e-SMART LOCK

Wireless Online
Smart Locking Solution Provider

e·Smart Lock PASSTECH

PASSTECH

For almost 20 years since established in 2003, Passtech has been dedicated to develop and provide an innovative electronic locking systems for our customers. Launching the world 1st HF RFID locker locks in 2005 and world 1st wireless online locker lock system in 2013 and our 1st mobile access locker lock system in 2020, we are proud of leading a future advanced electronic locking system in the world.

Technology Leadership

Passtech continues to develop an innovative future locker lock solutions in design and technology including standalone locks, wireless online & cloud based mobile access locks.

Customer service

Passtech listens to our customers' voices and provides a tailor-made customer services such as hardware & software customization services to fulfill customer requirements

Global Partnership

We are proud to work with our global partners who are brand furniture manufacturers, lock distribution channels & dealers and access solution providers. We are always opened to be your partners.

Quality Commitment

We are committed to seamlessly improving the quality of products & quality processes to make more reliable products and eventually ensure customer satisfaction.

HISTORY

2021 Launched Furniture locks

Launched Slim locks

2020 Released Cloud base MIS admin app

2019 Released the 3rd generation of locker lock, wireless online metal locker lock and cloud mobile key solution

2018 Released the 2nd generation of new lock management software 'E-smart Plus+'

2017 Developed the world's first exclusive technology of synchronization between RF cards and smartphone

Released BLE mobile access locker lock

2015 Released the 2nd generation of intelligent RFID locker lock solution

Developed HID locker locks

2014 Launched advanced RFID locker locks with IoT security solution

2012 Launched the world's first wireless online RFID locker locks

2011 Launched RFID furniture locks

2010 Launched hotel RFID safes

2009 Launched the 1st generation of intelligent RFID locker lock solution

2008 Designated as export promising enterprise

2007 Founded R&D center and certificated as a venture and innovative business enterprise

Registered a factory

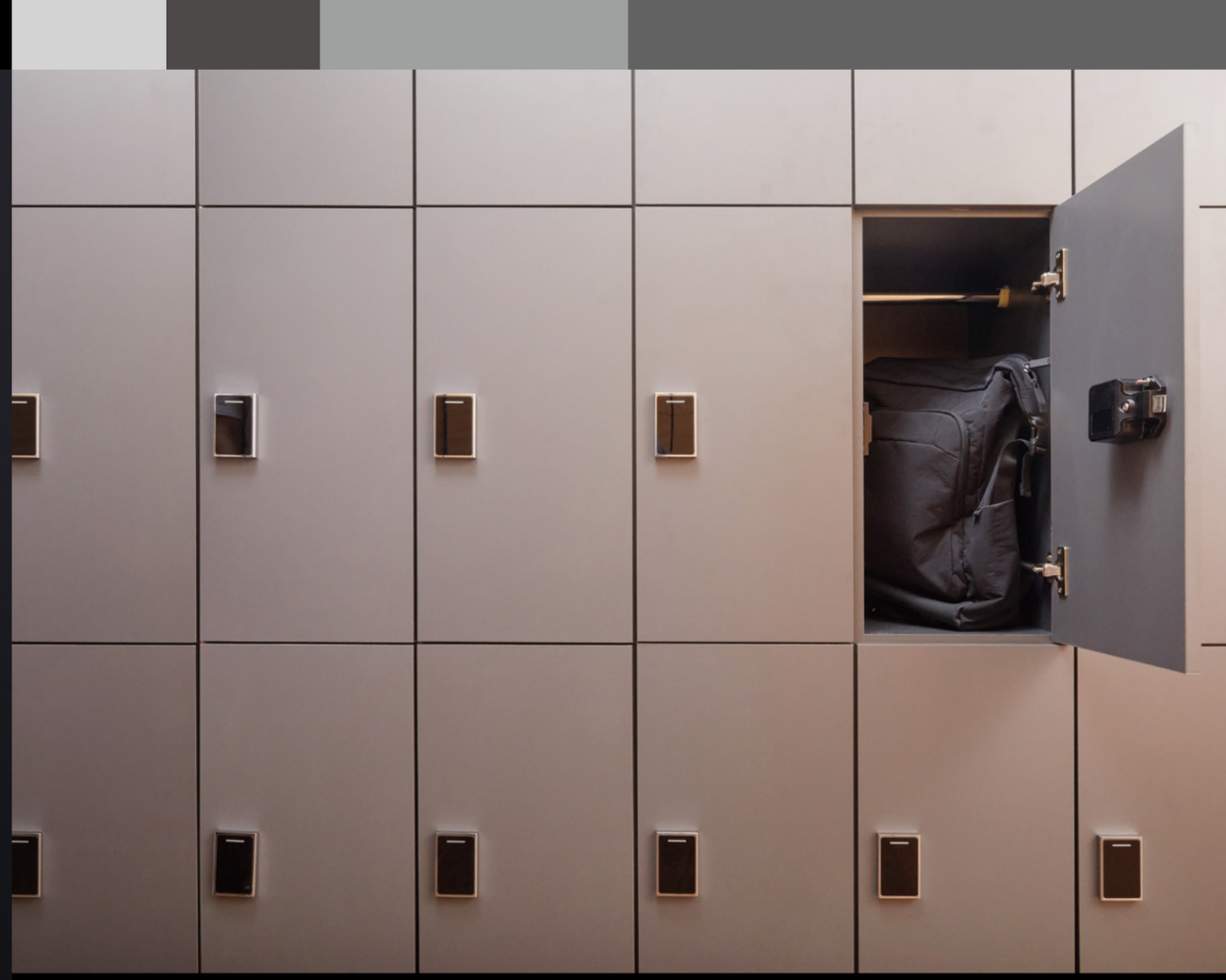
2006 Developed the world's first HF RFID locker locks

2005 Developed RFID modules

Certificated ISO 9001

2004 Developed access control system

2003 Established 'PASSTECH Co., Ltd.'



Why PASSTECH?

01
- RFID/Mobile technology R&D capability
- Rich and long experienced engineers
- Real-time customizing

02
- Own R&D (S/W, H/W)
- Own factory and quality assurance
- On-time delivery

03
- Proven quality in global market
- Reliable reference
- Competitive price

Wireless Online Smart Locking Solution Provider

Info Terminal

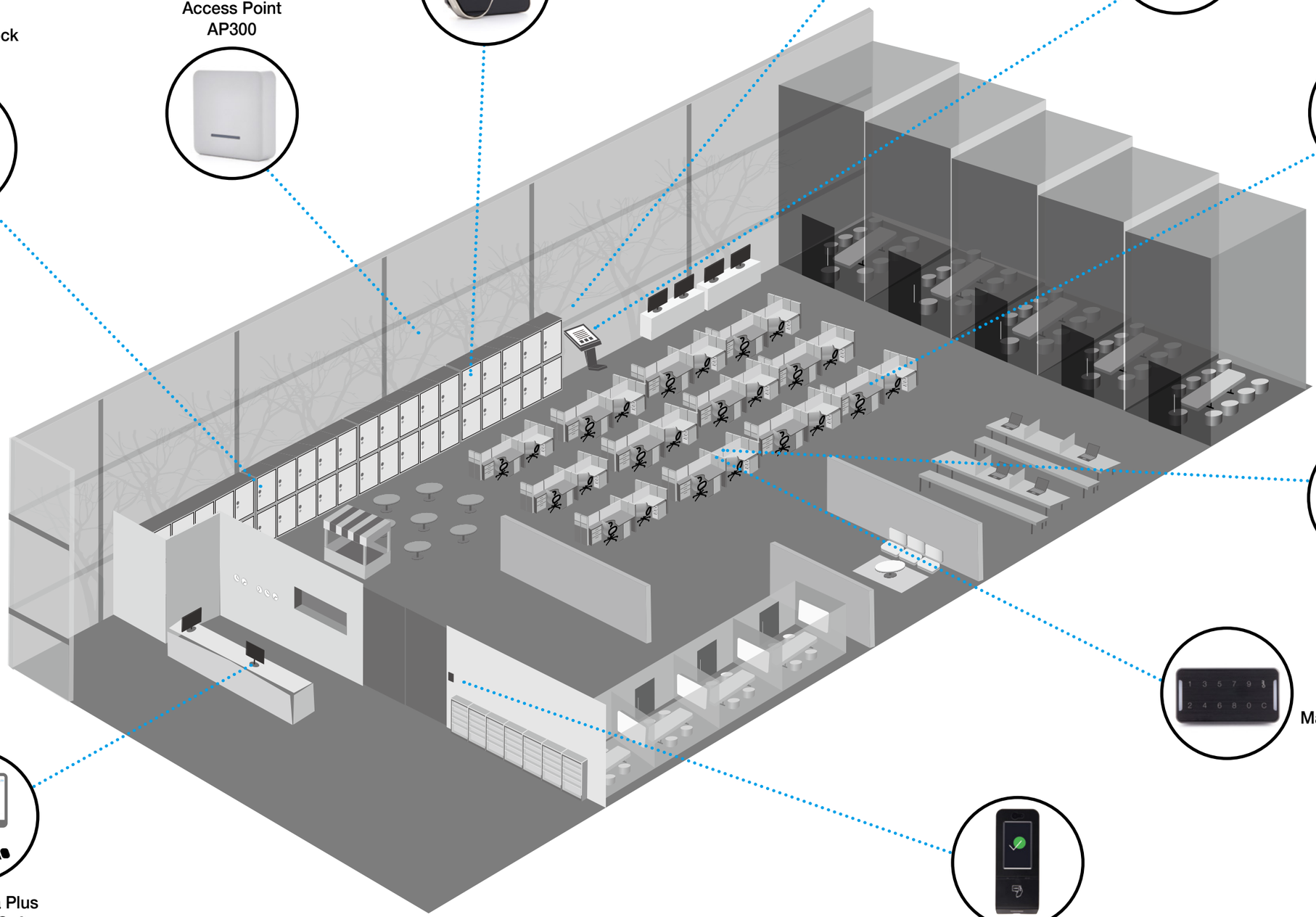
Esmart Slim Lock
SL600TWR

Kiosk Terminal

Access Point
AP300

Esmart Ultra Lock
ZP100WR

Esmart Flex Lock
FX200



Slave Lock
FX100

Master Lock

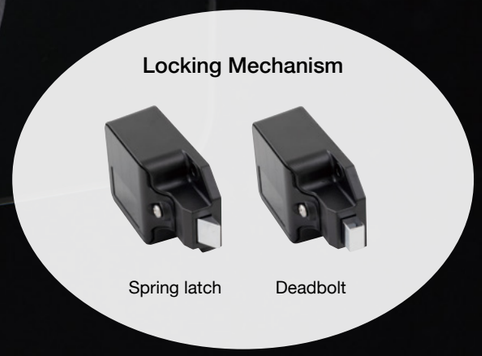
Esmart Ultra Plus
Server & Client Software

Wall Reader

Standalone Offline Lock

e-Smart Classic Series

User friendly standalone offline locker lock which provides you the most suitable operation mode in accordance with your preference.



e-Smart Classic Series

One Touch RFID

One Touch ZP100

Push Button RFID

Push Button ZP200R

Standard Keypad

Standard Keypad PT300BR

Metal Standard Keypad

Rubber Keypad PT500B

Metal Rubber Keypad

Rubber Keypad PT600BR

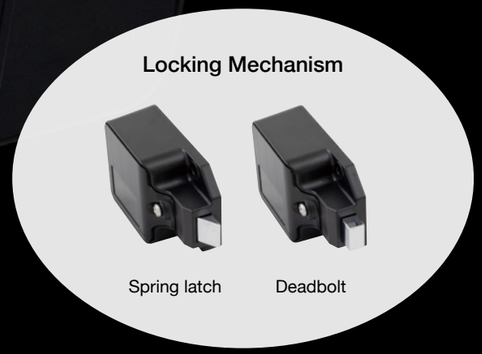
Feature

- Support various RFID credentials (13.56MHz ISO 14443 Type A/B - Mifare, DESFire, HID, etc.)
- Free mode (Shared use) / Assigned mode (Permanent use)
- Multi-User / Multi-Locker
- Time based operation function (Auto opening, Time limit, 3 Shift)
- Audit trail (Up to 150)
- Lock information check (Lock ID, battery status, User card info, firmware version etc.)
- Easy Lock setting and management by one Setup card
- Easy to fit and retrofit (Metal, wood and laminate lockers)
- Spring latch / Deadbolt
- Powered by 4 AA batteries (Approximately 3~5 years battery life)
- IP55 rated for moisture and dust protection
- Support E-smart Mobile ID (Free locker selection by mobile APP)
- Support E-smart Mobile Sync (Synchronize RF card and smartphone BLE)
- Support E-smart Mobile Key (Cloud server generated mobile key - Optional)
- Support E-smart Smart Code (Optional, Keypad model only)

Wireless Online Lock

e-Smart Ultra Series

The world's first wireless online locker lock which enables you to monitor and control it in real-time from the center.



One Touch Online

Ultra One Touch ZP100WR

Push Button Online

Ultra Push Button ZP200WR

Touch Screen Online

Ultra Touch Screen PT200TWR

Standard Keypad Online

Ultra Keypad PT300BWR

Metal Touch Screen Online

Ultra Touch Screen PT600TWR

Feature

- Real-time monitoring
- Online setup and maintenance
- Audit trail (Online - Unlimited, Card - Up to 150)
- Remote lock open/close
- Remote lock and card blocking
- Change password online
- Change user information online
- Support various RFID credentials (13.56MHz ISO 14443 Type A/B - Mifare, DESFire, HID, etc.)
- Free mode (Shared user) / Assigned mode (Permanent user) / Smart-Assigned mode
- Multi-User / Multi-Locker
- Time based operation function (Auto opening, Time limit, 3 Shift)
- Lock information check (Lock ID, battery status, user card info, firmware verson etc.)
- Easy lock setting and management by one Setup Card
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- Support E-smart Mobile Key (Cloud server generated mobile key - Optional)
- Support E-smart Smart Code (Optional, Keypad model only)

Wireless Online Slim Lock

e-Smart Slim Series

e-Smart Slim is designed modernistically and ergonomically for a convenient use. It is the most advanced and innovative locker locks with various types of lock selections. Not only offering an RFID locks, but also offering keypad and e-display(e-paper) options. By using the locks, it will allow you efficient management with high security.

e-Display Option

- Locker number / User name
- Occupancy Status
- Battery Status
- Customized image available.

e-Smart Slim Series

One Touch Online

One Touch SL100WR

Touch Screen Online

Touch Screen SL200TWR

Touch Screen Online

Touch Screen SL300TWR

E-Display Online

E-Display SL300EWR

Touch Screen Online

Touch Screen SL600TWR

E-Display Online

E-Display SL600EWR

Feature

- Real-time monitoring
- Online setup and maintenance
- Audit trail (Online - Unlimited, Card - Up to 150)
- Remote lock open/close
- Remote lock and card blocking
- Change password online
- Change user information online
- Support various RFID credentials (13.56MHz ISO 14443 Type A/B - Mifare, DESFire, HID, etc.)
- Free mode (Shared user) / Assigned mode (Permanent user) / Smart-Assigned mode
- Multi-User / Multi-Locker
- Time based operation function (Auto opening, Time limit, 3 Shift)
- Lock information check (Lock ID, battery status, user card info, firmware verson etc.)
- Easy lock setting and management by one Setup Card
- Easy to fit and retrofit (Metal, wood and laminate lockers)
- Spring latch / Deadbolt
- Powered by 4 AA batteries (Approximately 3~5 years battery life)
- Intuitive E-paper display
- Free to create the lock screens
- Support E-smart Mobile ID (Free locker selection by mobile APP)
- Support E-smart Mobile Sync (Synchronize RF card and smartphone BLE)
- Support E-smart Mobile Key (Cloud server generated mobile key - Optional)
- Support E-smart Smart Code (Optional, Keypad model only)

e-Smart Flex Series

Furniture lock(Battery CR123A)

