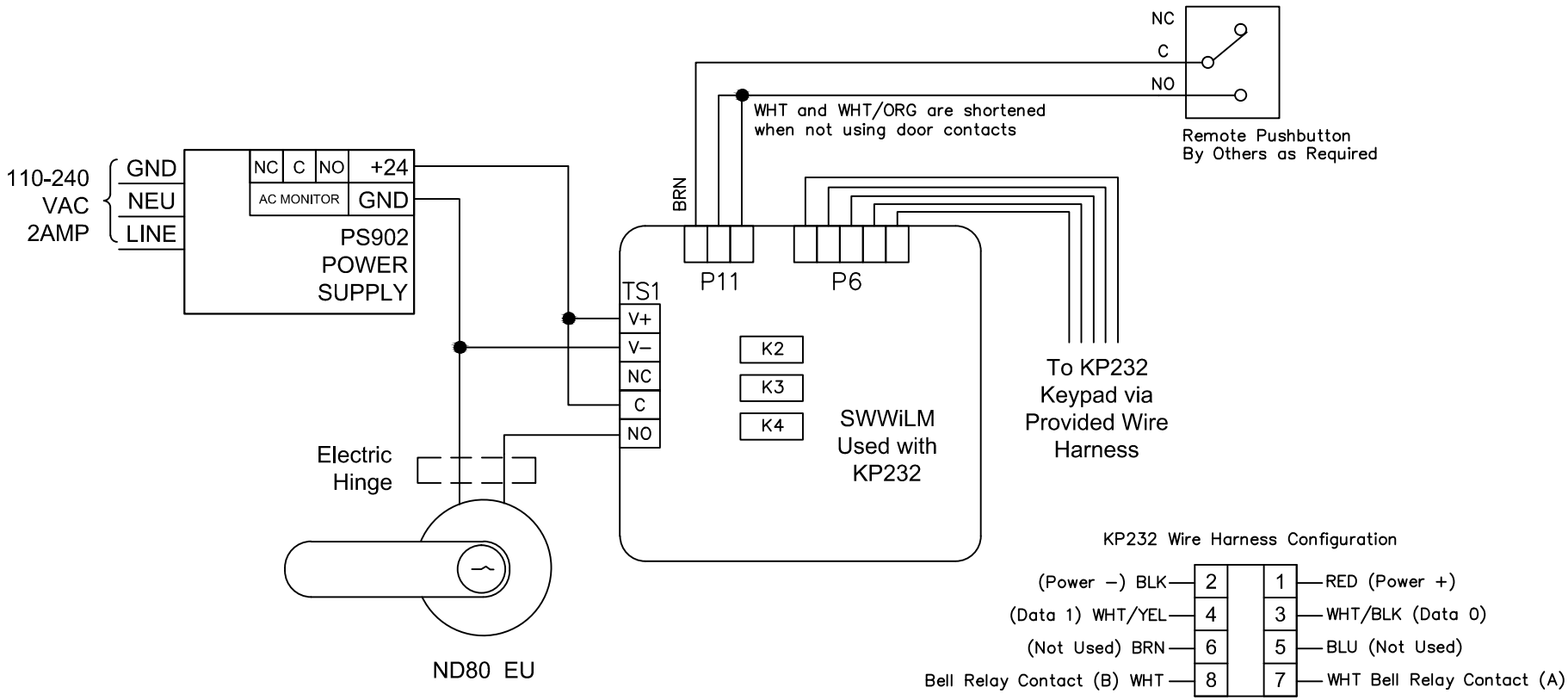
Security Technologies

Single PS902 ND80EU Remote PB KP232

Drawing Type:	Drawing Number:	Rev.
Riser	104976	A



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed and locked.
Valid PIN number unlocks door.
Free egress at all times.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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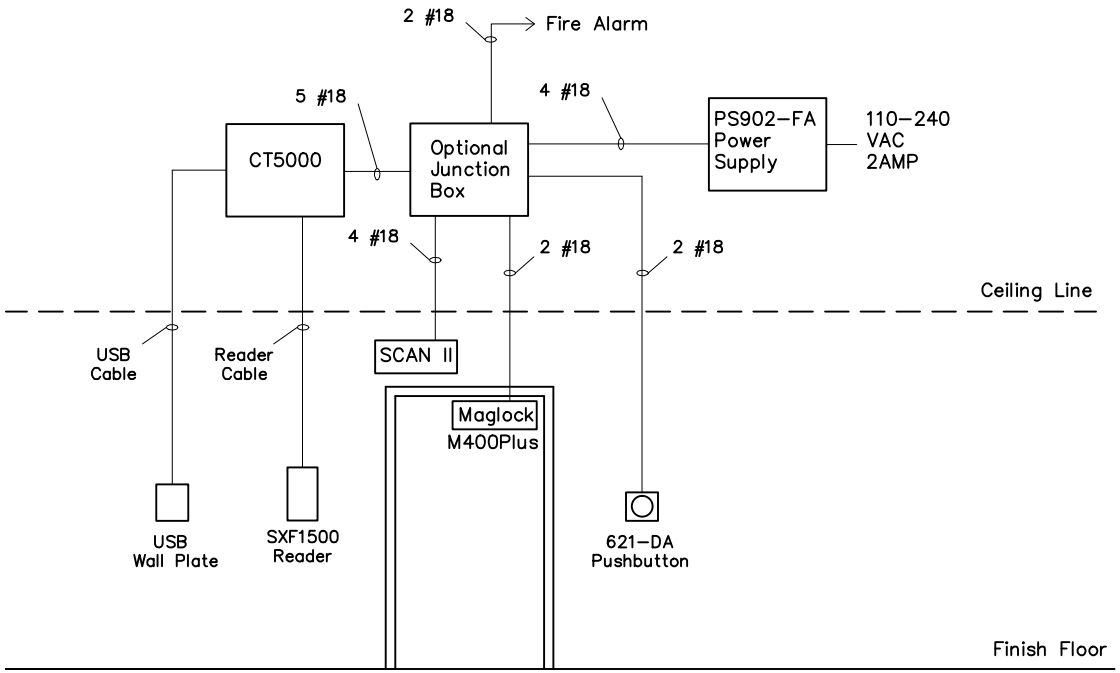
Single PS902 ND80EU Remote PB KP232

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104976	A



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:
Door normally closed and locked.
Valid card read unlock magnetic lock.
Scan II unlocks magnetic lock.
Pushbutton unlocks magnetic lock.
Fire alarm unlocks magnetic lock.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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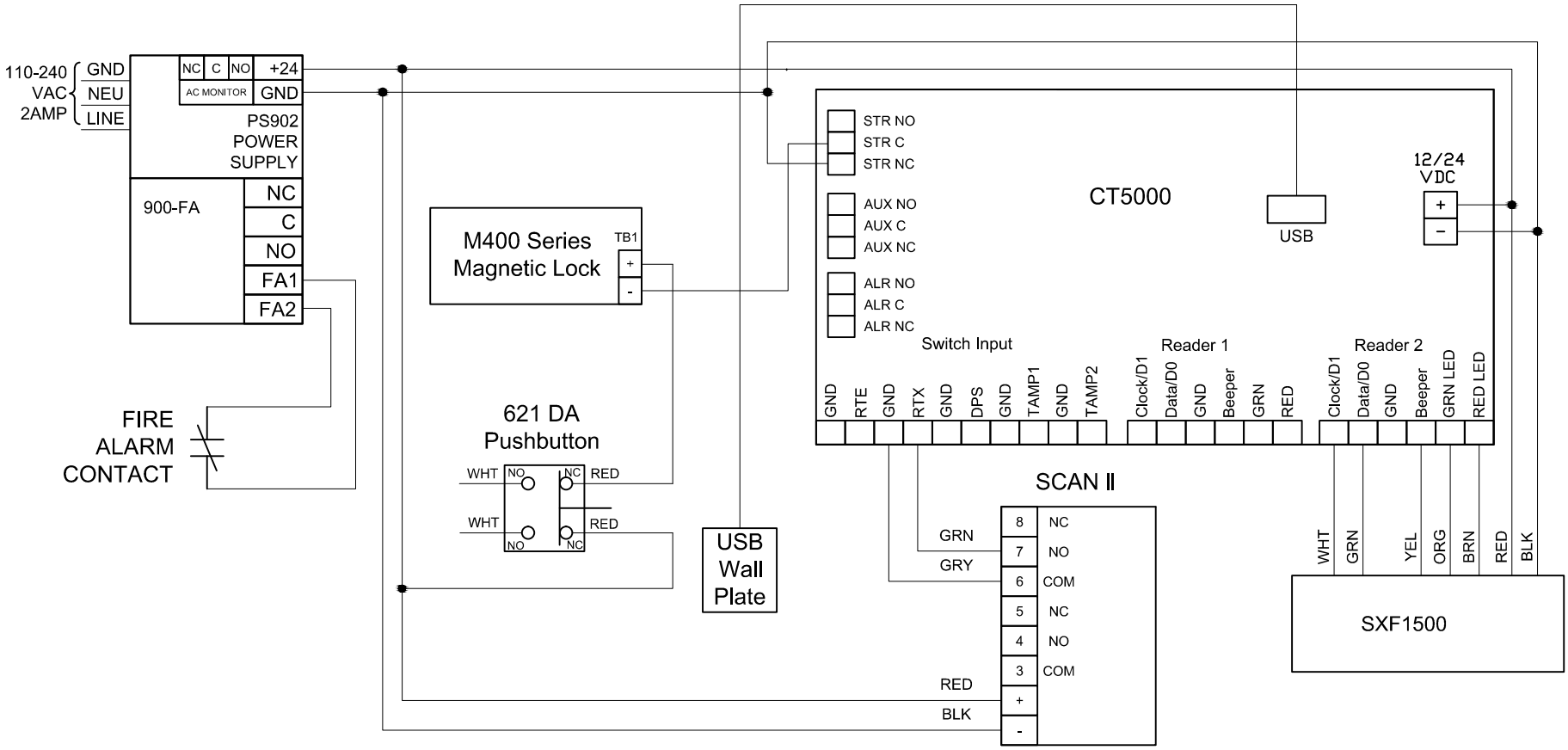
Security Technologies

Single PS902–FA M400 Maglock CT5000 SXF1500 SCAN II 621DA PB

Drawing Type:	Drawing Number:	Rev.
Riser	104977	B



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.

Function:

Door normally closed and locked.
Valid card read unlocks magnetic lock.
Scan II unlocks magnetic lock.
Pushbutton unlocks magnetic lock.
Fire alarm unlocks magnetic lock.