FX100

Side lock(Wired power)

FX200

Front Option

FX100

FX100/FX200

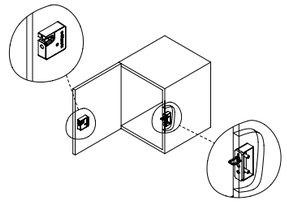
Striker Option

Feature

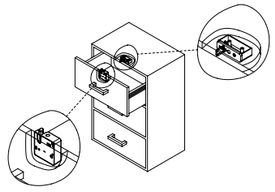
- Support various RFID credentials (13.56MHz ISO 14443 Type A/B - Mifare, DESFire, HID, etc.)
- Free mode (Shared user) / Assigned mode (Permanent user) / Smart-Assigned mode
- Multi-User / Multi-Locker
- Time based operation function (Auto opening, Time limit, 3 Shift)
- Lock information check (Lock ID, battery status, user card info, firmware verson etc.)
- Easy lock setting and management by one Setup Card
- Easy to fit and retrofit (Metal, wood and laminate lockers)
- Powered by 3V CR123A battery (FX100) / 5V wired DC cable (FX200)
- Battery Life: 1.4 year (Standalone) to 5 years (Slave function)
- Master / Slave option available
- Kiosk available
- USB device charging / LED Lighting available (FX200 Only)
- Real-time monitoring
- Online setup and maintenance
- Audit trail (Online - Unlimited, Card - Up to 150)
- Remote lock open/close
- Remote lock and card blocking
- Change user information online
- Support E-smart Mobile ID (Free locker selection by mobile APP)
- Support E-smart Mobile Sync (Synchronize RF card and smartphone BLE)
- Support E-smart Mobile Key (Cloud server generated mobile key - Optional)
- Support E-smart Smart Code (Optional, Keypad model only)

Supports any types of Furniture

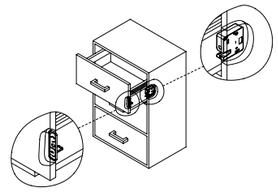
FX100 (Battery type)



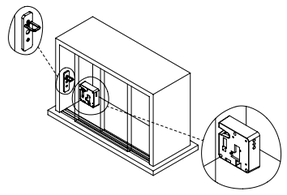
Visible/Invisible(Front lock)



Invisible(Drawer top)

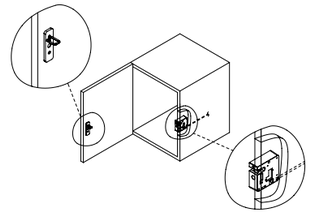


Invisible(Drawer side)

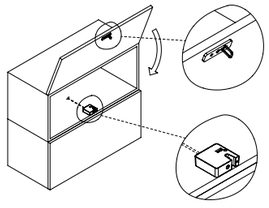


Slide

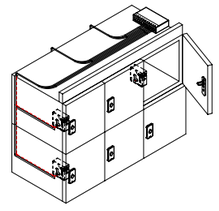
FX200 (Wired power DC5V type)



Visible/Invisible(Side lock)

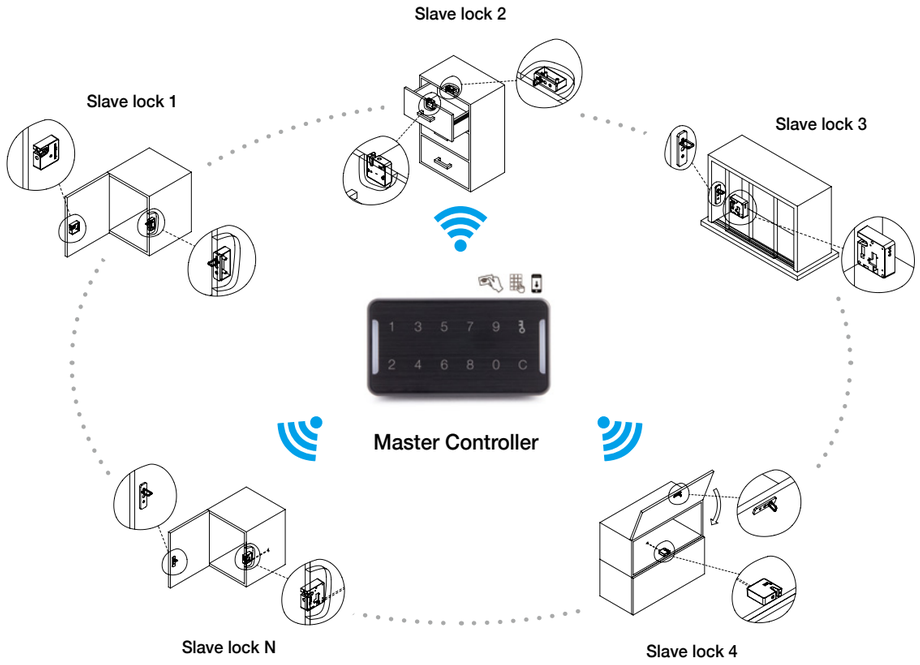


Visible/Invisible(Top)

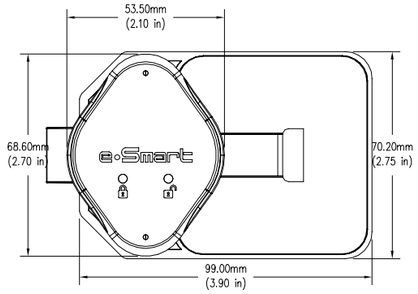


Wired power solution

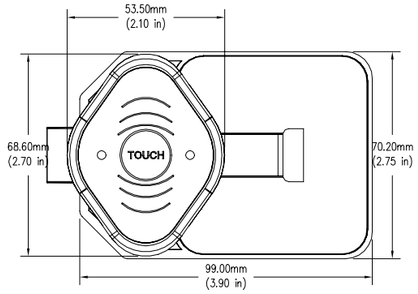
Master-Slave



ZP Series

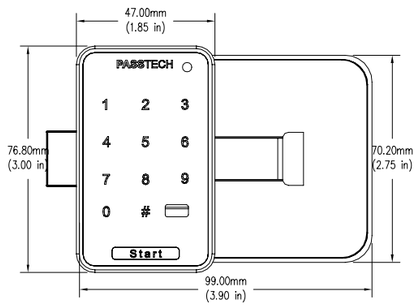


ZP100/ZP100WR

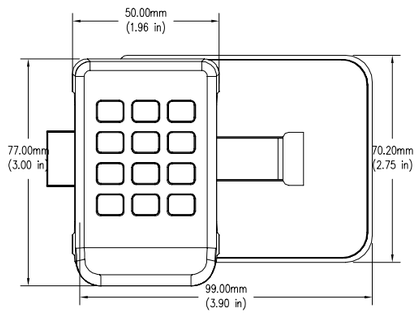


ZP200R/ZP200WR

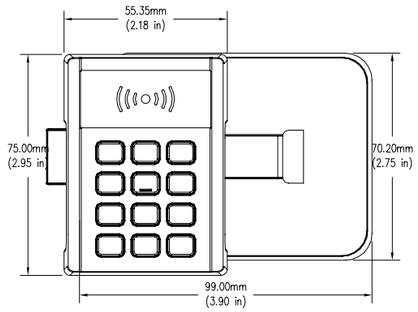
PT Series



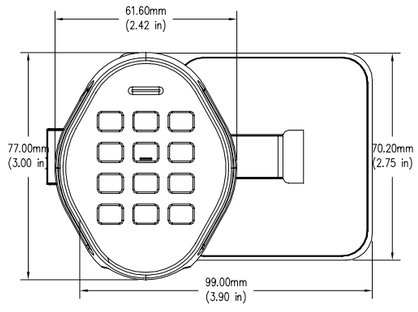
PT200TWR



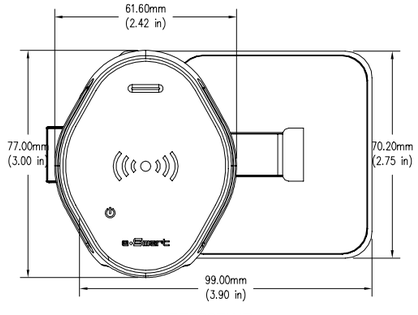
PT300BR/BWR



PT500B

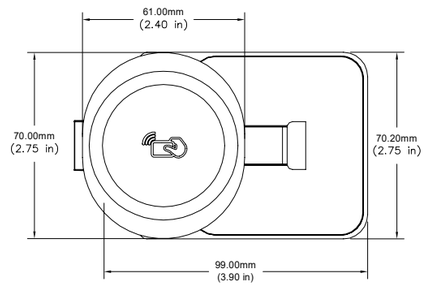


PT600BR

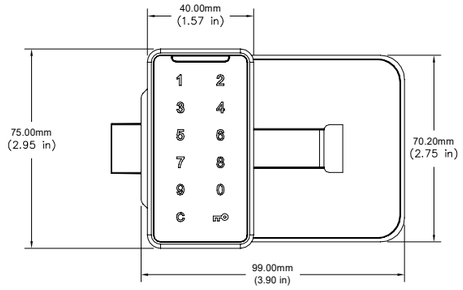


PT600TWR

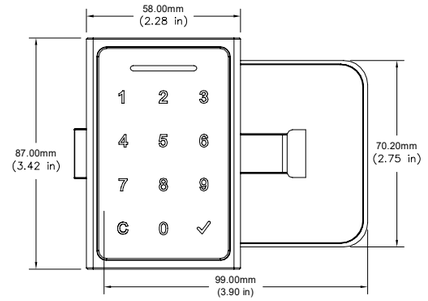
SL Series



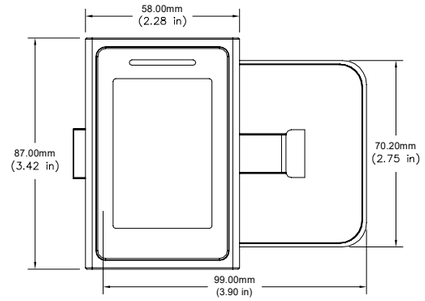
SL100WR



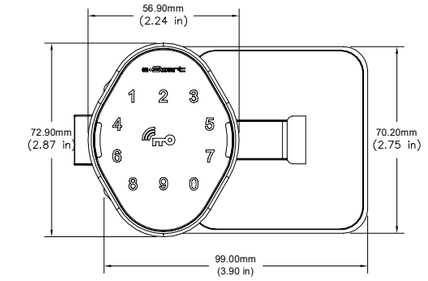
SL200TWR



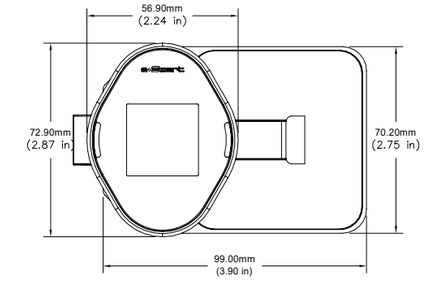
SL300TWR



SL300EWR

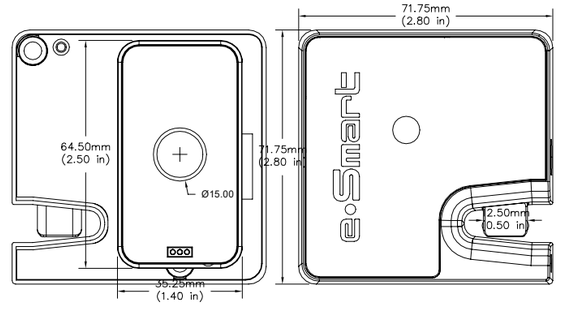


SL600TWR

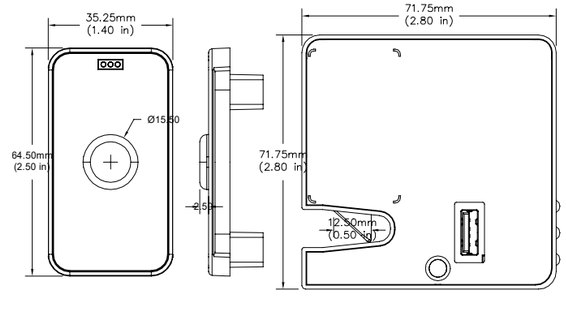


SL600EWR

FX Series



FX100



FX200

System Components

DE-620
(RFID card encoder)

iTOUCH POP/PopX
(Info terminal)

AP300
(Wireless Access Point)

Door Lock

RFID
Credentials

Emergency
Battery Pack

AP300 Wireless access point

ITEM	SPECIFICATION
Communication with Server	TCP/IP (standard), 2.4Ghz Wireless(ONLINE LOCK COMM)
Material	Polycarbornate
Security	AES128
Indicator	LED
Effective range	About 50 meters in open area (without barrier)
Communication Frequency with locks	2.4GHz IEEE 802.15.4 Compliant RF Transceiver 40-50M (Between Lock and AP)
Dimension	101.60 x 101.60 x 27.50 (mm)
Input Power	DC 12V Adapter, POE (IEEE802.3af)
Operation temperature	0°C ~ 50°C (Operating), -40°C~85°C(Storage)
Certificate	CE, FCC

DE620 RFID Reader

ITEM	SPECIFICATION
RF card protocol	ISO014443 A/B, Mifare, FeliCa, ISO-18092, ISO-15693
PC interface	USB 2.0
Input power	DC5V, 200mA
Operation temperature	0°C~ 50°C

System cards

ITEM	SPECIFICATION
RF card protocol	ISO014443 A/B, Mifare, FeliCa, ISO-18092, ISO-15693
Operation temperature	0°C~ 50°C

Credentials

Item	Standard Wristbands	RF Cards	Various Types of credentials
Picture			Upon Demand
Material	Sillicone	PVC	
Dimension	L 28mm x W 18mm x T 2mm	L 85.6mm x W 54mm x T 0.86mm	
Color	Blue, Violet, Red	As on image	
RFID Chip	ISO 14443 A Mifare		

Emergency Battery Pack

ITEM	SPECIFICATION
Power	AA Battery X 4, 6V
Switch	On / Off
Dimension	65x68x20mm

Info Terminal

ITEM	SPECIFICATION
RF card protocol	Mifare, ISO 14443 A/B, ISO 18092 (NFC), Mifare, DESFire, FeliCa
Frequency	13.56 MHz
LCD	4.3"TFT wide(800X480) - iTouchpop 3"TFT wide(800X480) - iTouchpopX
Touch	Resistive touch
Dimension	185*108*21mm - iTouchpop 163*65*35mm - iTouchpopX
Input power	DC9~24V (9V/2A)
Operation temperature	-10 ~ 60°C

Master Controller

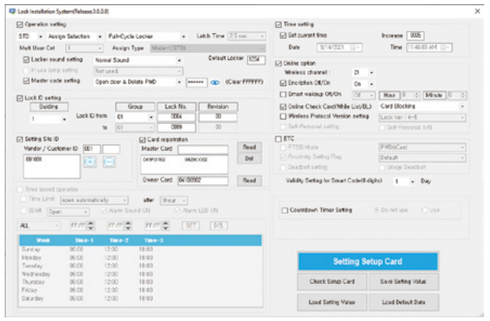
ITEM	SPECIFICATION
Power	DC 5V
Credential	RFID card, PIN, Mobile Access
Communication Protocol	1. RFID Card: ISO014443 A/B, Mifare, Desfire 2. Zigbee: 2.4GHz IEEE 802.15.4 Compliant 3. Mobile Access: BLE 4.0

e-Smart Software

▶ e-Smart LMS (For Distributor)

Lock Management Software

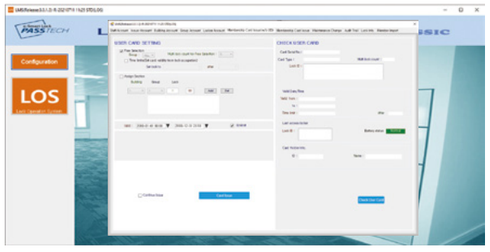
· LKS (Lock Key Management Software)
· L I S (Lock Installation Software)



- Generate security key card for customerss
- Generate system cards
- Issue Setup Card
- Set lock operation mode
- Program various operation parameters
- Make blank cards

▶ e-Smart LOS (For Customer - Offline)

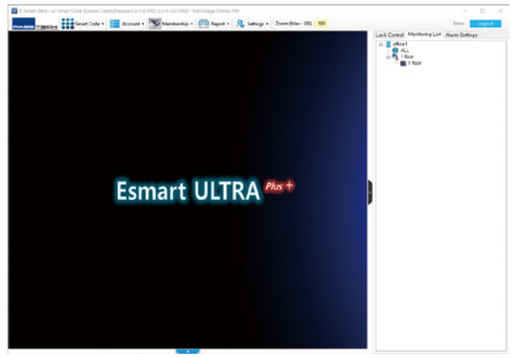
Offline Lock Operation Software

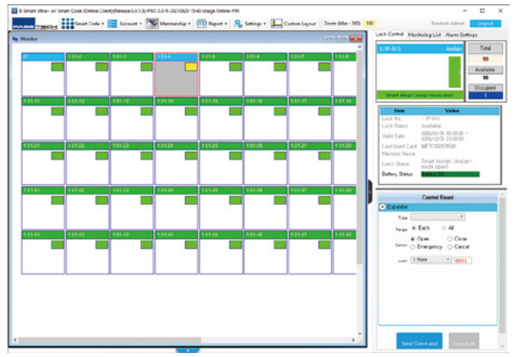


- Account management
- User Card issuance
- Audit trail and lock info check
- Lock maintenance
- Generating report
- Powerful database management

▶ e-Smart Ultra Plus+ (For Customer- Online)

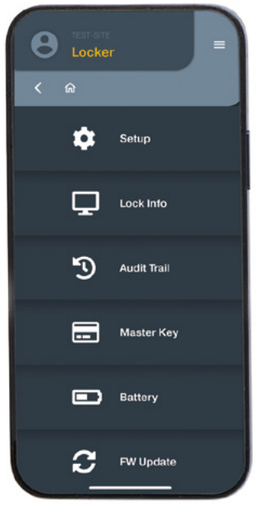
Online Lock Operation Software

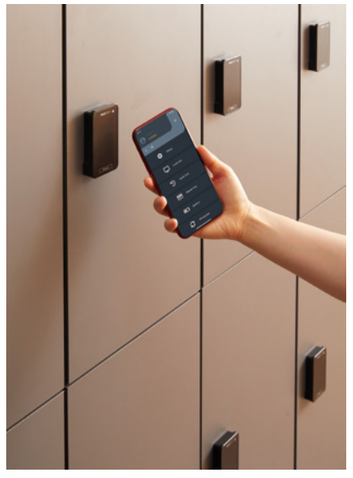




- All functions in e-Smart LOS
- Real-time monitoring
- Remote lock open/close. Block/unblock
- Online user information change (RF cards, Password)
- Online audit trail and lock info check
- Online maintenance
- Connect multi-client software (PC)
- Customize monitoring layout
- Powerful database management
- Mobile Key & Smartcode Issue
- 3rd party interface (Shared DB)

▶ e-Smart MIS (Lock Management APP)

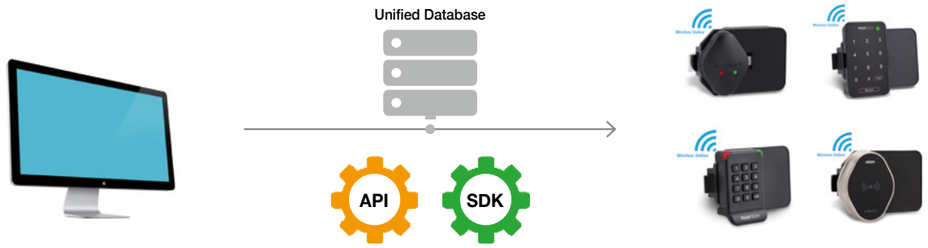




e-Smart locks can be programmed and managed efficiently by smartphone via Passtech management APP.

- Lock setting
- Maintenance
- Firmware download
- Audit trail
- Lock information check
- Battery status
- Emergency lock open (Master card)

e-Smart SDK (Software Development Kit)



- Third-party software companies and end-users are allowed to operate and manage E-smart locker locks by utilizing E-smart locking solution API (Application programming interface) to control access within their own applications.
- Customer can create card issuance and management system for applications.

SDK Packages	Provided by PASSTECH	Developed by Customer
RFID Standalone System (E-smart Classic)	• DLL for card issuance • API documents for card issuance • API sample program for card issuance • API sample source for card license for development period issuance • LMS	• Customer uses LKS, LIS provided by PASSTECH as it is • Lock operation software (LOS) needs to be developed by customer
Wireless Online System (E-smart Ultra)	• DLL for card issuance • API documents for card issuance • API sample program for card issuance • API sample source for card license for development period issuance • LMS • AP interface document for Server & Client software • AP interface sample program • AP interface sample source	• Customer uses LKS, LIS provided by PASSTECH as it is • Server & Client software needs to be developed by customer
Mobile User App For Anroid /IOS	• SDK for Android /iOS • Sample project(program source) for Anroid /iOS	• Mobile App for Android /iOS needs to be developed by customer

▶ e-Smart KIOSK

- Custom kiosk configuration
- Use your own kiosk system to control locks through Wireless Access Point (AP300)
- Providing API and sample application that guarantees easy and fast system integration
- It can be integrated to any 3rd party kiosk system with flexibility

SDK Packages	Provided by PASSTECH	Developed by Customer
Wireless Online System (E-smart Kiosk)	• API document • AP interface sample program • AP interface sample source	• Server & Kiosk system needs to be developed by customer

ZP200W
(LOCKER LOCK)

AP300
(Wireless access point)

Master Key Pack
(For emergency)

KIOSK Software
by customer

▶ Function Comparison Table

		LMS	E-smart LOS	E-smart Ultra Plus +
	Security Key Card generation	○		
	System Cards generation	○		
	Lock Programming	○		
	Card Initialization	○		
	User card programming		○	○
	Smart Code & Mobile Key Issuance		○	○
	Audit trail (Card)		○	○
	Audit trail (Online)			○
	Maintenance (Card) : Time update, Change of Master Cards, Time operation, etc.		○	○
	Maintenance (Online) : Time update, Change of Master Cards, Time operation, etc.			○
	Lock info collection		○	○
	Lock status monitoring			○
	Remote lock controlling			○
	Remote card or lock blocking			○
	Remote user changing			○
	Remote password changing			○
	Layout customizing			○
	Multi-Client			○
	3rd Party Interface			○

▶ System Requirements

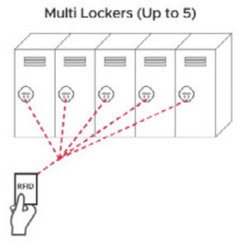
	LMS	E-smart LOS	E-smart Ultra Plus +
OS	Window 10		
RAM	16 GB or higher		16GB or higher
Admin privilege	No administrator right requirement		

Standalone Offline

Offline Lock Operation Software

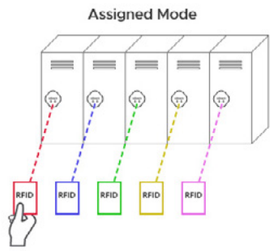
Free Selection mode (Shared use)

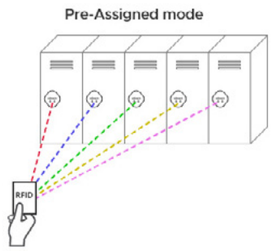
- User can select any empty locker to use as they wish
- Programmable to make LED lamp blinking to represent locker is in use (In use lamp)
- Programmable to use multiple lockers (up to 5) with one User card (Multi-lock)
- Programmable for Time based operation

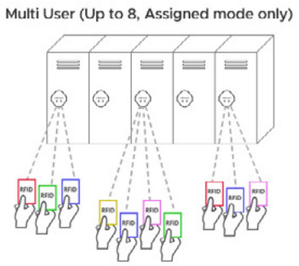


Assigned mode (Permanent Use)

- Use can only use a certain assigned locker
- User card can be assigned to a lock in advance
- User can select any empty locker at first to assigned the User card to the lock
- Programmable to use multiple lockers (up to 5) with one User card. (Multi-lock)
- Programmable to use multiple User cards (up to 8) to one locker (Multi-user)







Wireless Online

e-Smart Ultra series are representatives of wireless online solution.
With the help of the powerful database based lock operation software (E-smart Ultra Plus+), you can monitor and control locks remotely in real-time. The solution provides you full lock control and increase the efficient of your facility administration.

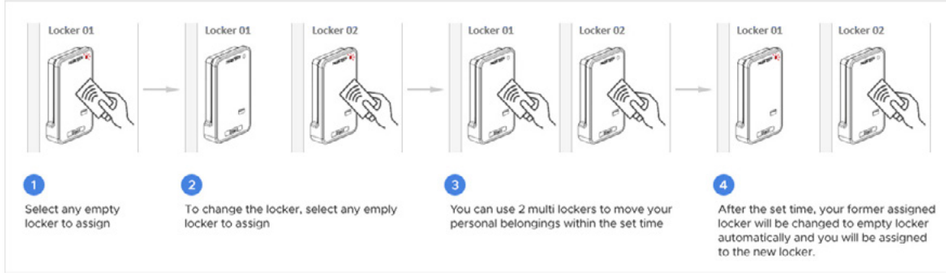
E-smart Ultra Plus+ offers a powerful database management and convenient central control functions such as:

- All functions in E-smart LOS
- Powerful database management
- Real-time monitoring
- Remote lock open/close, block/unblock
- Online user information change
- Online audit trail and lock info check
- Online maintenance
- Connect multi-client software
- Customize monitoring layout
- 3rd party interface

Operation Mode - Free/Assigned mode default support

Smart Assign mode

- User can select any empty locker and the user is assigned to the chosen locker.
- Without the help of administrator, user can freely change the assigned locker to any empty locker.
- Programmable to make LED lamp blinked to represent locker in use.
- Programmable to set specific time to release the assigned locker to empty locker after the changing the locker.



Mobile Access

▶ Mobile ID

Simple mobile access via Passtech Mobile APP without RFID card

e-Smart Mobile ID enables you to choose and operate any empty lock as you wish in Free Selection mode without any RFID card or other credentials.
The enhanced security algorithm provides more advanced and efficient approach towards managing the locks at various kinds of venues, such as hotels, resorts, fitness centers, schools, universities, hospitals, clinics, government entities, etc..
Moreover, E-smart Mobile ID can be easily programmed to work in Multi-lock function which enables you to use locks up to 5.

▶ Mobile Sync

BLE mobile access technology based on synchronization between RFID card and smartphone.

E-smart Mobile Sync is the world's first mobile access solution based on key synchronization between RFID card and smartphone.
The solution is very flexible and adaptable to various types of configuration.
Moreover, E-smart Mobile Sync can be easily programmed to work in assigned mode with Multi-user and Multi-lock functions.
In addition to that, multi-functionality and accessibility via various credentials makes E-smart Mobile Sync the best solution to meet even the most demanding operation requirements.

▶ Mobile Key

Mobile key generated via the Cloud server. Access to E-smart locks anywhere in the world.

E-smart Mobile Key is a secure, convenient and instant way of mobile access to E-smart locks.
Encrypted digital key are generated via E-smart Cloud Server, and access to a specific locker lock or door lock which is granted through the internet from anytime anywhere in the world.
All the looks are operating completely offline without the risk of malfunction.
Users can use their mobile keys only for a specific time period, and access privilege will be automatically expired when the granted time period is over.
Experience convenient access to your property by Mobile key generated via the Cloud.

Benefits

For User

Unique user experience
- Provide convenience by using a smartphone

Easy self registration via mobile app
- Bypass reception / No waiting in queue

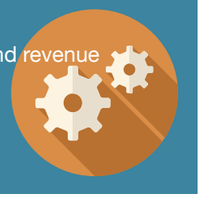
No any other credentials needed
- No carrying RFID card

For Facility Administration

Better operational efficiency
- No rush for registration

In reception / operational cost saving
- Improve customer satisfaction

Increased customer loyalty
- Increasing of client membership and revenue



Mobile ID

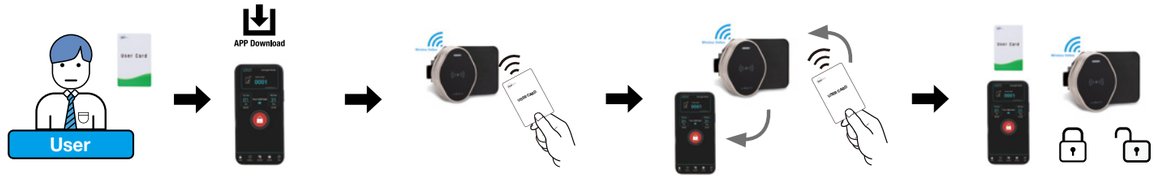
1. Download 'Passtech e-Smart Lock' APP and run it.

2. Wake up any empty locker to occupy.

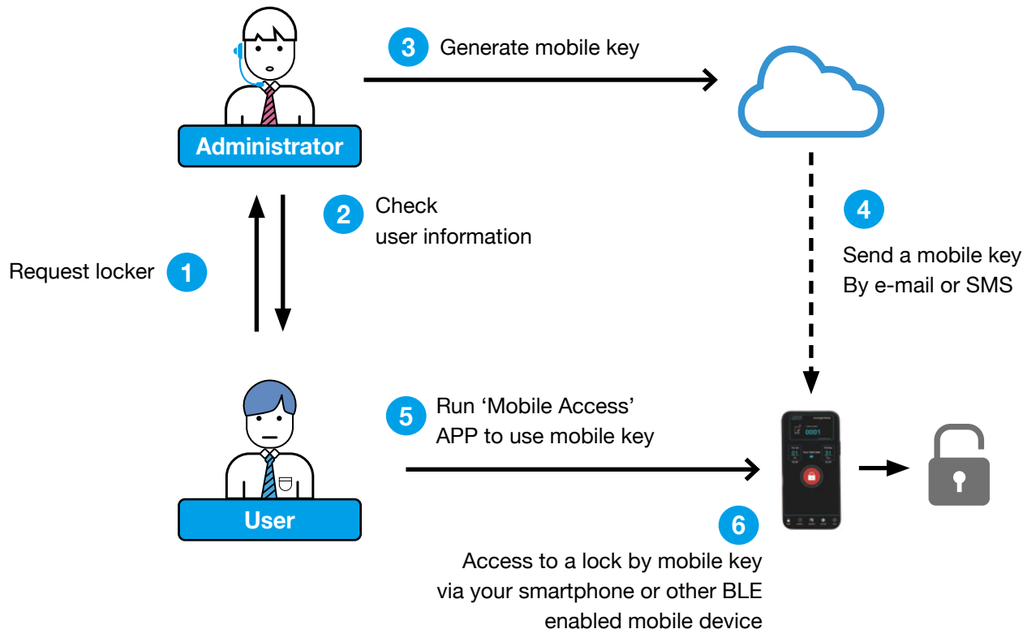
3. Select the lock number from the list on the app.