Type

Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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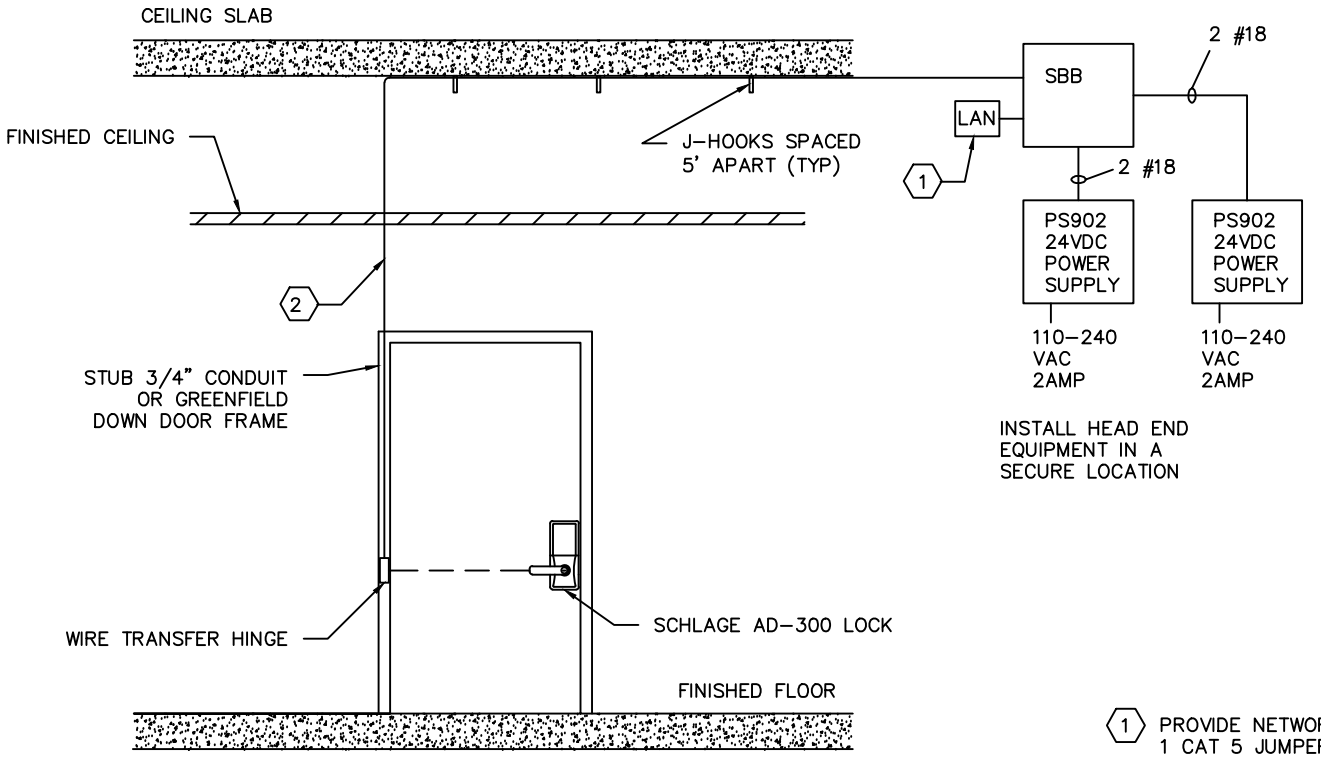
Single PS902–FA M400 Maglock CT5000 SXF1500 SCAN II 621DA PB

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104977	B



1. PROVIDE NETWORK CONNECTION.
1 CAT 5 JUMPER WITH RJ-45 CONNECTORS FROM SBB DEVICE TO NETWORK WALL JACK.

2. INSTALL 3/4" CONDUIT TO THE SBB CONTROLLER.
RUN 18 AWG-4 COND. STRANDED/TWISTED/SHIELDED TO SBB.

Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded/twisted/shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the lock power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation only.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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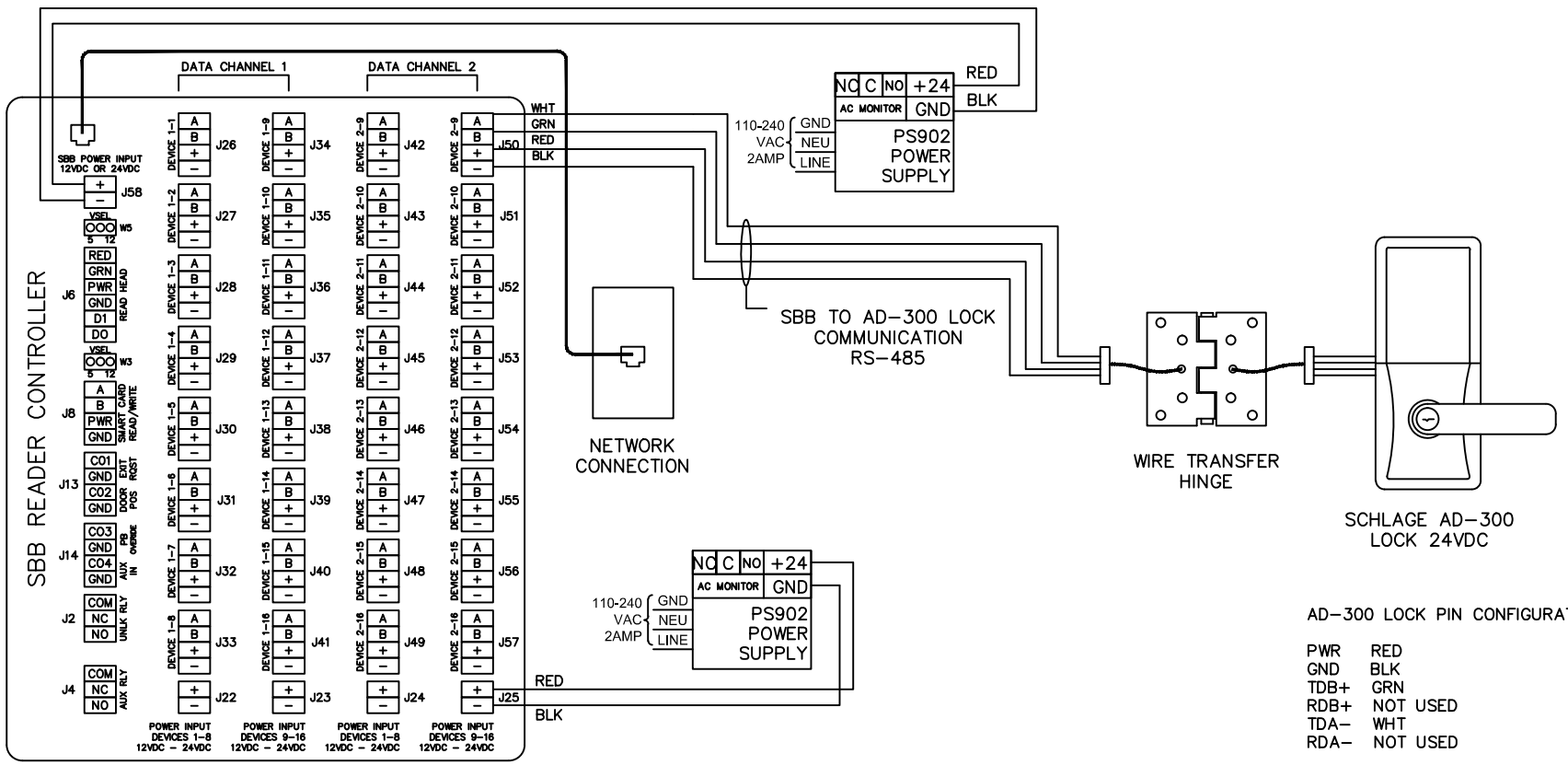
Security Technologies

Single SBB AD300

Drawing Type:	Drawing Number:	Rev.
Riser	104978	A



Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded, twisted, shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the SMS power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please verify jumper locations for the specific product configuration.
6. Please follow specific device instructions provided with the products. This is a pictorial representation.
7. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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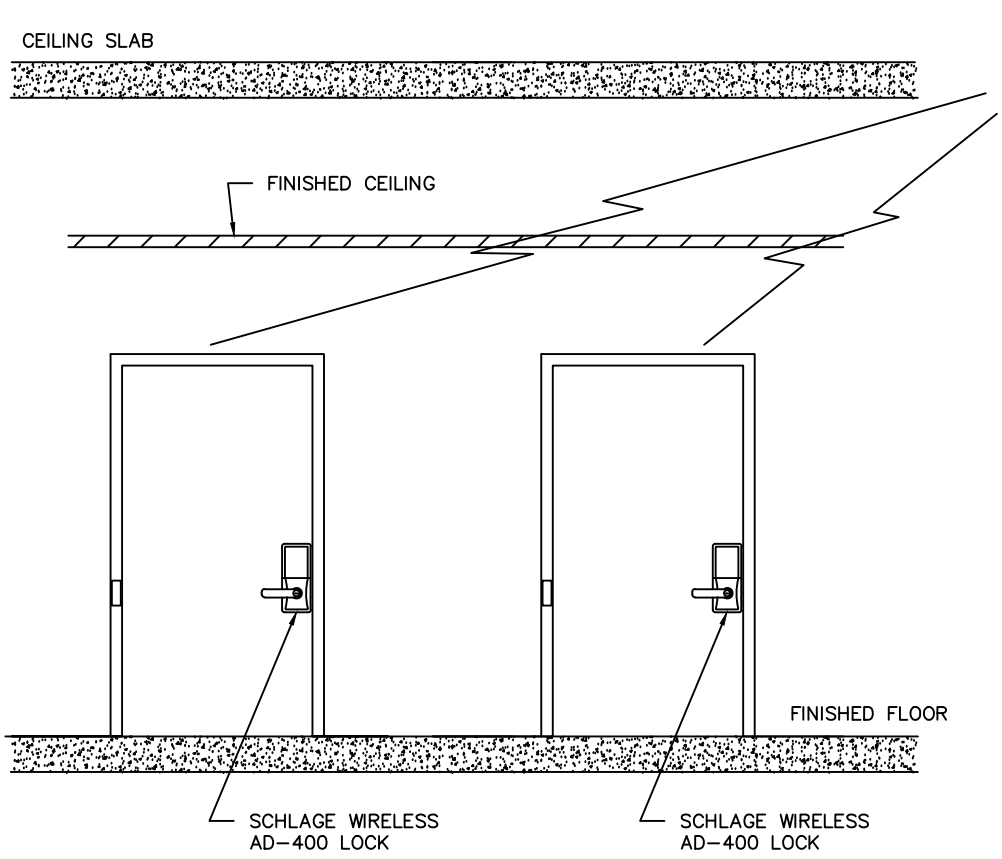
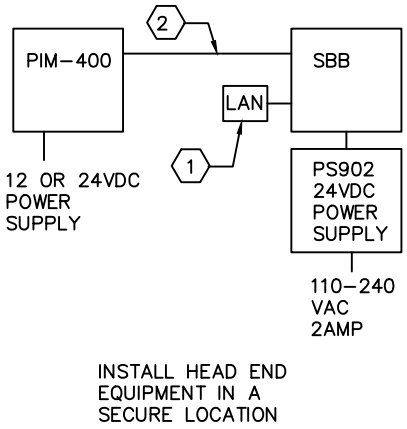
Single SBB AD300

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104978	A





INSTALL HEAD END
EQUIPMENT IN A
SECURE LOCATION

(1) PROVIDE NETWORK CONNECTION.
1 CAT 5 JUMPER WITH RJ–45 CONNECTORS FROM SBB DEVICE TO NETWORK WALL JACK.