Mobile Sync

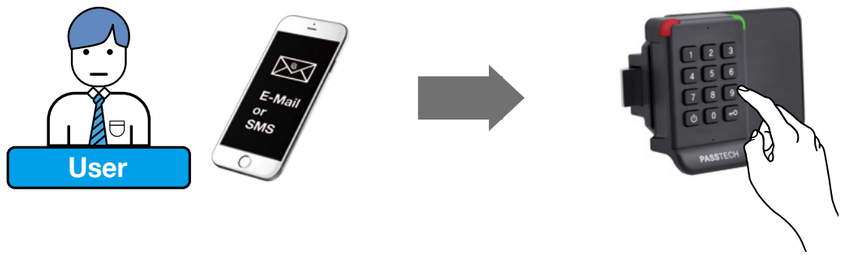
1. Get a User Card
2. Download 'Passtech E-Smart Lock' APP and run it.
3. Scan the User Card on a lock and put '99 + key(start)' button to register.
4. Touch 'Register' Button on the APP.
5. You can use both User Card and smartphone after registration.



Mobile Key



Smart Code(Time Sensitive Code)

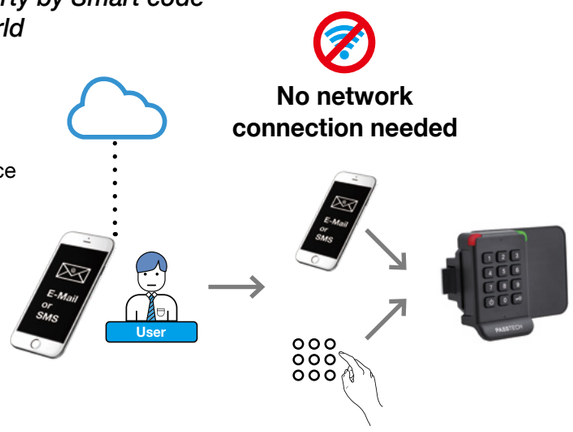


Control Time Sensitive Smart Code from wherever you are

- √ Very easy and convenient for you to schedule a smart code for each lock via your smartphone or computer
- √ Simply login the cloud server and select your lock to generate the smart code and mobile key

Experience convenient access to your property by Smart code generated via the Cloud anywhere in the world

- √ 6-10 digit PIN code by e-mail or SMS
- √ Work offline, no network connection needed
- √ Operate a lock anytime, anywhere
- √ No contact and Bypass reception for key Issuance
- √ No user card needed – cost save
- √ No risk of losing cards
- √ Fast, easy, and secure



Convenience of Smart Code for Group of Users

CSN (Chip Serial Number) Mode

Passtech products are designed to work with the international standard credentials including not only IOS 14443 Mifare/Desfire card, but also compatible with ISO 155693 iCode & HID iClass card.
In order to support those credentials in our system, we have CSN operation mode in which the lock only reads RF chip serial number of the card, but does not write any data to the cards.

▶ **Supporting RFID credentials**

- ISO 14443A/B, Mifare classic, Desfire card and etc.
- ISO 15693-2/ISO15693-3
- iClass Tag or PicoPass Tag compatible card
- Card reader: OMNIKEY 5022 or 5027

▶ **Supporting Operation Modes**

Functions	CSN offline mode	CSN online mode
Operation modes	Free/Assigned	Free/Assigned/Smart Assigned
Reads CSN of card	O	O
Time Based Operation	O	O
Register user by master card	O	O
Audit trail	By Card	By Card/Online
Control the locker user online (Register users on the DB)	X	O
Limit Multi locker use	X	O
Remote lock controlling (Open/close)	X	O
Real-time lock status monitoring	X	O
Remote User/Password change	X	O
Online Maintenance	X	O
Remote Lock blocking	X	O

Real Time Monitoring
• Checking your locks in real-time. You can check Battery status, Lock occupancy, Alarm, Lock event history, etc. easily without any delay.

Online Audit Trail
• You can collect Audit Trail of each lock without using Audit Trail Cards.

Remote Lock Open & Close
•If you want to open a specific lock or if you want to make a specific lock stay closed, simply manage it through one single mouse click from Ultra Client software.

White list online Database
• You can use any RF card without issuing user card from the program.
• By inputting the CSN in the database, you can manage and control the users in CSN mode.

Lock Blocking
• You can block any lock from Ultra Client. Blocked lock doesn't accept any User Card unless you unblock it on program.

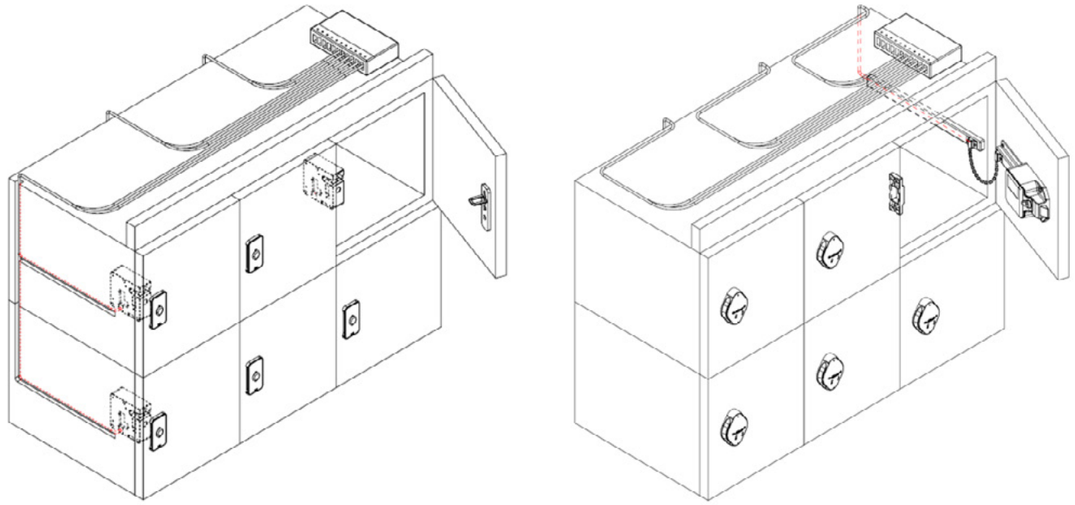
Remote Card Blocking
•You can block cards online for your best security.
•Cards are blocked against being used by people

Online Setup & Maintenance
• Do you still bring Setup & Maintenance Card and scan them on locks one by one for setting?
• New Ultra Client sets various functions to all locks at once with one mouse click

Customize your Monitoring Layout
• No more tedious rectangles.
• Your own customized layout of lockers displays on Lock monitoring.
• Arrange the lockers in New Ultra Client just like a real layout, and manage it more easily and efficiently.

Time based operation
• Doors open automatically at programmed time.
• Set a time limit on user access.

Wired Power Solution



Wired Power Accessories (Optional)

Power Supply Device and allotter (USB 10 ports)

Power usb cable (5m)

Door Loop

e-Smart Wired power option will offer you many advantages you are looking for.

- More reliable power supply. You don't have to worry about the low battery level or replacing the batteries.
- Simple and neat finish. With our solution, you don't have to worry about the wires being seen. It will cover them perfectly.
- Ideal for saving the environment. Since you don't use the alkaline batteries, you are not polluting the world.

As it is well-known, alkaline batteries will pollute not only the ground and water, but also the air which can lead to problems to crops and animals including us. So by using this option, you are saving the earth.

Kiosk Solution

e-Smart Kiosk solution is best suitable for unmanned (Kiosk) system which is for unmanned rental, delivery pick up/drop off, storage, device charging, and so on.
As this solution offers a modular package which allows customers easy and convenient lock installation to use.

Features :

- Easy to install with the modularized components
- Low cost installation (No RFID on each lock set)
- Easy to use
- Easy to program with mobile phone
- Multi operation type: RFID, PIN code, Mobile access

Application :

- Secure storage
- Equipment rental
- Smart parcel delivery
- Office
- School
- Hospital and so on

System Modularized components

Kiosk

- Kiosk software
- RFID optional

* Touch screen display can be sourced by the customer

AP200

- Wireless Access Point
- Cover up to 50 locks

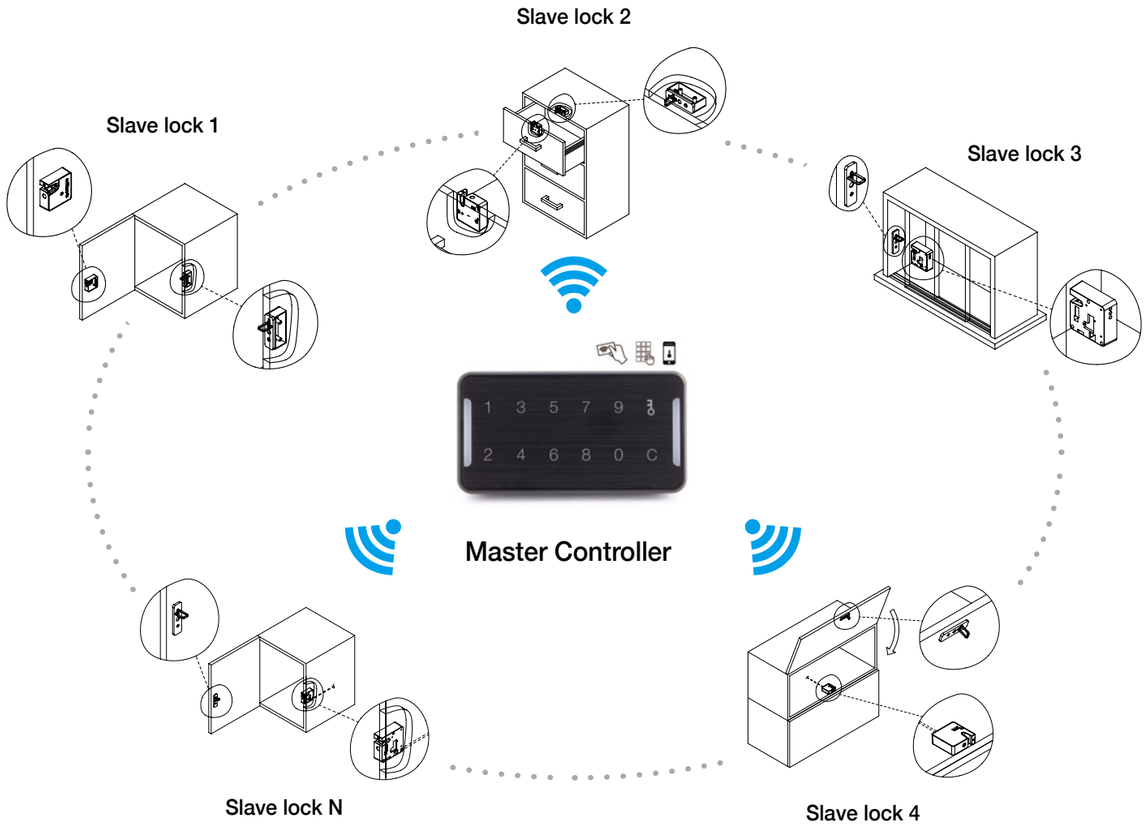
Master Pack

- Master key function

RFID locker lock

- FX100 (Battery type)
- FX200 (Wired Power type)

Master-slave solution



Master/Slave Lock Solution is best suitable for the office furniture or the retail furniture where 1 master lock controls over the several slave locks by wireless. These locks can be installed on various types of furniture and Slave locks can be easily registered on the Master lock using the mobile app.
This solution is appropriate for retails stores, who need higher security for the field such as Jewelry store or the store where sells clocks and watches, offices, hospitals, schools, and so on.

FX100/FX200 can be used on:

- Drawers
- Cabinet doors
- Glass doors
- Sliding doors
- Display cabinets
- Wall cabinets
- Shutters
- And many more

Features:

- Register the slave locks to master lock with Mobile app
- Simple planning of locking schedules
- Easy to install without any wires
- Easy to program
- Easy to use
- Multi operation type: RFID, PIN code, Mobile access
- Access authority for multiple users

FX100 - Furniture lock(Battery CR123A)

FX200 - Side lock(Wired power)

Applications

Workspace

Education

Fitness

Hospitality

Theme Parks

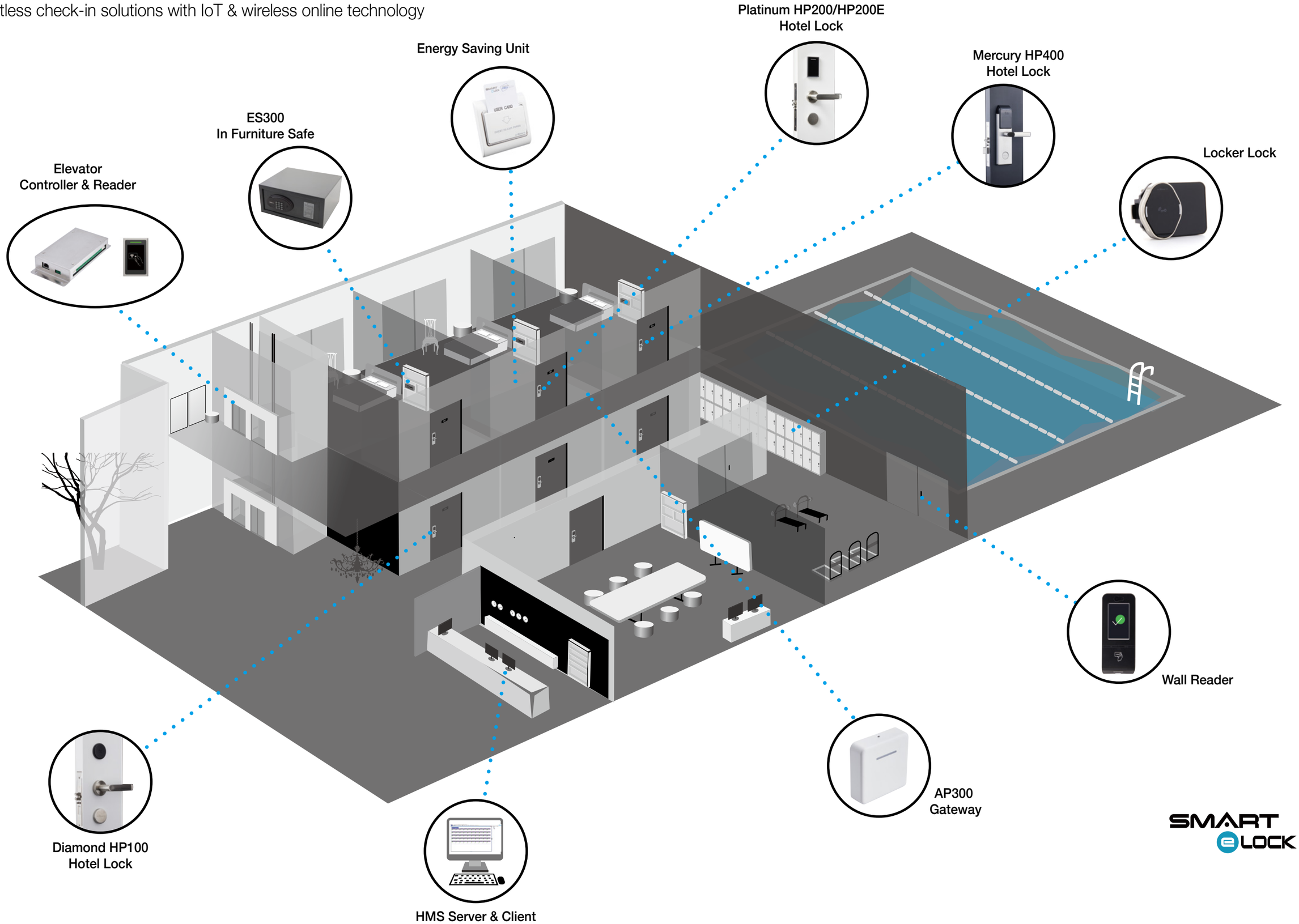
Healthcare

Goverment

Pro Sports

Seamless Unlock Innovation

Contactless check-in solutions with IoT & wireless online technology



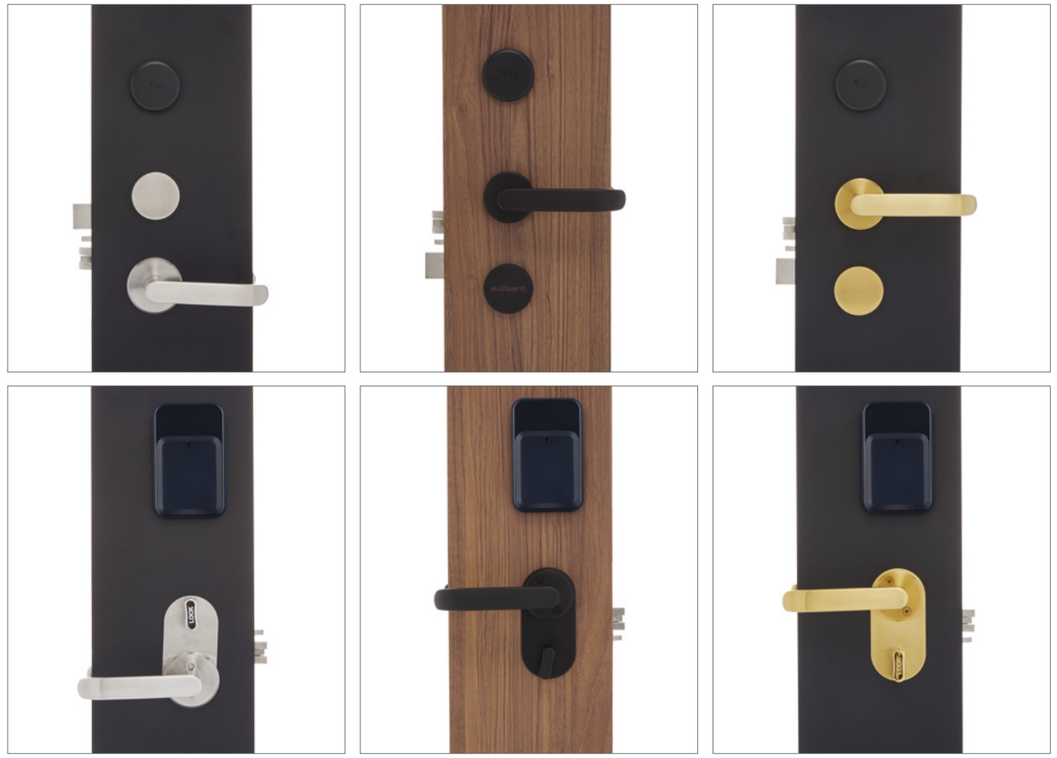
Diamond **HP100**

Feature

- Support RFID technology: Mifare classic & Desfire, ISO14443 Type A/B, ISO15693
- Support mobile key (BLE 4.0 or higher)
- BLE/ZIGBEE Unique security key by AES128 security algorithm
- Audit trail up to 2,000 events by RFID card or Smartphone
- Mortise standard: ANSI/EURO
- Support Dead bolt
- Provide Intrusion alarm
- Door Open/Close detection Sensor (Optional)
- Provide Ajar alarm
- Support Panic release: Deadbolt and latch are automatically retracted by inside handle for easy regress in emergency situations
- Mechanical override: Hidden cylinder key inside
- Lock Management by mobile app (Master key/FW update/Audit Trail/Battery Status check/etc.)
- Power Source : 1) Battery life: 18months and more (AA x 4)
  2) Wired Power (12V) - Optional
- Certifications: CE, FCC, KC approved

Diamond **HP100**

- Color options



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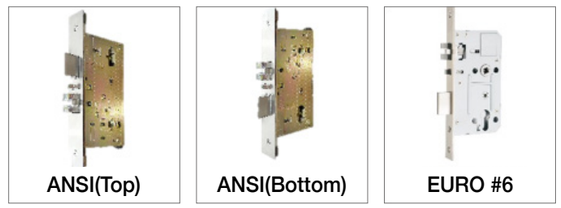
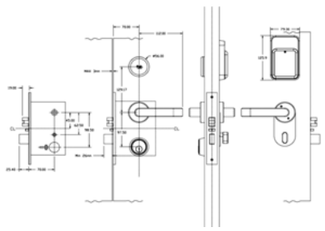
- Mortise Options



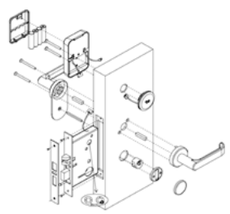
ANSI(Top) ANSI(Bottom) EURO #6

- Handles Options

- Dimensions



- Installation



Platinum **HP200**

Feature

- Support RFID technology: Mifare classic & Desfire, ISO14443 Type A/B, ISO15693
- Support mobile key (BLE 4.0 or higher)
- BLE/ZIGBEE Unique security key by AES128 security algorithm
- Support PIN code(Smart code)
  Use 6~10 pin code which is provided with HashCode algorithm from the client software or cloud server
- Audit trail up to 2,000 events by RFID card or Smartphone
- Mortise standard: ANSI/EURO
- Support Dead bolt
- Provide Intrusion alarm
- Door Open/Close detection Sensor (Optional)
- Provide Ajar alarm
- Support Panic release: Deadbolt and latch are automatically retracted by inside handle for easy regress in emergency situations
- Mechanical override: Hidden cylinder key inside
- Lock Management by mobile app (Master key/FW update/Audit Trail/Battery Status check/etc.)
- Power Source : 1) Battery life: 18months and more (AA x 4)
  2) Wired Power (12V) - Optional
- Certifications: CE, FCC, KC approved

Platinum **HP200**

- Color options

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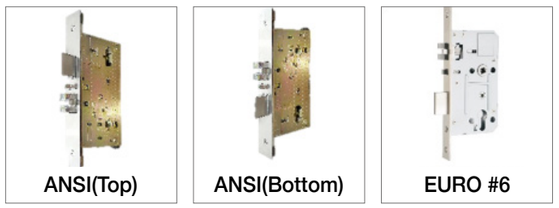
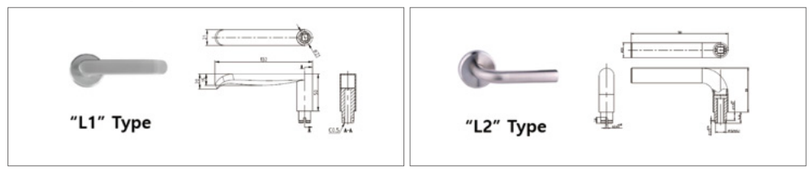
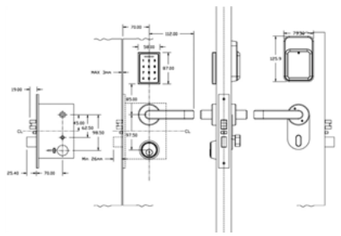
- Mortise Options



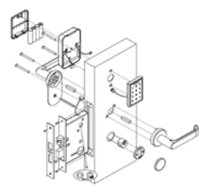
- Handles Options

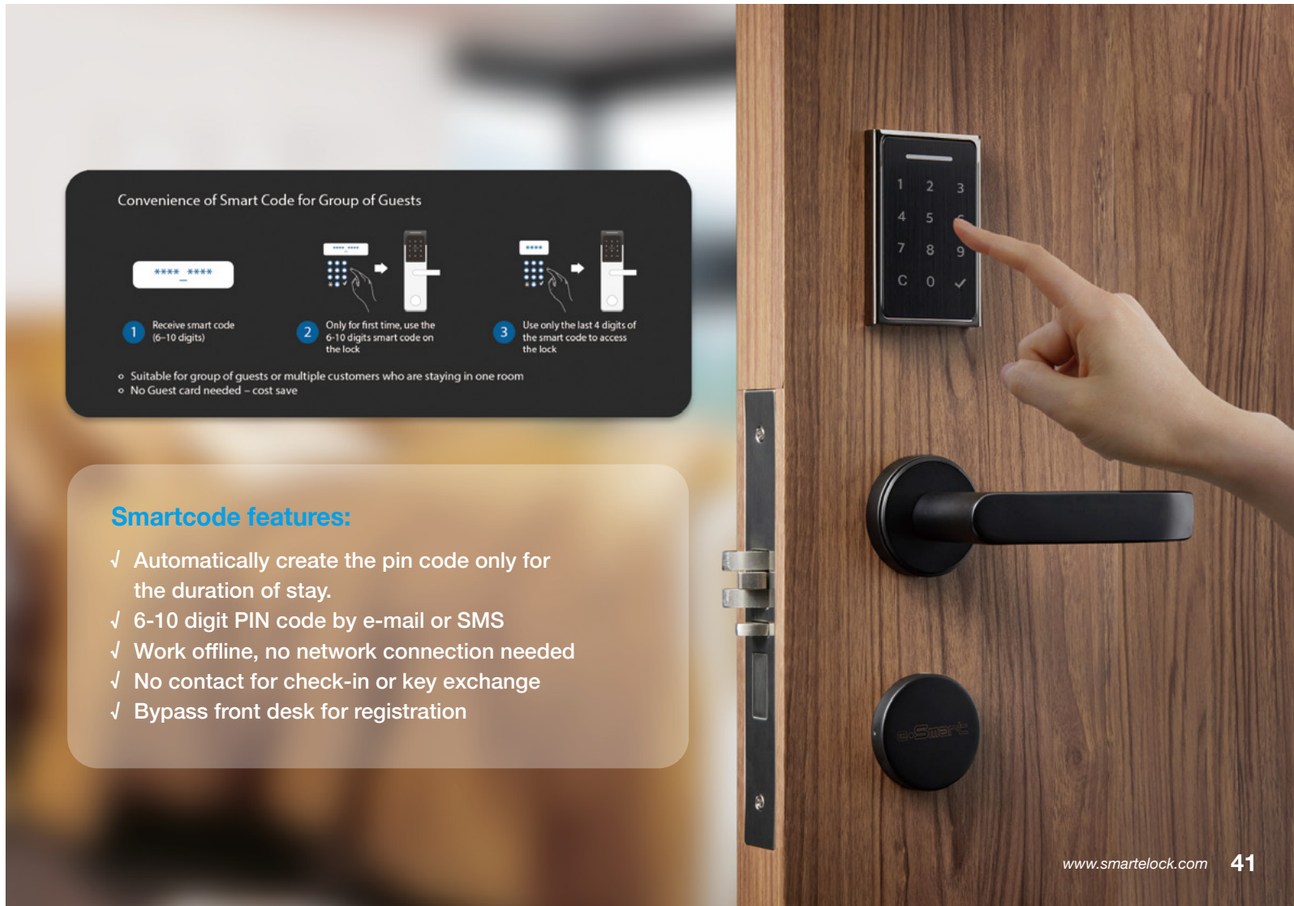


- **Dimensions**

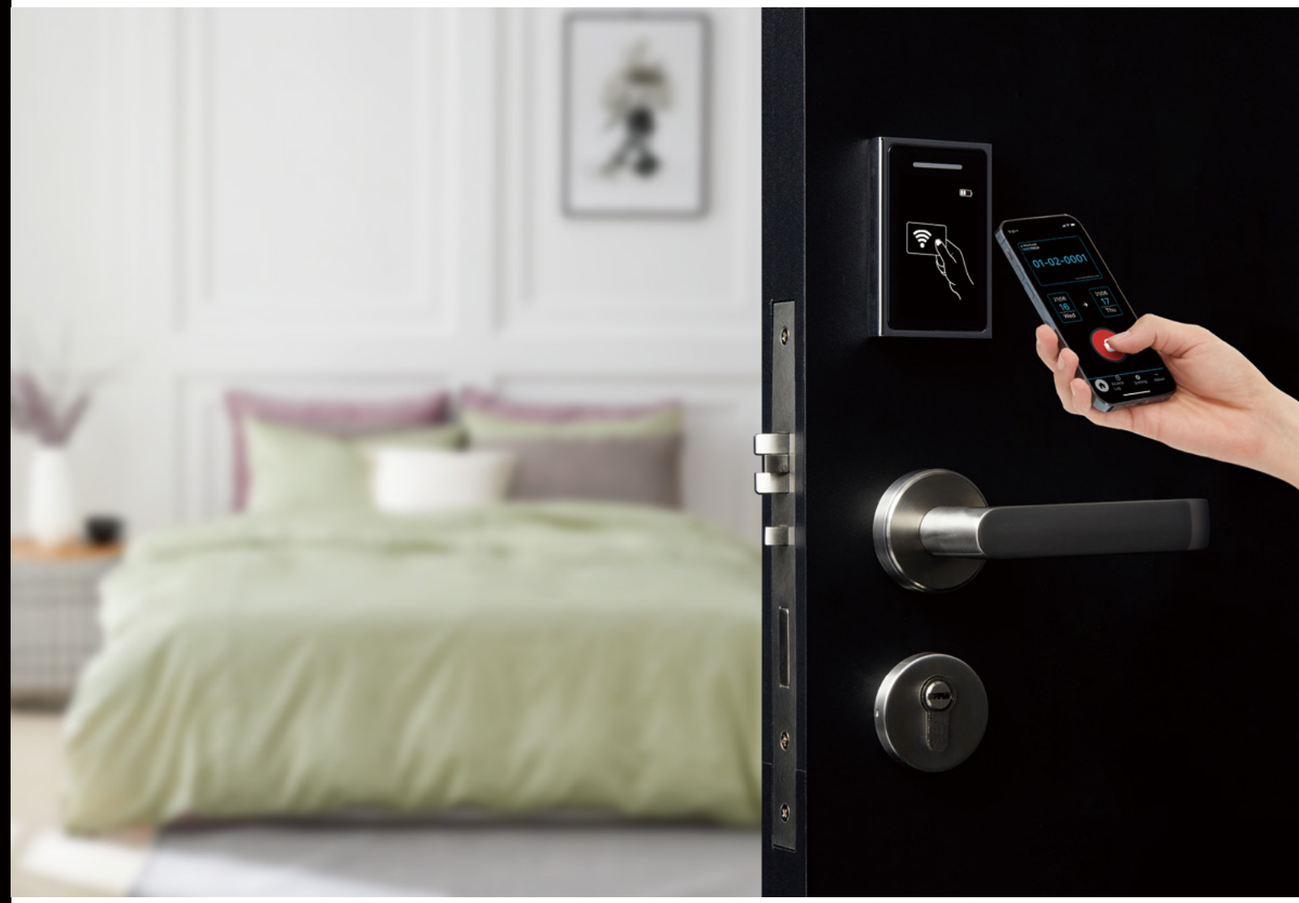


- **Installation**





Platinum **HP200E**



Feature

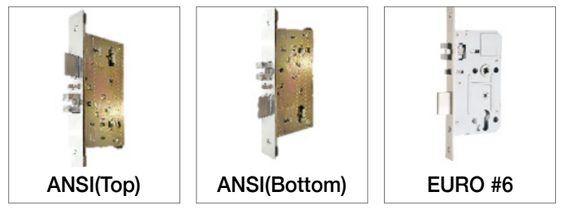
- Support RFID technology: Mifare classic & Desfire, ISO14443 Type A/B
- Support mobile key (BLE 4.0)
- Support E-display (DND/MUR/Room Number/etc,.)
- BLE/ZIGBEE Unique security key by AES128 security algorithm
- Audit trail up to 2,000 events by RFID card or Smartphone
- Mortise standard: ANSI/EURO
- Support Dead bolt
- Provide Intrusion alarm
- Door Open/Close detection Sensor (Optional)
- Provide Ajar alarm
- Support Panic release: Deadbolt and latch are automatically retracted by inside handle for easy regress in emergency situations
- Mechanical override: Hidden cylinder key inside
- Lock Management by mobile app (Master key/FW update/Audit Trail/Battery Status check/etc.)
- Power Source : 1) Battery life: 18months and more (AA x 4)
  2) Wired Power (12V) - Optional
- Certifications: CE, FCC, KC approved