(2) INSTALL 3/4" CONDUIT FROM THE PIM–SBB TO THE SBB CONTROLLER.
RUN 18 AWG 2 COND. STRANDED/TWISTED/SHIELDED TO SBB.

Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded/twisted/shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the lock power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation only.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single or Double Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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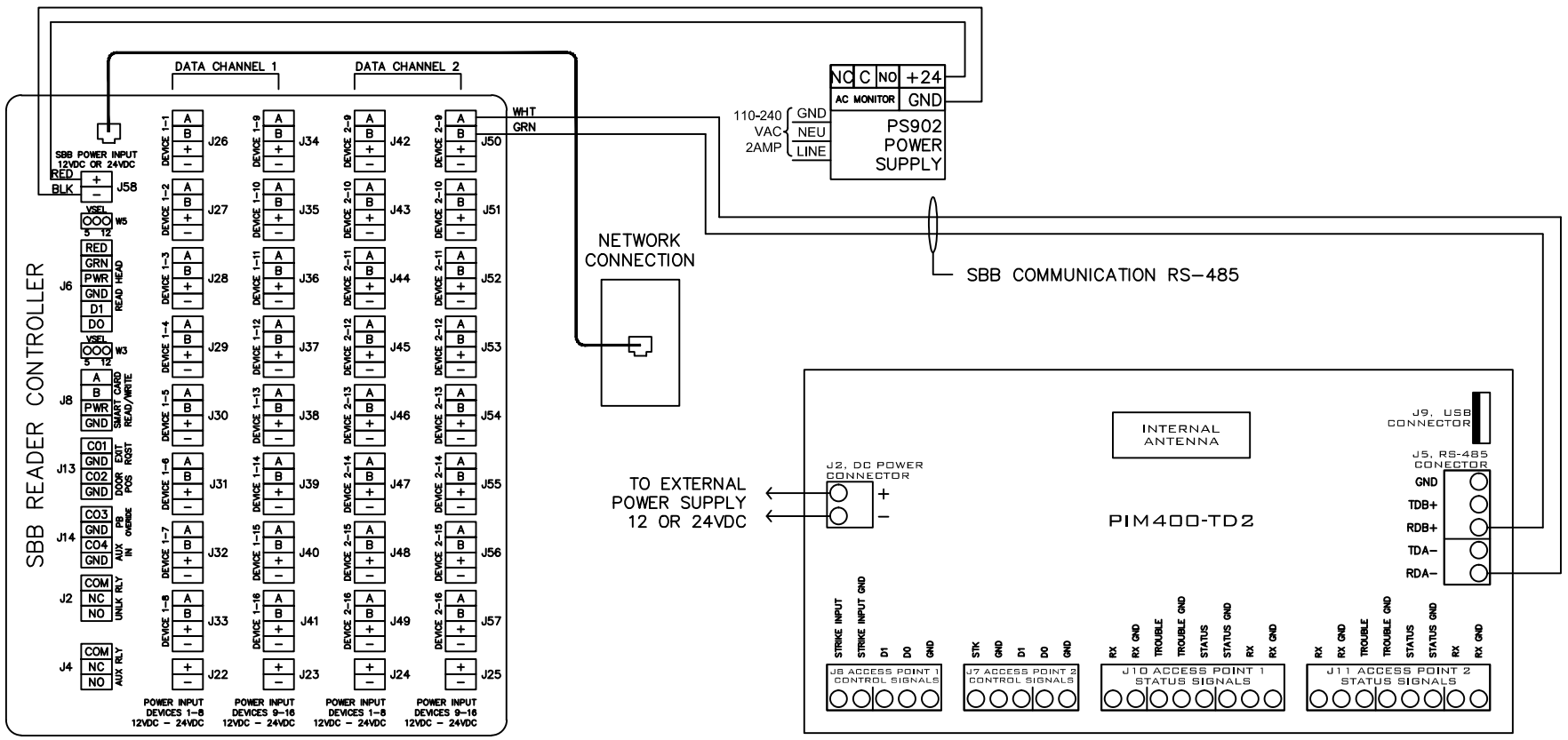
Security Technologies

Single SBB AD400 PIM400–485–SBB

Drawing Type:	Drawing Number:	Rev.
Riser	104979	A



14 X 14 ENCLOSURE

Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded/twisted/shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the lock power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation only.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single or Double Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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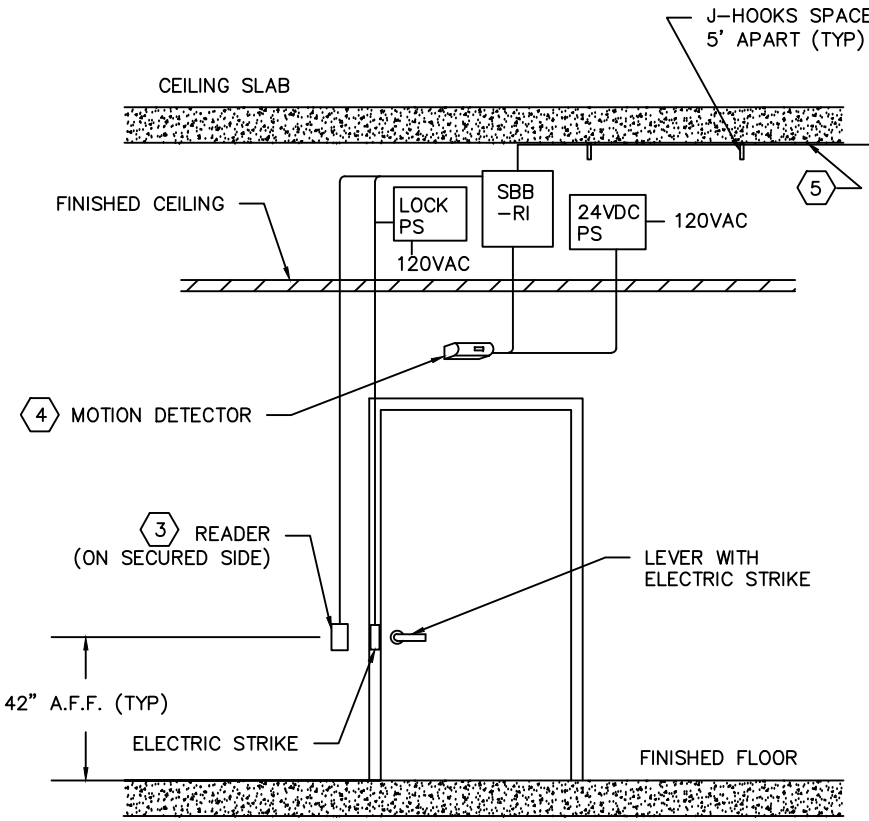
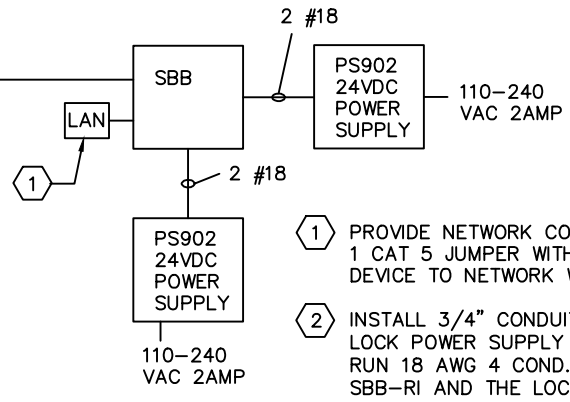
Single SBB AD400 PIM400-485-SBB

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104979	A





INSTALL HEAD END EQUIPMENT IN A SECURE LOCATION

1. PROVIDE NETWORK CONNECTION BETWEEN SBB AND SBB–RI. 1 CAT 5 JUMPER WITH RJ–45 CONNECTORS FROM SBB DEVICE TO NETWORK WALL JACK.

2. INSTALL 3/4" CONDUIT FROM ELECTRIC STRIKE AND TO LOCK POWER SUPPLY AND SBB–RI.
RUN 18 AWG 4 COND. STRANDED/TWISTED/SHIELDED TO SBB–RI AND THE LOCK POWER SUPPLY.

3. PROVIDE SINGLE GANG ELECTRICAL JUNCTION BOX.
INSTALL 3/4"CONDUIT INTO SINGLE GANG ELECTRICAL JUNCTION BOX AND SBB–RI.
MOUNTED 3'6" A.F.F. FOR CARD READER ON THE SECURED SIDE OF DOOR.
RUN 18 AWG 6 COND. STRANDED/TWISTED/SHIELDED TO SBB–RI.

4. INSTALL 3/4" CONDUIT TO SBB–RI AND TO 24VDC POWER SUPPLY.
RUN 18 AWG 2 COND. STRANDED/TWISTED/SHEILDED TO SBB–RI.
RUN 18 AWG 2 COND. STRANDED/TWISTED/SHEILDED TO 24VDC POWER SUPPLY.

5. INSTALL 3/4" CONDUIT ALONG UNFINISHED CEILING TO THE SBB LOCATION.
RUN 18 AWG 4 COND. STRANDED/TWISTED/SHIELDED FROM THE SBB–RI TO THE SBB CONTROLLER.

Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded/twisted/shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the lock power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation only.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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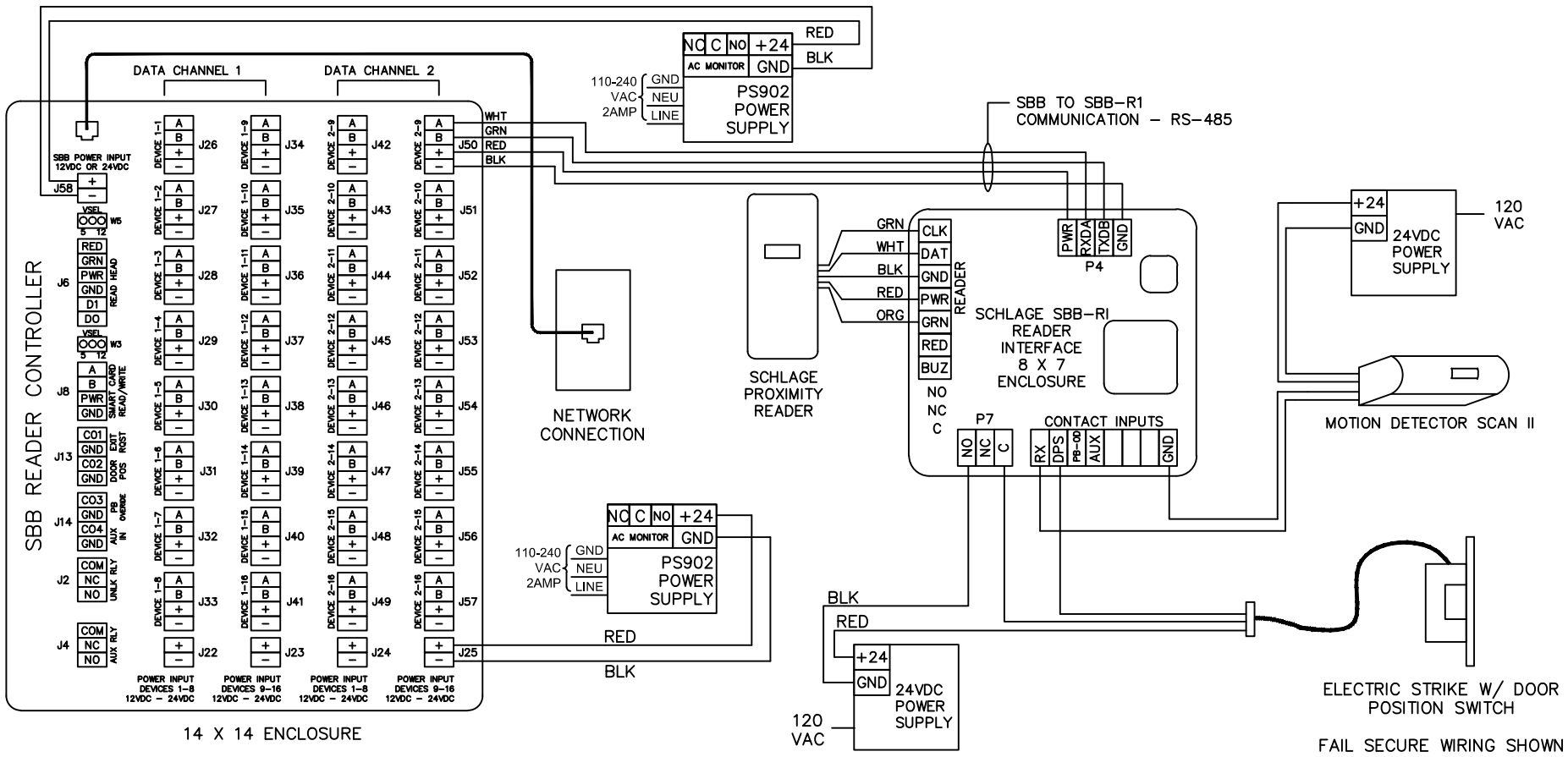
Single SBB SBB–RI Card Reader FSE Electric Strike DPS Scan II

Drawing Type:	Drawing Number:	Rev.
Riser	104980	A



Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded, twisted, shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the lock power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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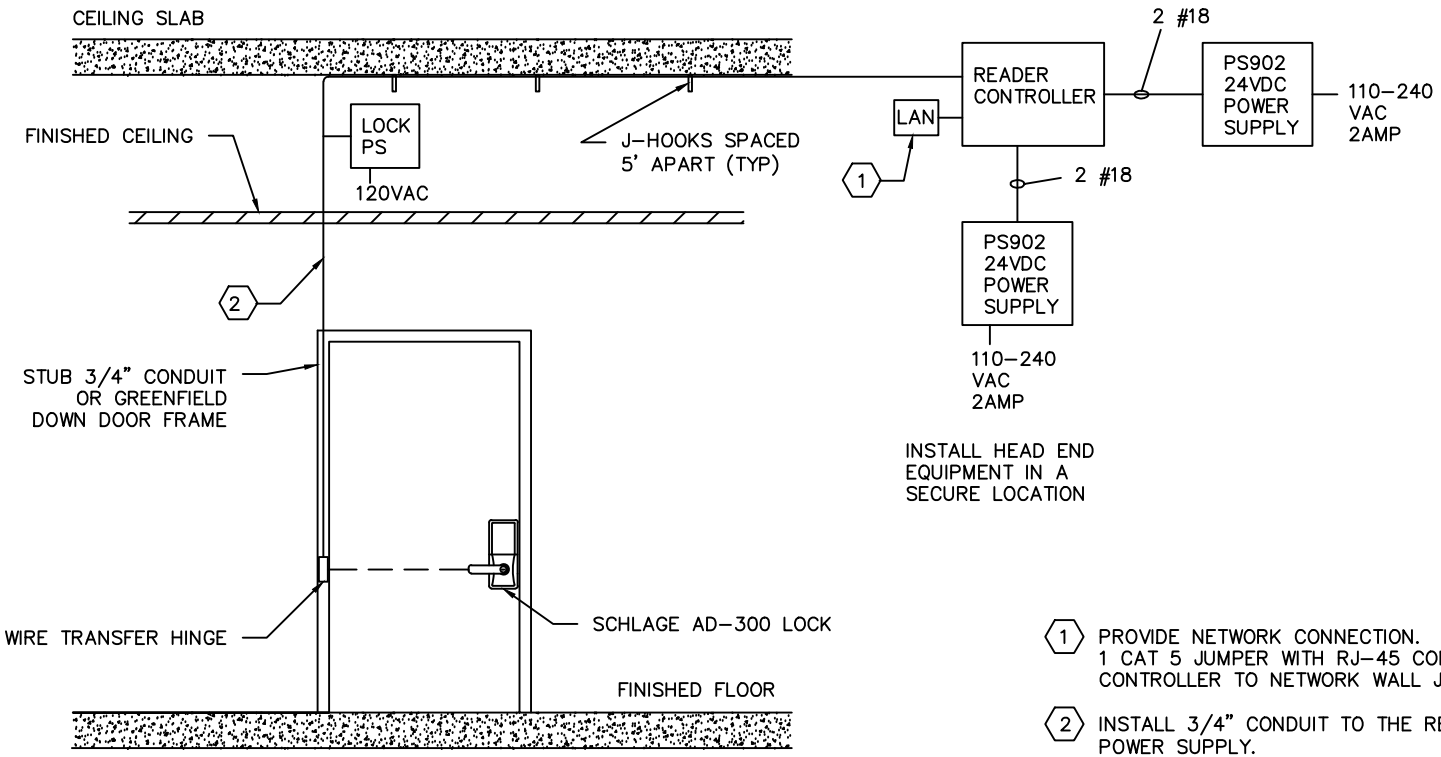
Single SBB SBB–RI Card Reader FSE
Electric Strike DPS Scan II

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104980	A



Drawing not to scale

1. PROVIDE NETWORK CONNECTION.
   1 CAT 5 JUMPER WITH RJ-45 CONNECTORS FROM READER CONTROLLER TO NETWORK WALL JACK.

2. INSTALL 3/4" CONDUIT TO THE READER CONTROLLER AND LOCK POWER SUPPLY.
   RUN 18 AWG 2 COND. STRANDED/TWISTED/SHIELDED TO READER CONTROLLER.
   RUN 18 AWG 2 COND. STRANDED/TWISTED/SHIELDED TO LOCK POWER SUPPLY.

Notes:

1. All security cables shall be 18AWG stranded/twisted/shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the lock power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation only.
6. See reference guide for power supply information.

Function:

Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type

Single Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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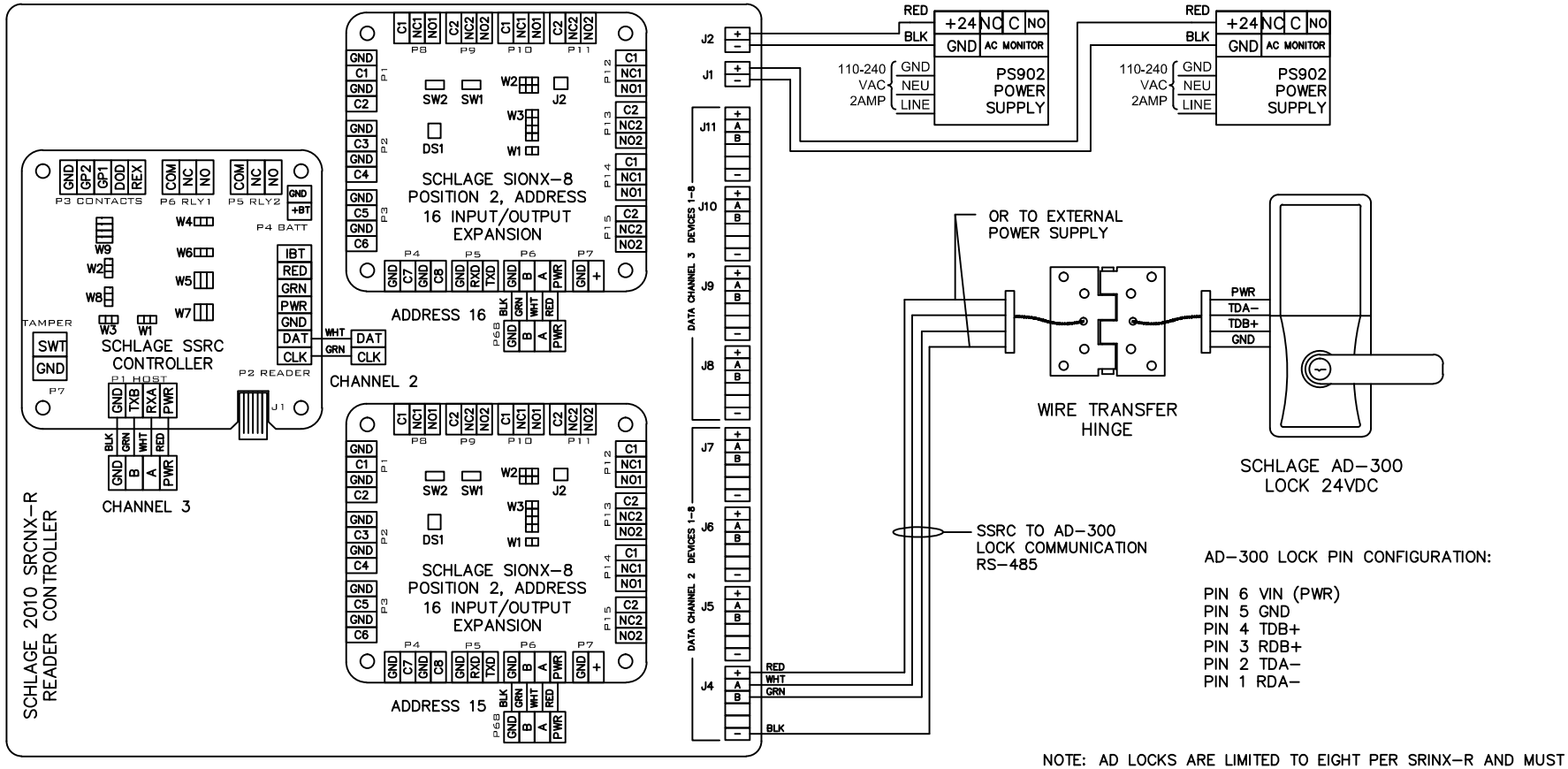
Single SMS SRCNX-R AD300

Drawing Type:	Drawing Number:	Rev.
Riser	104981	A



NOTE: AD LOCKS ARE LIMITED TO EIGHT PER SRINX-R AND MUST BE LANDED ON CHANNEL 1 PORTS 1 THROUGH 4.

Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded, twisted, shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the SMS power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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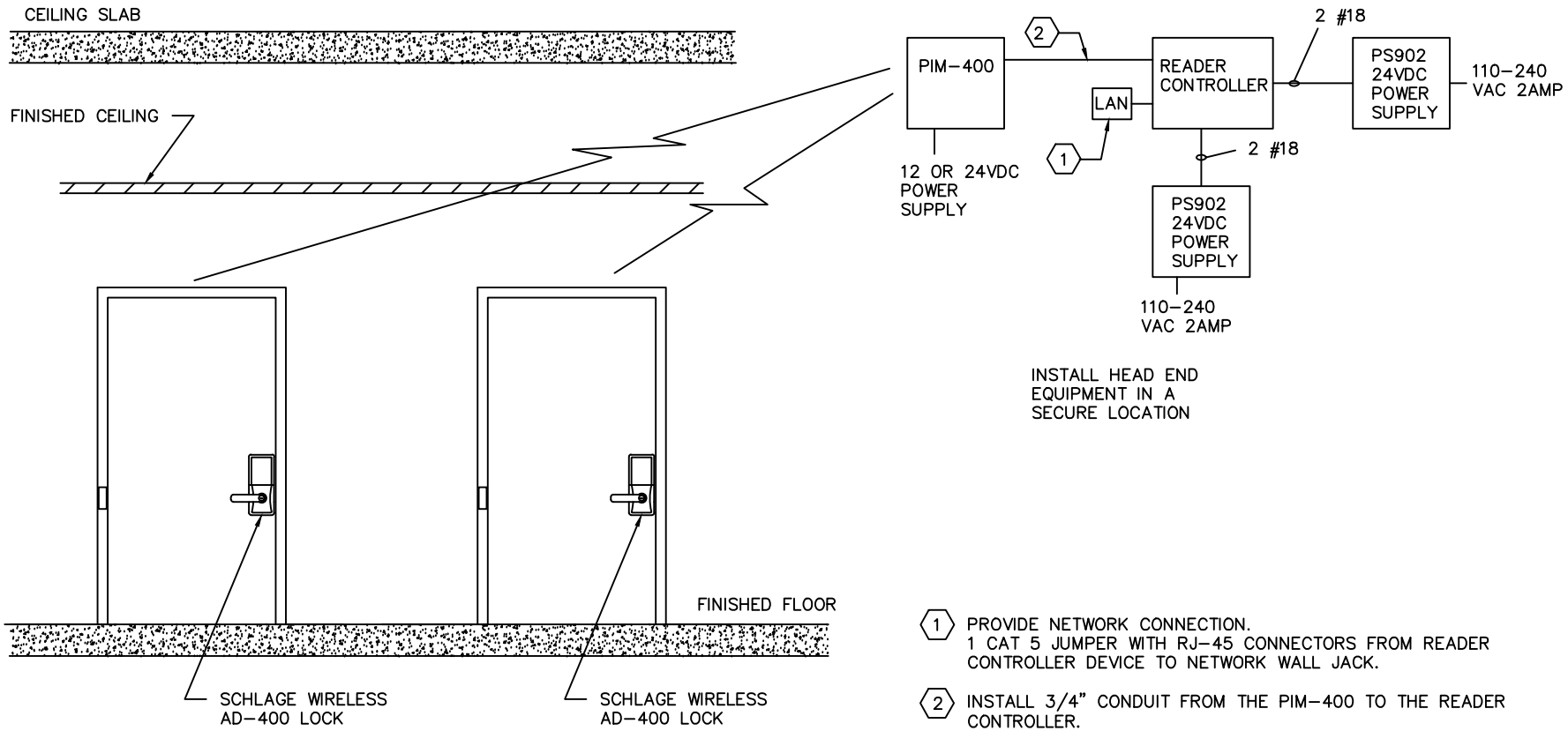
Single SMS SRCNX-R AD300

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104981	A



1. PROVIDE NETWORK CONNECTION.
1 CAT 5 JUMPER WITH RJ-45 CONNECTORS FROM READER CONTROLLER DEVICE TO NETWORK WALL JACK.

2. INSTALL 3/4" CONDUIT FROM THE PIM-400 TO THE READER CONTROLLER.
RUN 18 AWG 2 COND. STRANDED/TWISTED/SHIELDED TO READER CONROLLER.

Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded/twisted/shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the SMS power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation only.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single or Double Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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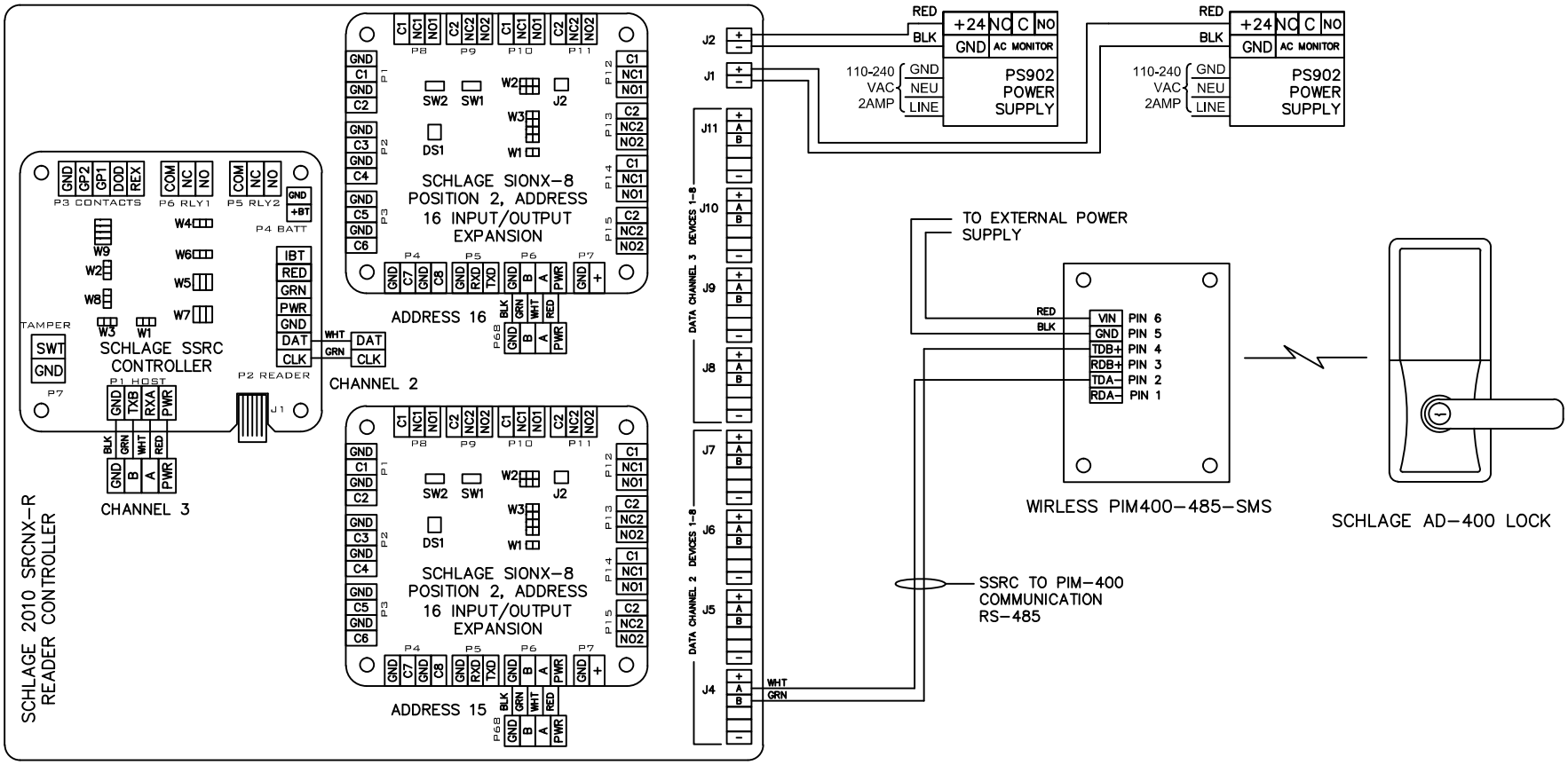
Security Technologies

Single SMS SRCNX-R AD400
PIM400-485-SMS

Drawing Type:	Drawing Number:	Rev.
Riser	104982	A



Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded, twisted, shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the SMS power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type
Single or Double Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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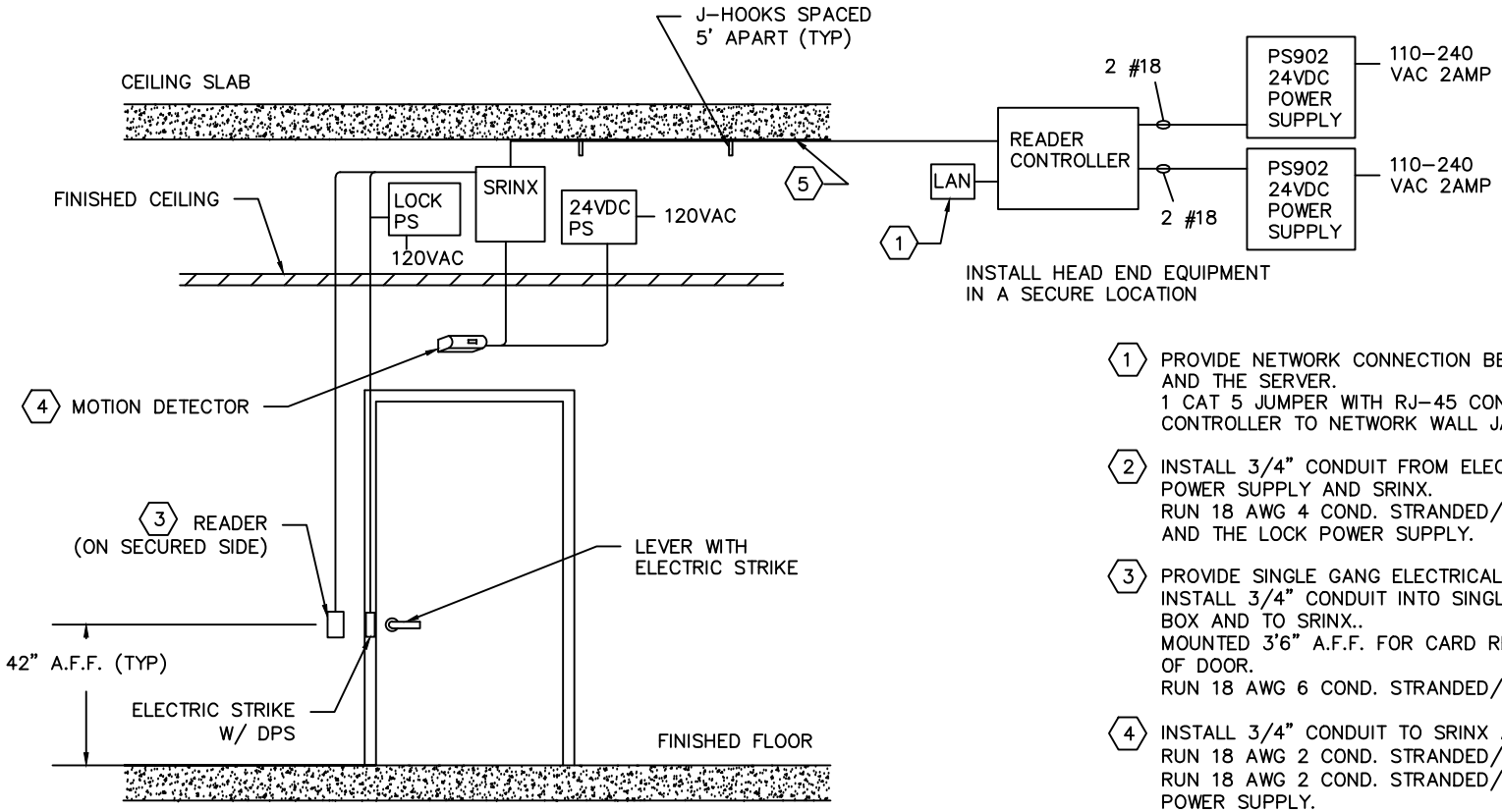
Security Technologies

Single SMS SRCNX-R AD400
PIM400-485-SMS

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104982	A



1. PROVIDE NETWORK CONNECTION BETWEEN READER CONTROLLER AND THE SERVER.
1 CAT 5 JUMPER WITH RJ–45 CONNECTORS FROM READER CONTROLLER TO NETWORK WALL JACK.

2. INSTALL 3/4" CONDUIT FROM ELECTRIC STRIKE AND TO LOCK POWER SUPPLY AND SRINX.
RUN 18 AWG 4 COND. STRANDED/TWISTED/SHIELDED TO SRINX AND THE LOCK POWER SUPPLY.

3. PROVIDE SINGLE GANG ELECTRICAL JUNCTION BOX.
INSTALL 3/4" CONDUIT INTO SINGLE GANG ELECTRICAL JUNCTION BOX AND TO SRINX..
MOUNTED 3'6" A.F.F. FOR CARD READER ON THE SECURED SIDE OF DOOR.
RUN 18 AWG 6 COND. STRANDED/TWISTED/SHIELDED TO SRINX.

4. INSTALL 3/4" CONDUIT TO SRINX AND TO 24VDC POWER SUPPLY.
RUN 18 AWG 2 COND. STRANDED/TWISTED/SHEILDED TO SRINX.
RUN 18 AWG 2 COND. STRANDED/TWISTED/SHEILDED TO 24VDC POWER SUPPLY.

5. INSTALL 3/4" CONDUIT ALONG UNFINISHED CEILING TO THE READER CONTROLLER LOCATION.
RUN 18 AWG 4 COND. STRANDED/TWISTED/SHIELDED FROM THE SRINX TO THE READER CONTROLLER.

Drawing not to scale

Notes:

1. All security cables shall be 18AWG stranded/twisted/shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the SMS power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation only.
6. See reference guide for power supply information.

Function:

Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type

Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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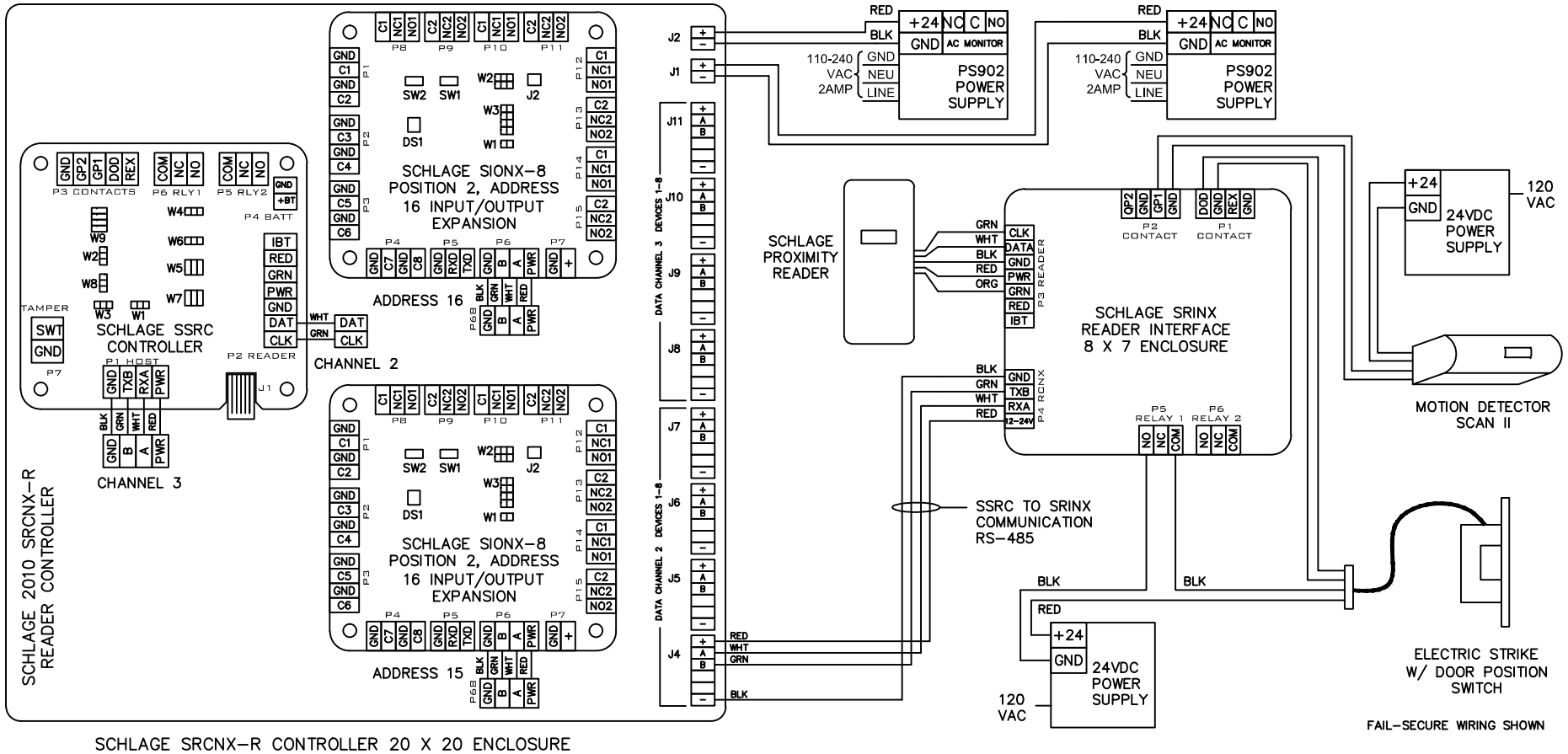
Security Technologies

Single SMS SRCNX–R SRINX Card Reader
FSE Electric Strike DPS Scan II

Drawing Type:	Drawing Number:	Rev.
Riser	104983	A



Drawing not to scale

Notes:

1. All security cables shall be 18AWG stranded, twisted, shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the lock power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation.
6. See reference guide for power supply information.

Function:

Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Type

Single Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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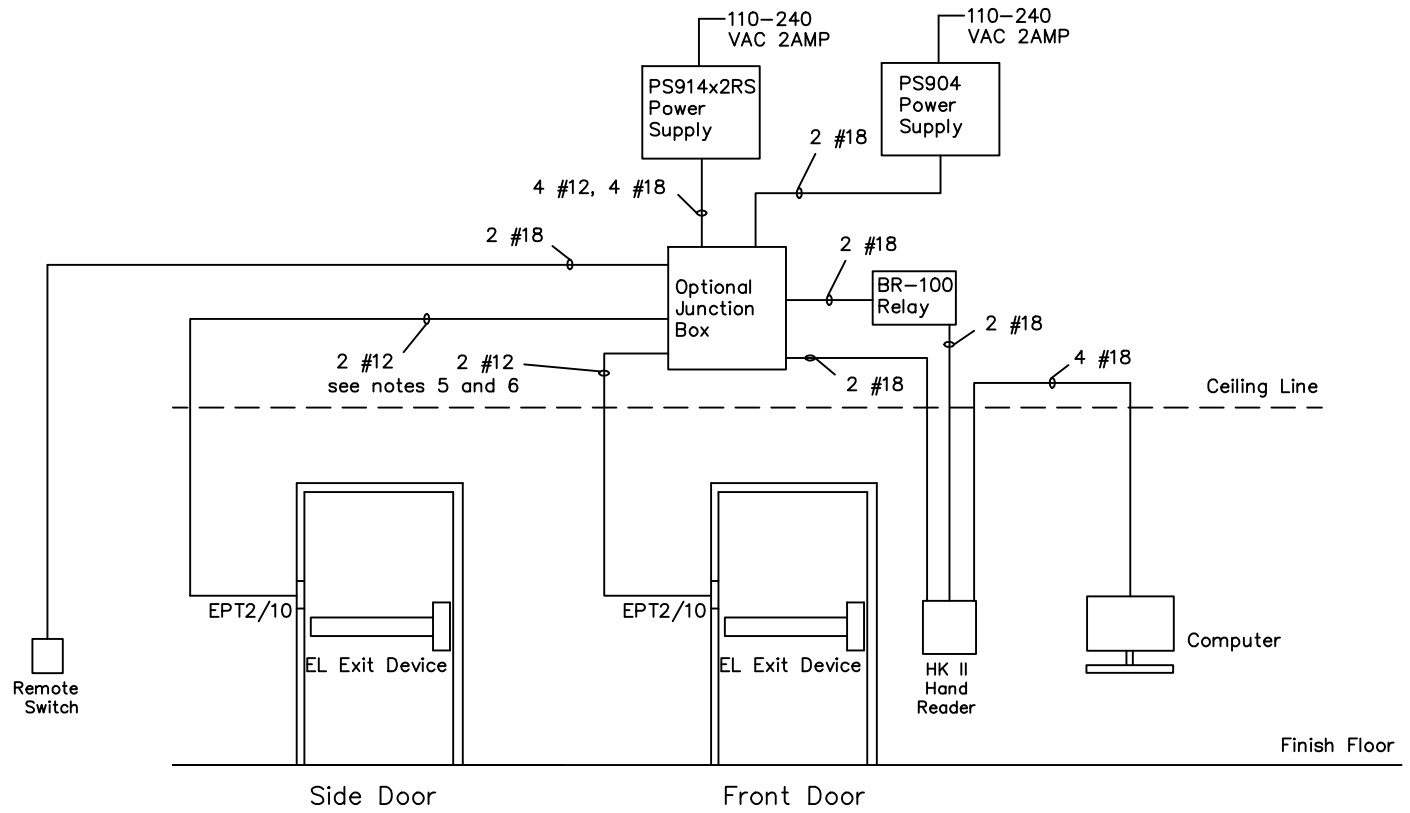
Single SMS SRCNX-R SRINX Card Reader
FSE Electric Strike DPS Scan II

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104983	A



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi–conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #12 gauge wire for distances up tp 200' from EPT to PS914.
6) Use #14 gauge wire for distances up to 100' from EPT to PS914.