Platinum **HP200E**

- **Color options**

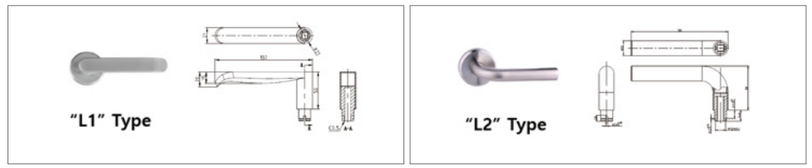
< SILVER > < BLACK > < GOLD >

- **Mortise Options**

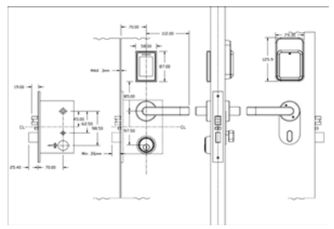


ANSI(Top) ANSI(Bottom) EURO #6

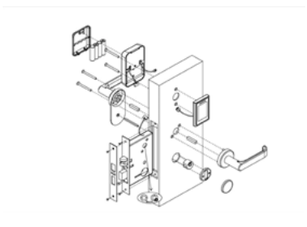
- **Handles Options**

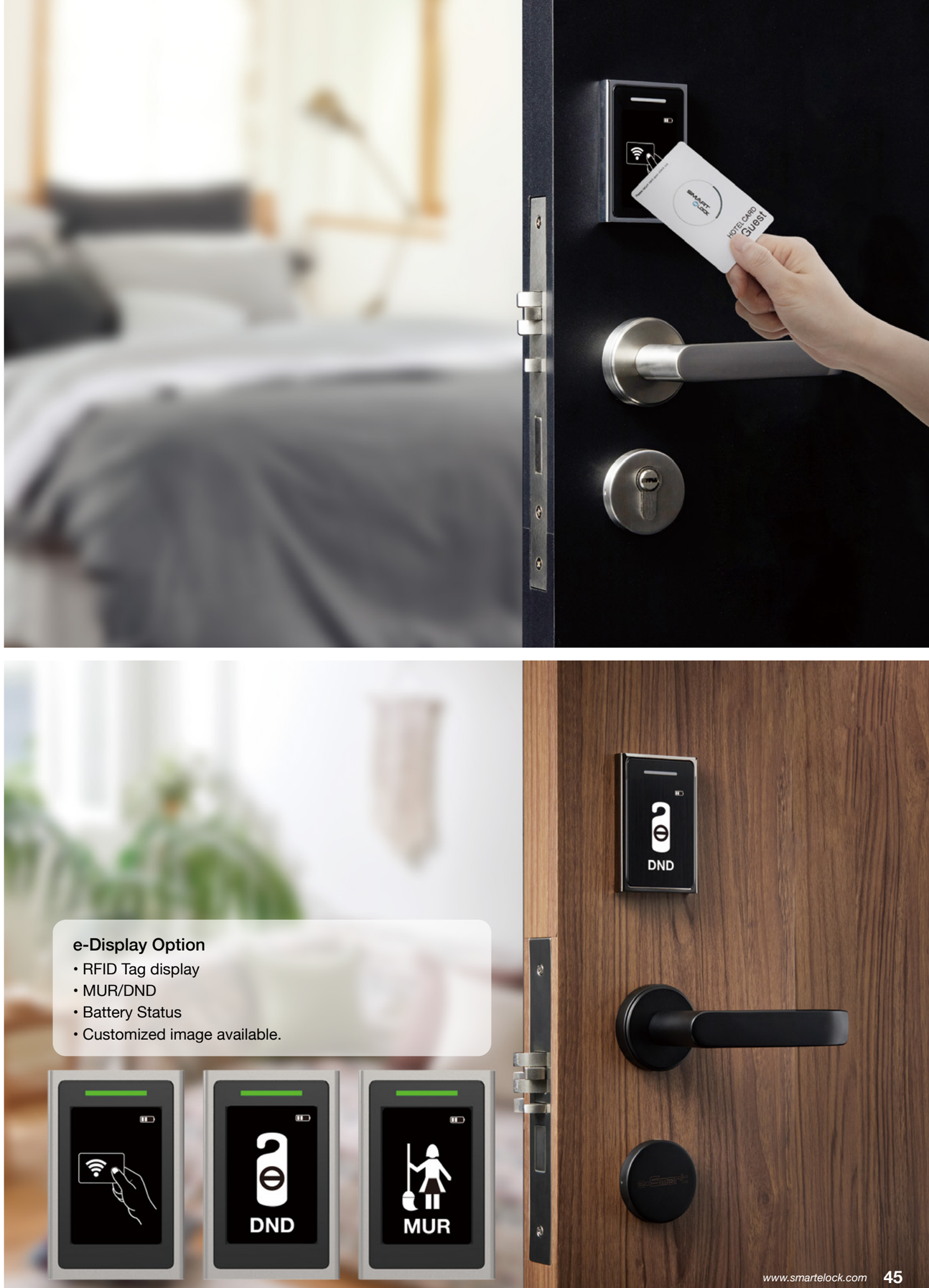


- **Dimensions**



- **Installation**





e-Display Option

- RFID Tag display
- MUR/DND
- Battery Status
- Customized image available.

Mercury **HP400 - 01**

Mercury **HP400 - 02**

Mercury **HP400-01**

• Color options

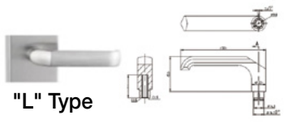
< SILVER > < BLACK > < GOLD >

• Mortise Options

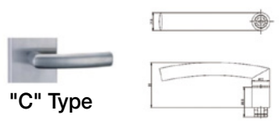
ANSI(Top)

EURO #6

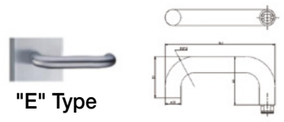
• Handles Options



"L" Type

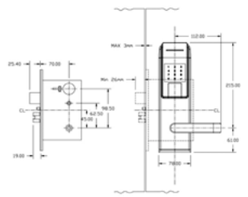


"C" Type

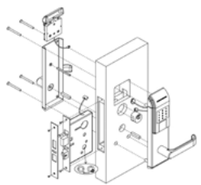


"E" Type

• Dimensions

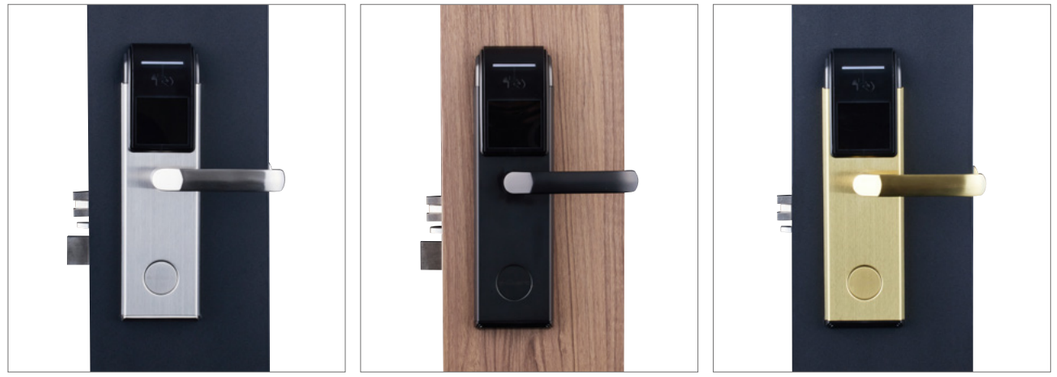


• Installation



Mercury **HP400-02**

• Color options



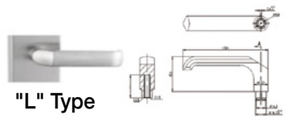
< SILVER > < BLACK > < GOLD >

• Mortise Options

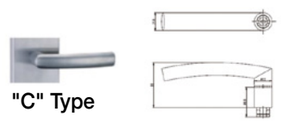
ANSI(Bottom)

EURO #6

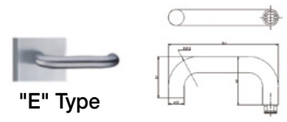
• Handles Options



"L" Type

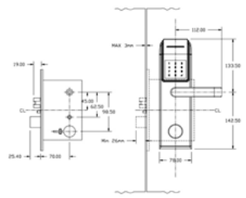


"C" Type

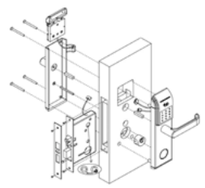


"E" Type

• Dimensions



• Installation



Feature

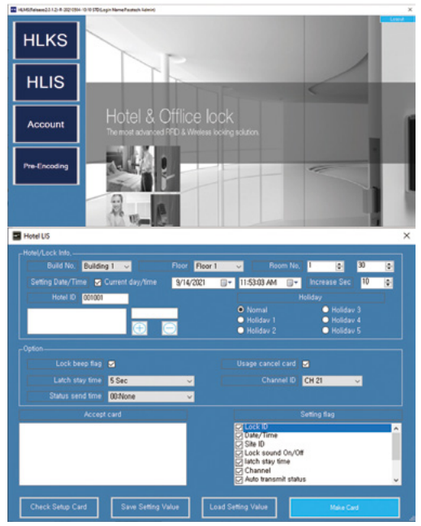
- Support RFID technology: Mifare classic & Desfire, ISO14443 Type A/B, ISO15693
- Support mobile key (BLE 4.0 or higher)
- BLE/ZIGBEE Unique security key by AES128 security algorithm
- Support PIN code(Smart code) Use 6~10 pin code which is provided with HashCode algorithm from the client software or cloud server
- Audit trail up to 2,000 events by RFID card or Smartphone
- Mortise standard: ANSI/EURO
- Support Dead bolt
- Provide Intrusion alarm
- Door Open/Close detection Sensor (Optional)
- Provide Ajar alarm
- Support Panic release: Deadbolt and latch are automatically retracted by inside handle for easy regress in emergency situations
- Mechanical override: Hidden cylinder key inside
- Lock Management by mobile app (Master key/FW update/Audit Trail/Battery Status check/etc.)
- Power Source : 1) Battery life: 18months and more (AA x 4)
  2) Wired Power (12V) - Optional
- Certifications: CE, FCC, KC approved

Smartcode features:

- √ Automatically create the pin code only for the duration of stay.
- √ 6-10 digit PIN code by e-mail or SMS
- √ Work offline, no network connection needed
- √ No contact for check-in or key exchange
- √ Bypass front desk for registration

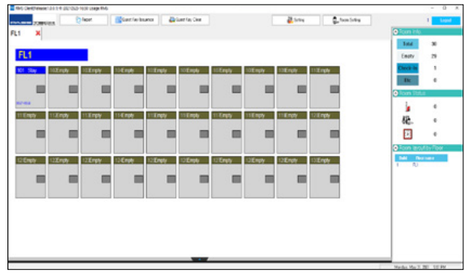
Management Software

e-Smart HLKS (For Distributor)



- Key/System Card generation
- Make card blank
- Lock ID, Wireless channel, parameter setting

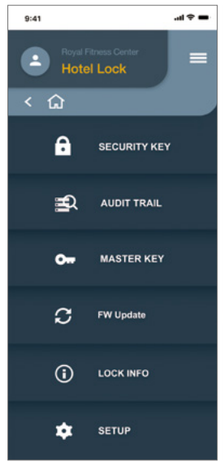
e-Smart HMS (For Customer)

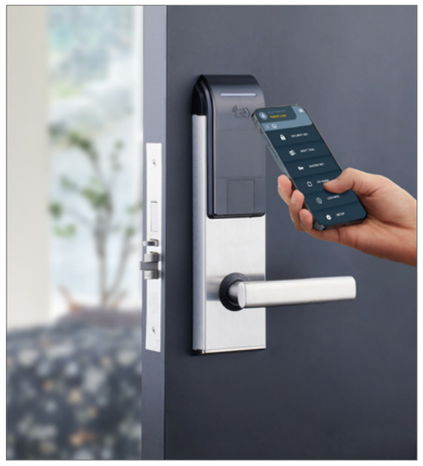


Management software for hotels, resorts, hostels, and other accommodations

- User & Staff account management
- Guest & Staff card issuance
- Auto check-in/out
- Low battery alert, Intrusion alarm
- Audit trail (RFID card: 2000 events / Online: Unlimited)
- Instant extended stay without visiting reception (Online)
- Instant room change without visiting reception (Online)
- Emergency open/close (Online)
- Remote lock status monitoring (Online)
- Remote passage mode activation for a specific room(Online)
- Report a problem with a room by scanning Reporting Card (Online)

e-Smart MIS (Lock Management APP)



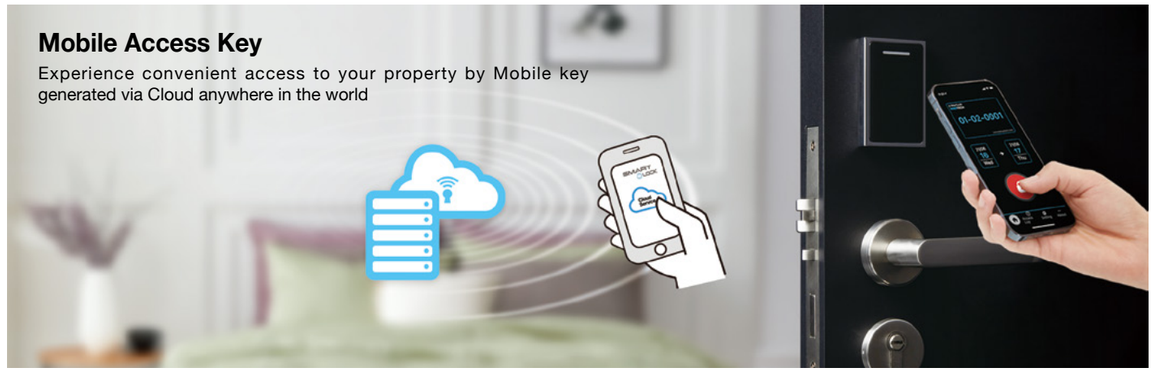


e-Smart locks can be programmed and managed efficiently bysmartphone via Smartelock management APP.

- Lock setting
- Maintenance
- Firmware download
- Audit trail
- Lock information check
- Battery status
- Emergency lock open (Master card)

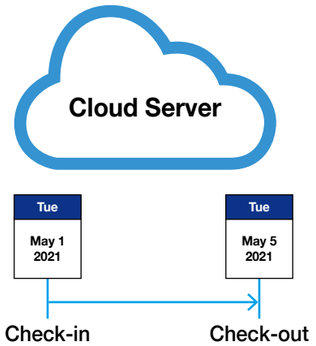
Technology & Solutions

Mobile Key and Smart Code



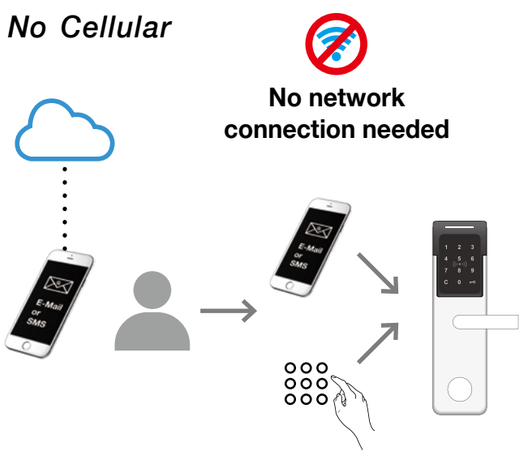
Control Time Sensitive Smart Code and Mobile key from wherever you are

- Very easy and convenient for you to schedule a smart code and mobile key for each lock via your smartphone or computer
- Simply login the cloud server and select your lock to generate the smart code and mobile key



No Network Connection, No WiFi, No Cellular Phone Network Needed.....

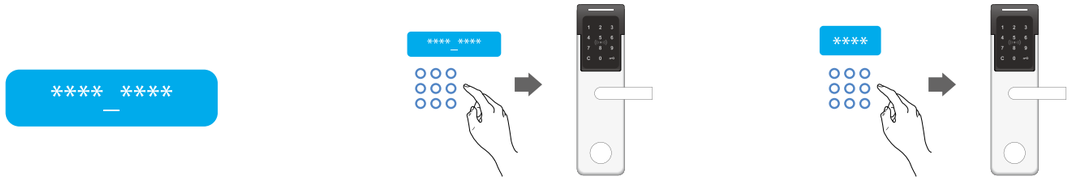
- Smart Code and Mobile key operates in completely offline environment
- No Network Connection Required



Experience convenient access to your property by Smart code or Mobile key generated via the Cloud anywhere in the world

- 6-10 digit PIN code by e-mail or SMS
- Encrypted mobile key which can be used by smartphone
- Work offline, no network connection needed
- Operate a lock anytime, anywhere
- No contact for check-in or key exchange
- Bypass front desk for registration
- No guest card needed – cost save
- No risk of losing keys or cards
- Fast, easy, and secure

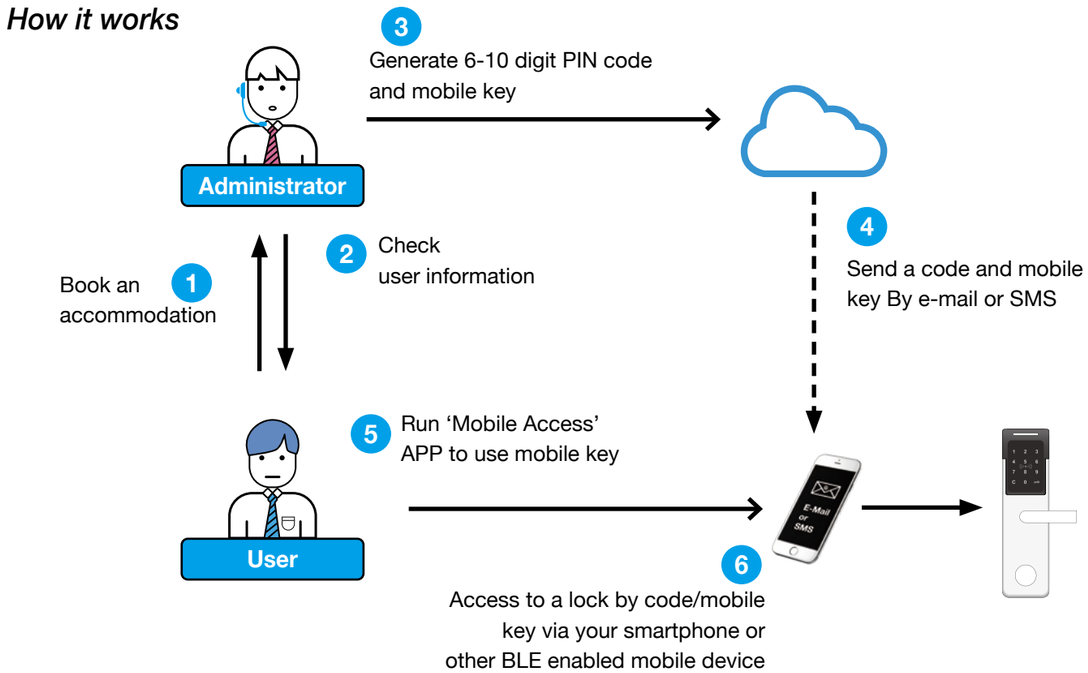
Convenience of Smart Code for Group of Guests



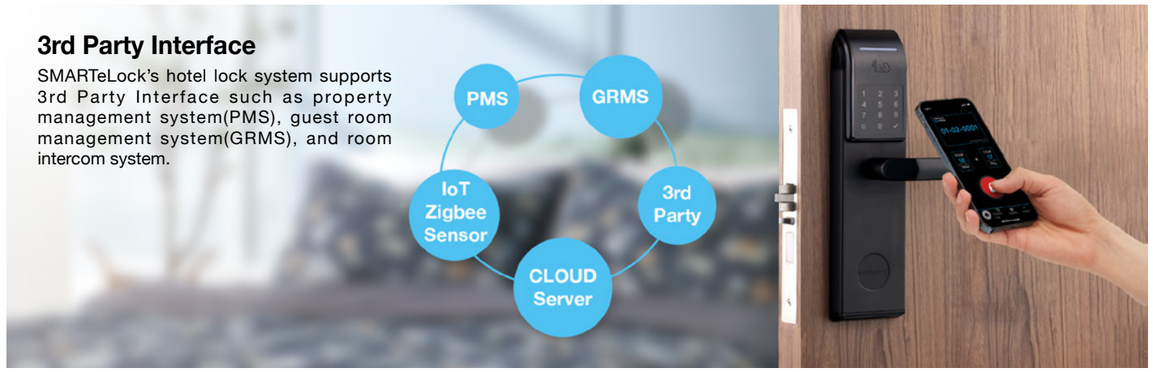
1. Receive smart code (6–10 digits)
2. Only for first time, use the 6-10 digits smart code on the lock
3. Use only the last 4 digits of the smart code to access the lock

Suitable for group of guests or multiple customers who are staying in one room
No Guest card needed – cost save

How it works



3rd Party Interface

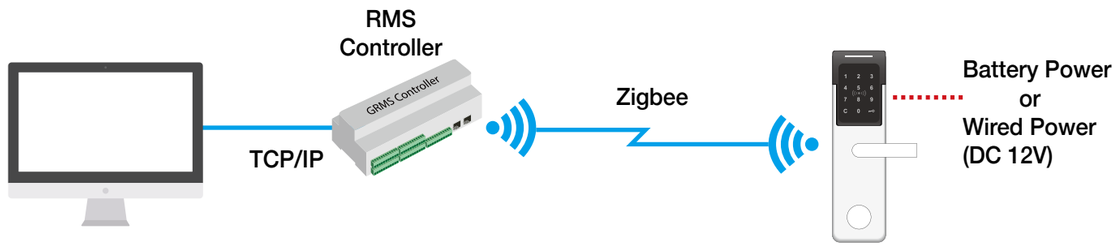


• SMARTeLOCK's hotel lock system supports 3rd Party Interface such as property management system(PMS), guest room management system(GRMS), and room intercom system.

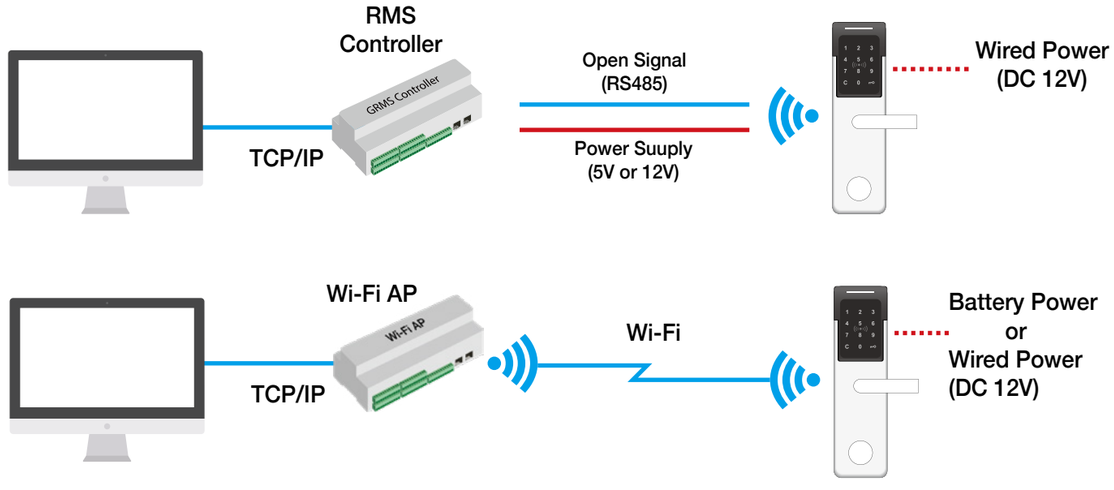
PMS interface

• Support PMS interface that is used in the hotel and provide SMARTeLock's unique total management solution that is for reservation & room management, issuance of guest card, and so on.
• Easily manage your hotel from the front desk using room/staff card issuance program module which is optimized for PMS interface.

GRMS interface



※ Provide room/staff card issuance SDK in order to support integration with existing GRMS solution for the total solution.
※ If you are using Zigbee stack in your RMS controller or other devices, it can communicate with our door lock with Zigbee.

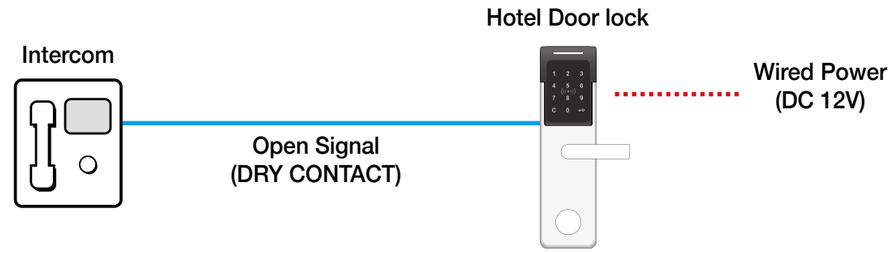


※ Door locks can be interfaced with 3rd Party GRMS by using RS485 communication and wired power supply.
※ By using commercial Wi-Fi access point, door locks can be interfaced and controlled/monitored wirelessly.

Room intercom interface

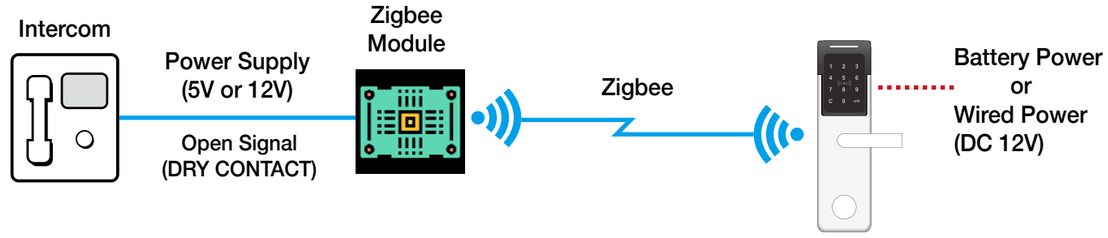
• Control it by communicating Door lock with wireless Zigbee module or wired communication module on an Intercom that was installed previously.

Type 1



※ Needs Wiring work (1 Line) from Intercom to Hotel door lock.

Type 2



※ Doesn't need Wiring work from Intercom to Hotel door lock.