Function:
Door normally closed and locked.
Valid hand read unlocks doors for configured amount of time.
Free egress at all times.

Type
Single Door

Drawn	08–09–11
Checked	08–10–11
Approved	08–10–11

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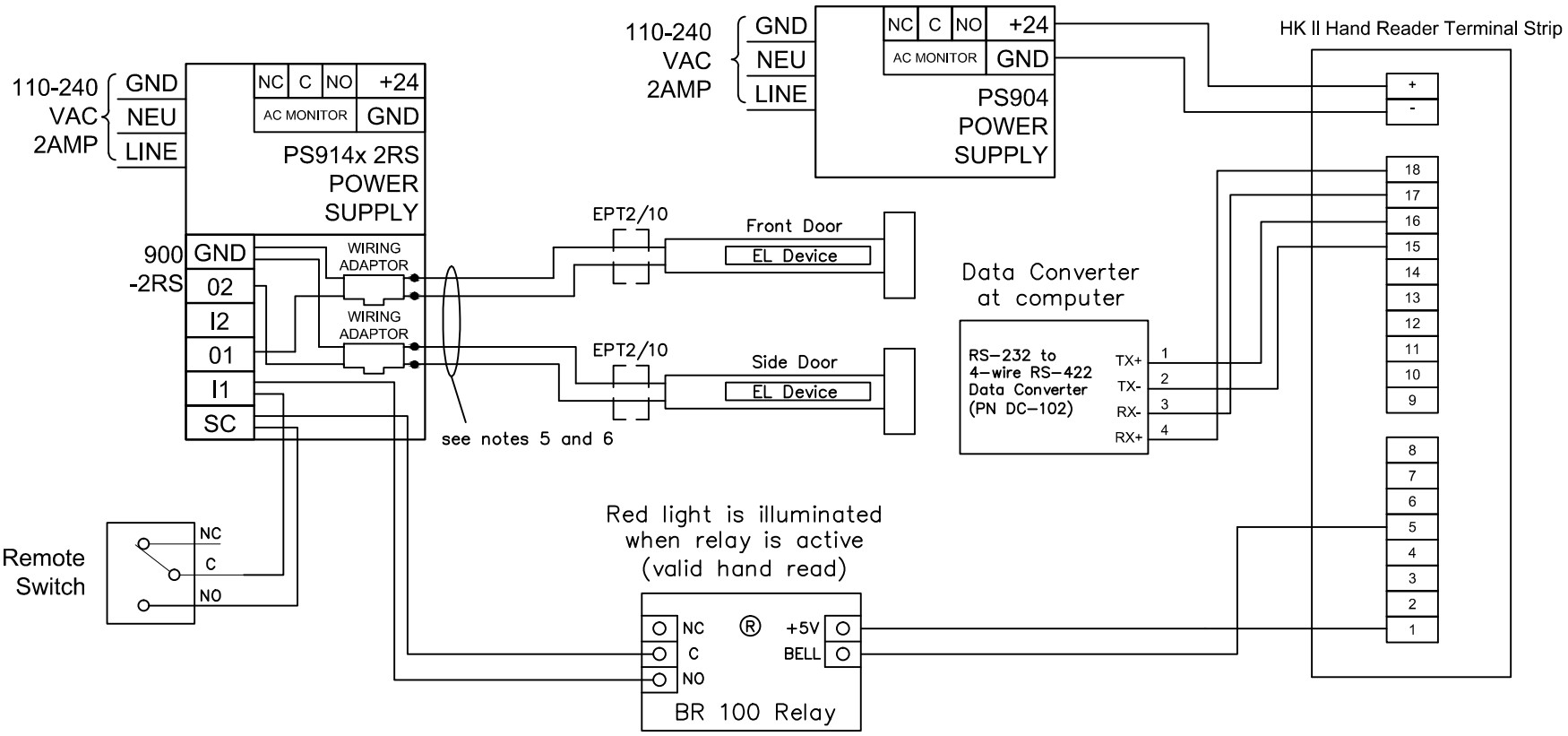
Security Technologies

Single PS904 PS914 2xEL99 HKII Remote Release Computer

Drawing Type:	Drawing Number:	Rev.
Riser	104984	A



Drawing not to scale

Notes:
1) All low voltage wiring to be standard, multi-conductor color coded without splices.
2) Wiring to conform to applicable national, state and local electrical codes.
3) Refer to specific product installation instructions for specific wiring requirements.
4) This drawing is for graphical representation of products detailed in the hardware set only.
5) Use #12 gauge wire for distances up to 200' from EPT to PS914.
6) Use #14 gauge wire for distances up to 100' from EPT to PS914.

Function:
Door normally closed and locked.
Valid hand read unlocks doors for configured amount of time.
Free egress at all times.

Type
Single Door

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11

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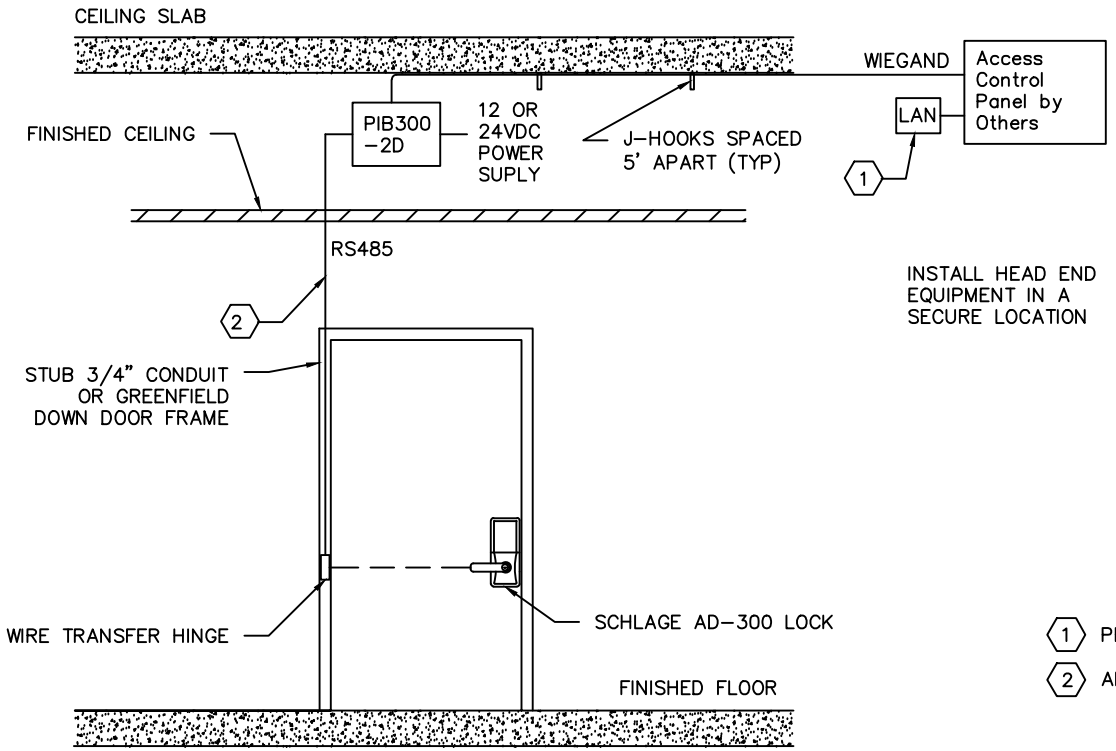
Security Technologies

Single PS904 PS914 2xEL99 HKII Remote Release Computer

Drawing Type:	Drawing Number:	Rev.
Wiring Diagram	104984	A



1. PROVIDE NETWORK CONNECTION AS REQUIRED BY ACP.
2. ALL WIRING MUST COMPLY WITH NFPA70 (NEC) AND LOCAL CODES.

Drawing not to scale

Notes:
1. Please consult with Access Control System provider for specific wiring information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.
Each PIB300-2D can support up to two (2) AD-300 devices.
Consult Access Control System provider for specific reader capacity per ACP.