Mobile SDK

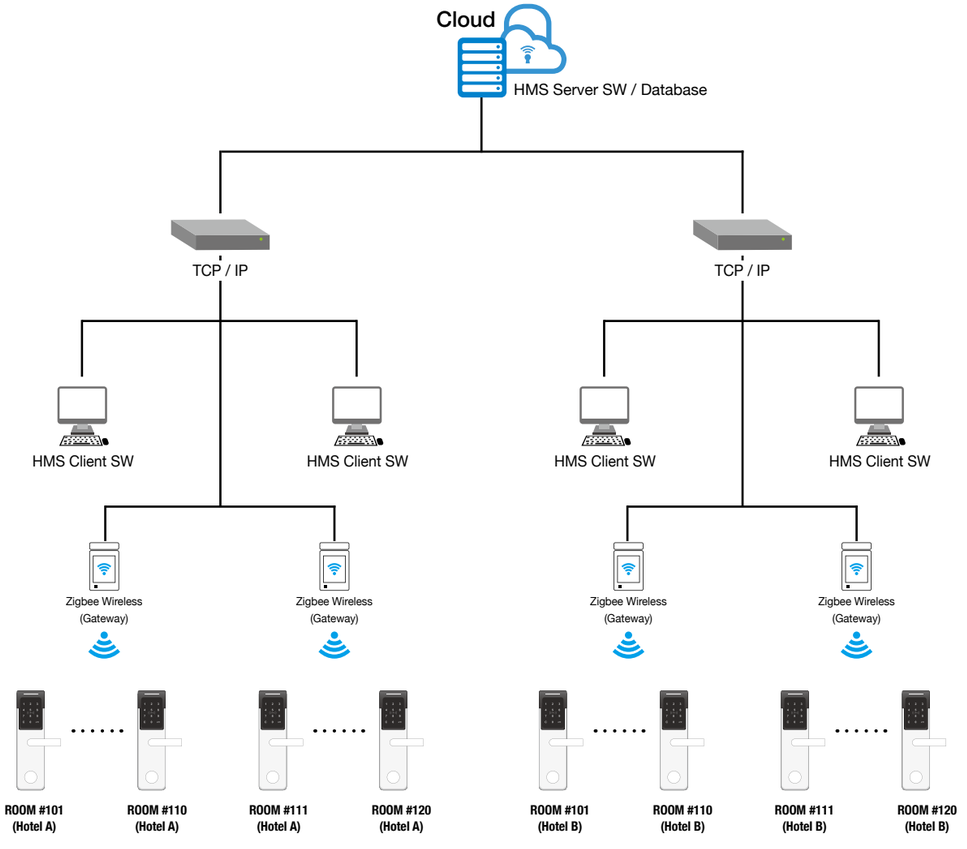
• Third-party software companies and end-users are allowed to operate and manage SMARTeLock Hotel door locks by utilizing e-Smart locking solution. API(Application Programming Interface) to control access within their own applications.
• Customer can create card issuance and management system for applications

SDK Packages	Provided by SMARTeLOCK	Developed by Customer
HMS Card Issuance System	• DLL for Card Issuance • API document for Card Issuance • API sample program for Card Issuance	• Card Issuance program needs to be developed and interfaced by customer
Mobile User App For Anroid / iOS	• SDK for Android/iOS • Sample project (program source) for Android/iOS	• Mobile app for Android/iOS needs to be developed by customer

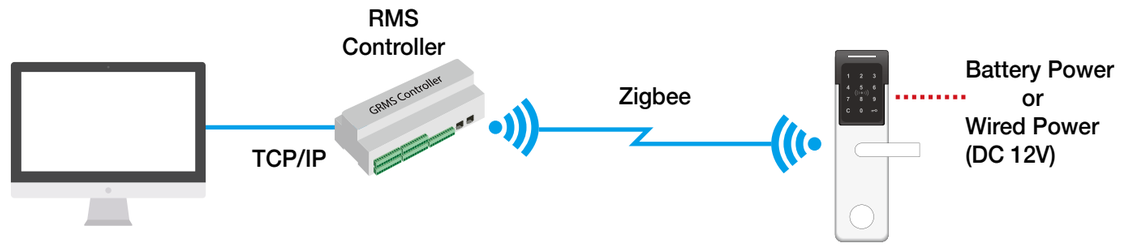
Wireless Online Solution

There are 4 solutions in Smartelock's online solutions such as, 1) Wireless online Zigbee communication using SMARTeLock's AP, 2) Wireless online Zigbee communication using 3rd party GRMS controller, 3) hard-wired RS485 communication using 3rd party GRMS controller, and finally, 4) wireless online communication solution using commercial Wi-Fi AP.
By using these solutions, SMARTeLock offers complete hard-wired / wireless online solution that can be applied to various circumstances.

1) Wireless online Zigbee communication using SMARTeLock's AP

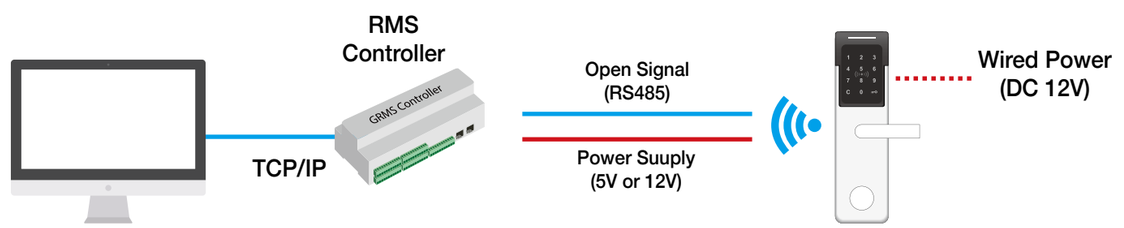


2) Wireless online Zigbee communication using 3rd party GRMS controller

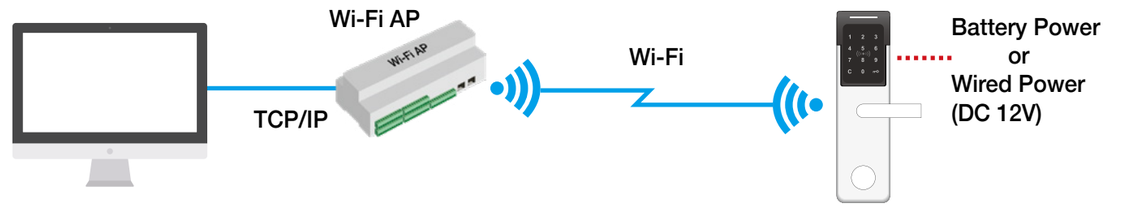


※ Provide room/staff card issuance SDK in order to support integration with existing GRMS solution for the total solution.
※ If you are using Zigbee stack in your RMS controller or other devices, it can communicate with our door lock with Zigbee.

3) Hard-wired RS485 communication using 3rd party GRMS controller, and finally



4) Wireless online communication solution using commercial Wi-Fi AP.



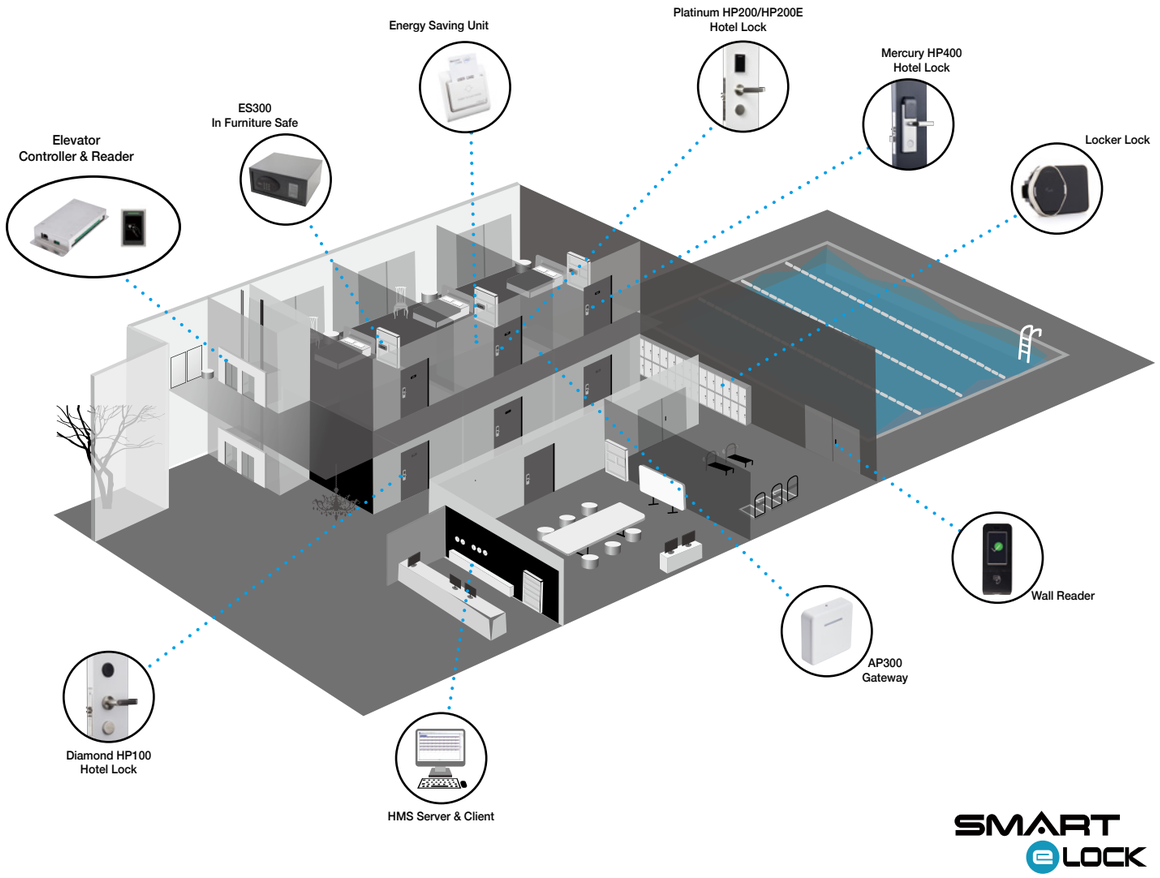
Comparison Table

Features	Standalone Offline	e-Smart HMS Online
Audit Trail	2,000 events (Card) Need to visit the door	Unlimited events(Online) Remote Online Audit Trail
Low battery status	Need to visit the door	Remote Online Low Battery status check
Extension of Stay	Need to visit the reception to extend	Remote Online stay extension without visiting reception
Room Change	Need to visit the reception to change	Remote Online room change without visiting reception
Real time room control & monitoring • Room status Monitoring • Lock/Card blocking • Lock opening/closing • Ajar alarm	Need to visit the door	Remote Online control & monitoring

System Components & Peripheral Equipments

Seamless Unlock Innovation

Contactless check-in solutions with IoT & wireless online technology



SMART eLOCK

System Components

Elevator Controller & Reader

Gateway (AP300)

RFID Reader (DR-620)

Wall Reader

Energy Saving Unit

ES100 Safe

ES300 Safe

Locker Lock

Emergency Power Supply

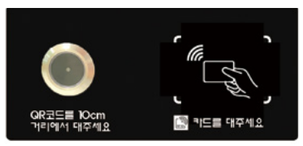
Guest Card

Elevator Controller

ITEM	SPECIFICATION
Control Floors	16 Floors (Max. 64 Floor extensible)
Communication to the reader	RS-232
Indicator	LED
Power Supply	DC 12V
Dimension	203.4 x 94.4 x 32.7 (mm)
Operation temperature	-10°C~ 60°C
Certificate	CE/FCC/KC

Elevator Reader

e-Display reader



Customized reader

ITEM	SPECIFICATION
Communication to the controller	RS232(Controller)
Security	AES 128
User Credentials	RFID CARD (ISO14443 A/B, Mifare, ISO15693), Optional - Mobil key / QR code
Indicator	Buzzer, LED
Power Supply	DC 12V
Dimension	57 x 87 x 11 (mm) - TBD (Flat type)
Operation temperature	-10°C~ 60°C
Certificate	CE/FCC/KC

Gateway (AP300)

ITEM	SPECIFICATION
Communication with Server	TCP/IP (standard), WIFI (IEEE 802.11b/g/n standards Transceiver, Optional) 2.4Ghz Wireless(ONLINE LOCK COMM)
Material	Polycarbornate
Security	AES128
Indicator	LED
Effective range	About 50 meters in open area (without barrier)
Communication Frequency with locks	2.4GHz IEEE 802.15.4 Compliant RF Transceiver 40-50M (Between Lock and AP)
Dimension	101.60 x 101.60 x 27.50 (mm) - AP300
Input Power	DC 12V Adapter, POE (IEEE802.3af)
Operation temperature	0°C ~ 50°C (Operating), -40°C~85°C(Storage)
Certificate	CE, FCC

DE620 RFID Reader

ITEM	SPECIFICATION
RF card protocol	ISO014443 A/B, Mifare, FeliCa, ISO-18092, ISO-15693 /
PC interface	USB 2.0
Input power	DC5V, 200mA
Operation temperature	0°C~ 50°C

Wall Reader

ITEM	SPECIFICATION
RF card protocol	ISO 14443 A/B, Mifare, DESFire, Mobile Key(BLE) - Optional
Frequency	13.56 MHz
LCD	4.3”TFT wide(800X480)
Touch	Resistive touch
Dimension	163*65*35mm
Input power	DC9~24V (9V/2A)
Operation temperature	-10 ~ 60°C

Energy Saving Unit

ITEM	SPECIFICATION
Power	AC 220V / 110V DC 12V
RFID Card Detection	ISO14443A/B, Mifare
Dimension	86mm x 86mm

In Furniture Safes

Model	ES100	ES300
Picture		
External size	150(H) x 410(W) x 350(D) (mm)	200(H) x 400(W) x 300(D) (mm)
Weight	10KG	12KG
Opening Type	Top opening	Front opening
PIN code	4~6 digits	
RFID credentials	MIFARE Classic & DESFire as default, ISO 14443 Type A/B, NFC and more on request	
Mobile access (Optional)	E-Smart Mobile ID, Mobile Sync, Mobile Key	
Emergency opening	Mechanical override key, Master code	
Certification	CE, FCC	
Power Supply	4 x AA Alkaline batteries	
LED display	O	O
Keypad backlight	O	X

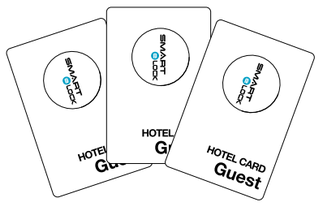
Locker Lock(ZP100)

ITEM	SPECIFICATION
RF card protocol	ISO014443 A/B, Mifare, FeliCa, ISO-18092, ISO-15693
Input power	4 * AA Alkaline batteries
Operation temperature	0°C~ 50°C

Emergency Power Supply

ITEM	SPECIFICATION
Power	AA Battery X 4, 6V
Switch	On / Off
Dimension	65x68x20mm

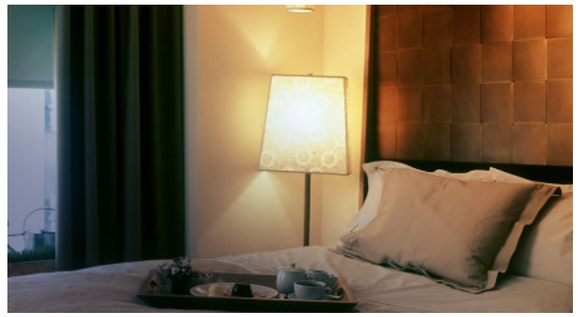
Guest card



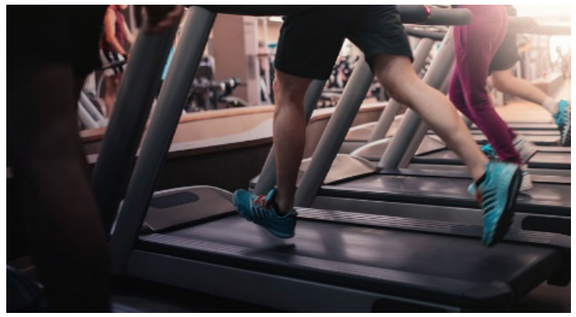
ITEM	SPECIFICATION
Dimension	ISO 7816 (85.6x53.98x0.76mm)
RFID chip	ISO 14443 type A / B :Mifare, Desfire & additional cards on request
Logo	Customer logo to be printed on request
Operation temperature	0°C~ 50°C

Applications

SMARTeLOCK provides you the most advanced door locking solutions for various facilities including not only the hospitality, but also many other applications such as leisure & fitness, work space, education and rental. Experience our innovative wireless online & mobile access technology and become a part of our global partners.



Hospitality



Leisure & Fitness

Smart Office

Rental

Education

Healthcare

Goverment

Pro Sports

PASSTECH

e-Smart

Seamless Unlock Innovation

Passtech Co., Ltd.

Address : B-402, 215 Galmachi-ro, Jungwon-gu, Seongnam-si, Gyeonggi-do, Rep. of Korea
Tel : +82 31-743-7277 / Fax : +82 31-743-7276
E-mail : passtech@esmartlock.com
Web : www.esmartlock.com (Locker Lock Solutions)
www.smartelock.com (Hotel Lock Solutions)