Drawn	12-28-11
Checked	01-11-12
Approved	01-11-12

Type: Single Door

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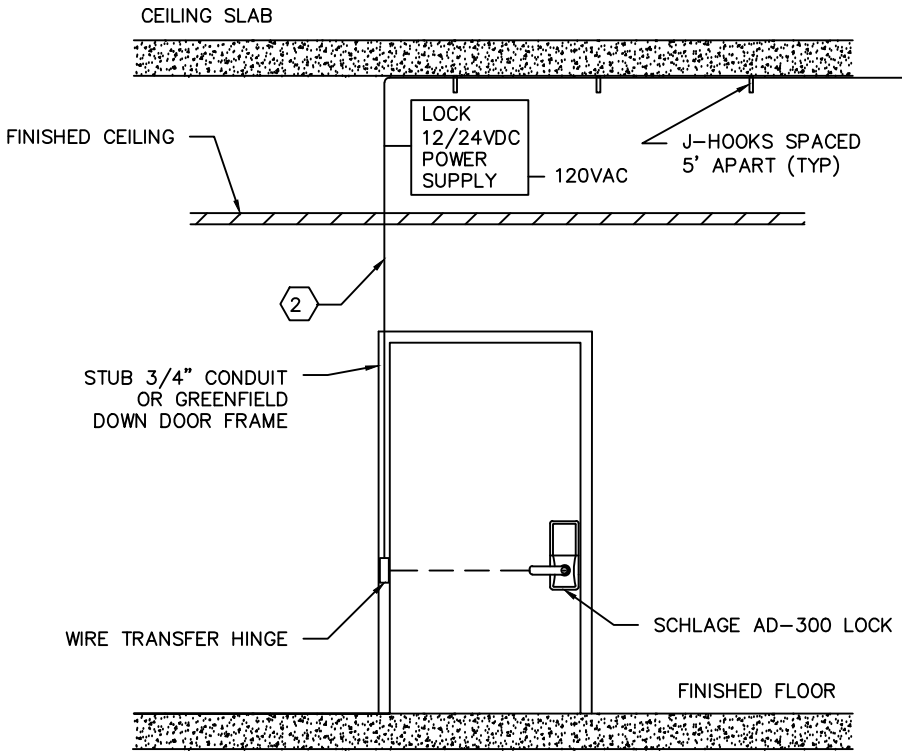
Single AD300 PIB300-2D ACP by Others Wiegand

Drawing Type:	Drawing Number:	Rev.
Riser	105348	A



1. PROVIDE NETWORK CONNECTION AS REQUIRED BY ACP.
2. ALL WIRING MUST COMPLY WITH NFPA70 (NEC) AND LOCAL CODES.

Drawing not to scale

Notes:
1. All security cables shall be 18AWG stranded/twisted/shielded. Please note conductors as shown.
2. All network cables shall be CAT 5 or greater.
3. Optional fire tie in module can be added to the lock power supplies.
4. All wiring must comply with NFPA 70 (NEC) and local codes.
5. Please follow specific device instructions provided with the products. This is a pictorial representation only.
6. See reference guide for power supply information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.

Consult access control system provider for specific capacity per ACP.

Type
Single Door

Drawn	12-28-11
Checked	01-11-12
Approved	01-11-12

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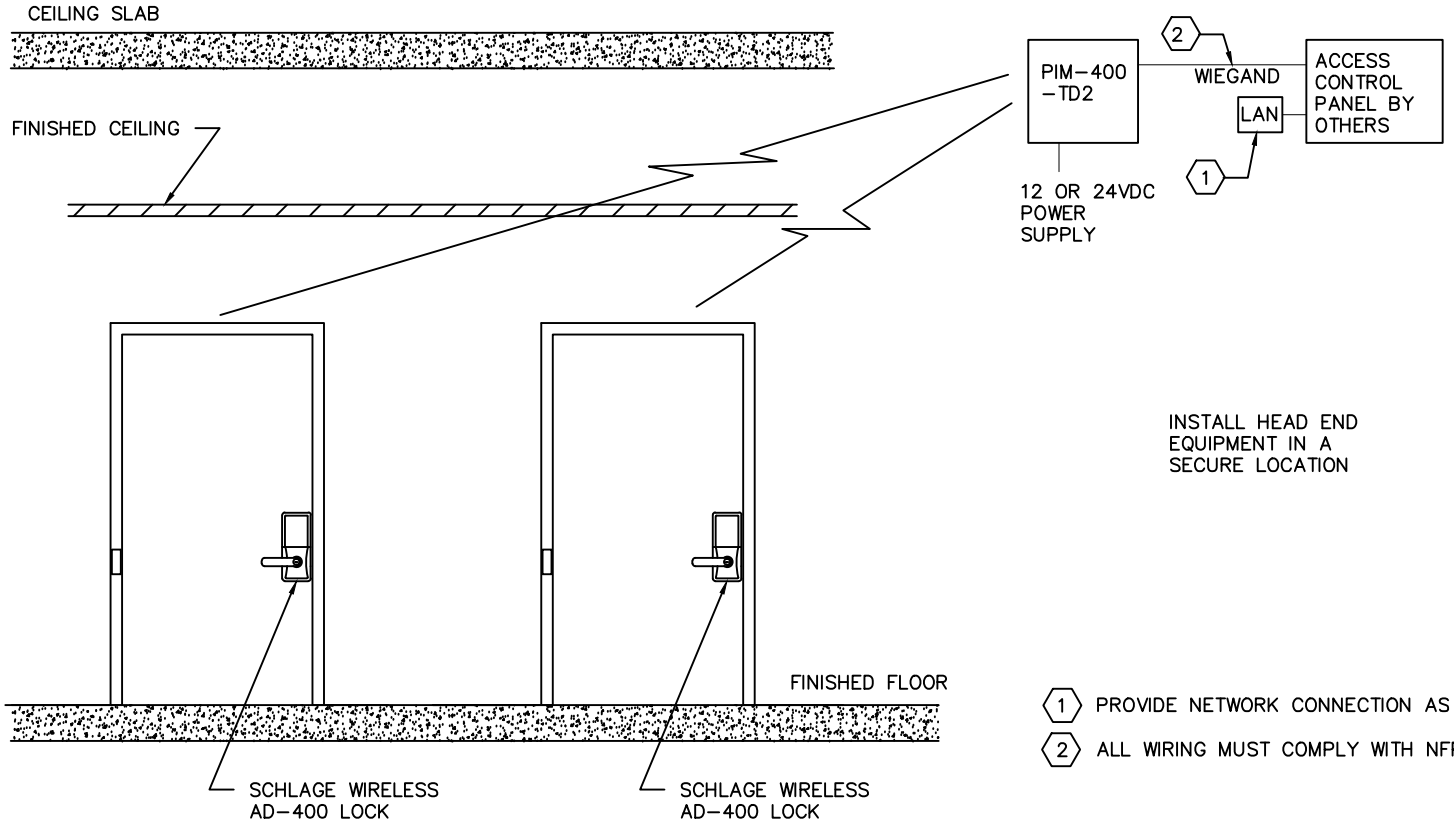
Single AD300 IR Integrated Partner ACP RS485

Drawing Type:	Drawing Number:	Rev.
Riser	105349	A



1. PROVIDE NETWORK CONNECTION AS REQUIRED BY ACP.
2. ALL WIRING MUST COMPLY WITH NFPA70 (NEC) AND LOCAL CODES.

Drawing not to scale

Notes:
1. Please consult with Access Control System provider for specific wiring information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.
Each PIM400–TD2 can support up to two (2) AD–400 devices. Consult Access Control System provider for specific capacity per ACP.

Type
Single or Double Door

Drawn	12–28–11
Checked	01–11–12
Approved	01–11–12

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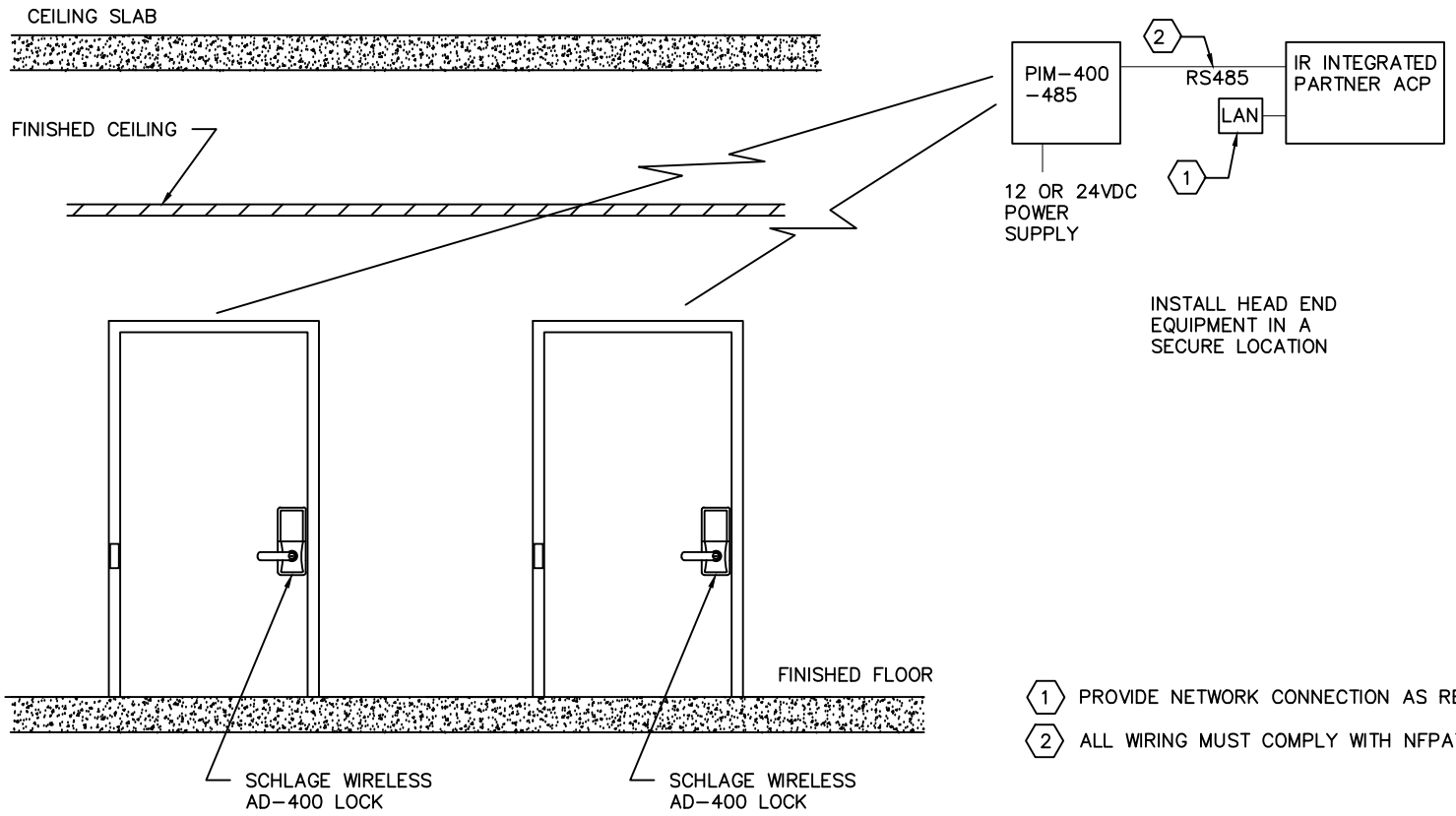
Single AD400 PIM400–TD2 ACP
BY OTHERS WIEGAND

Drawing Type:	Drawing Number:	Rev.
Riser	105350	A



1. PROVIDE NETWORK CONNECTION AS REQUIRED BY ACP.
2. ALL WIRING MUST COMPLY WITH NFPA70 (NEC) AND LOCAL CODES.

Drawing not to scale

Notes:
1. Please consult with Access Control System provider for specific wiring information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.
Each PIM400–485 can support up to sixteen (16) AD–400 devices. Consult Access Control System provider for specific capacity per ACP.

Type
Single or Double Door

Drawn	12–28–11
Checked	01–11–12
Approved	01–11–12

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Single AD400 PIM400–485 IR Integrated Partner ACP RS485

Drawing Type:	Drawing Number:	Rev.
Riser	105351	A

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