

# Cisco Video Surveillance 3050 IP Camera

The Cisco<sup>®</sup> Video Surveillance 3050 IP Camera is a ruggedized, outdoor, high-definition (HD) video endpoint that delivers industry-leading image quality and processing power. The camera is designed to be vibration resistant and is ideal for use in transportation applications, such as buses, trains, and other moving vehicles. The IK10- and IP66-rated housing combined with a low profile also make this camera suitable for discreet placement in harsh environments.

The camera is capable of 1280 x 960 resolution while optimizing network utilization with either H.264 or Motion JPEG (MJPEG) compression. Contact closures allow integration with access control systems. With its open, standards-based design, the camera provides an ideal platform for integration and operation as an independent device or as part of a Cisco IP Video Surveillance network.



#### **Key Benefits**

The Cisco Video Surveillance 3050 IP Camera offers a variety of benefits, including:

- **True HD video:** This megapixel camera streams crisp and clear video at resolutions up to 1280 x 960, while maintaining low network bandwidth.
- Indoor and outdoor-ready: An IK10 and IP66-rated enclosure enables outdoor mounting.
- **Dual streaming:** The camera can stream H.264 and MJPEG video simultaneously. Each video stream can be configured with independent resolution, quality, and frame-rate settings.
- **Application-ready platform:** Device functionality can be extended by installing and running applications directly on the camera, for example, SIP client, video analytics, audio analytics, etc.
- **Privacy regions:** The camera supports up to four user-defined privacy regions. Any video in a privacy region is masked in the video stream.
- Local storage: Video data can automatically be recorded to a micro-Secure Digital (SD) card when the camera loses network connectivity.
- Bidirectional audio: The camera supports full-duplex audio and options for half-duplex operation.
- Open API: Support for Open Network Video Interface Forum (ONVIF) 2.0 and Profile S allows for standards-based interoperability and communications with other ONVIF appliances.

## Features and Specifications

The following Table 1 describes the capabilities and specifications of the Cisco 3050 IP Camera.

 Table 1.
 Capabilities and Specification of the 3050 IP Camera

Features and Specifications	
Additional Software Features	
Activity detection	Detects changes in motion in the field of view, and triggers user-definable alerts (with configurable sensitivities and thresholds), email alerts, and HTTP notifications
Camera tamper detection	Detects when a camera view is changed, blocked, or substantially out of focus. User-definable alerts, email alerts, and HTTP notifications can be triggered
Security	802.1x for client authentication
	Control device access by filtering individual user IP addresses or a range of IP addresses that are allowed or denied access
Overlay capabilities	Time, date, text and image
Image settings	Configurable brightness, sharpness, contrast, saturation, hue, and white balance
Device configuration	Internet Explorer 8, and later
Device Specifications	
Image sensor	1/3-inch progressive-scan complementary metal-oxide semiconductor (CMOS)
Image control	Automatic white balance (AWB), automatic gain control (AGC), automatic exposure shutter (AES)
Wide dynamic range	120 dB
Minimum illumination	Color mode: 0.5 lux Black/White mode: 0.05 lux
Lens	Focal length: 4mm Max. aperture: F2.8
Shutter speed	1/5 seconds to 1/32,000 seconds
Iris control	Fixed iris
Field of view	68° horizontal
	50° vertical
	90° diagonal
Manual pan and tilt range	90° (0° ~ 90°)
Video Specifications	
Video compression	H.264 and MJPEG
Video formats	NTSC and PAL
Video streaming	Single stream H.264 - up to 1280 x 720 at15 fps
	Single stream MJPEG - up to 1280 x 720 at15 fps
	Dual stream H.264 and MJPEG:  • Primary stream - up to 1280 x 720 at5 fps
	Secondary stream - up to 1280 x 720 at 5 fps
Video data transfer	Support for both constant and variable bit rates
Video resolution and frame rates	For more details see the following Table 2
Audio Specifications	
Audio compression	G.711 A-Law, G.711 U-Law
Audio input and output	Built-in microphone
•	Two-way (full- and half-duplex), one-way, or audio off

Features and Specifications		
Network Specifications		
Quality of service	Differentiated-services-code-point (DSCP) marking and class-of-service (CoS) marking	
Device discovery	Cisco Discovery Protocol, Bonjour Zero-Configuration discovery	
Supported protocols	TCP/IP, DHCP, HTTP, HTTPS, NTP, RTP, RTSP, SMTP, SSL/TLS, SRTP, CDP, Bonjour, SNMP, and SSH	
Physical and Environmental Specification	s	
Power	5W consumed with a PoE source (802.3af-compliant)	
Operating temperature	Normal startup: -25 to 50°C (-13 to 122°F) using Power over Ethernet (PoE) Cold startup: -20°C using PoE	
Weight	13.83 ounces (392 grams)	
Dimensions (D x H)	129 mm (D) x 107 mm (W) x 54 mm (H)	
Housing	Aluminum	
Status LEDs	Power and activity	
External Connectivity		
Network connectivity	100BASE-TX Ethernet with RJ-45 connector	
Serial port	Not supported	
Alarm input	One logic level programmable	
Alarm output	One logic level programmable	
Storage	MicroSD card slot	
Audio	External line output	
Analog video out	Not supported	
Power input	PoE only	
Certifications		
Safety	UL60950-1 second edition CSA22.2-No.60950-1 IEC/EN60950-1 second edition	
EMC requirements	CISPR22 Class B ICES-003 EN50121-4 EN50155 EN50130-4 EN55022 EN55024 VCCI Class B KN22 Class B KN22 Class B KN24 CISPR 24 AS/NZS CISPR 22 FCC CFR Title 47 Part 15 Subpart B	

Not supported when the IP camera is used with Cisco Video Surveillance Manager

## Video Stream Profile Support

The following Table 2 shows support for 16:9 aspect ratios.

 Table 2.
 Support for 16:9 Aspect Ratios

Primary (H.264 or MJPEG)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
1280 x 720	30	1024 x 576 960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
1024 x 576	30	1024 x 576 960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
960 x 544	30	960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
768 x 432	30	768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
704 x 400	30	704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
640 x 368	30	640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15

Primary (H.264 or MJPEG)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
352 x 208	30	352 x 208 320 x 192 192 x 112 160 x 96	15
320 x 192	30	320 x 192 192 x 112 160 x 96	15
192 x 112	30	192 x 112 160 x 96	15
160 x 96	30	160 x 96	15

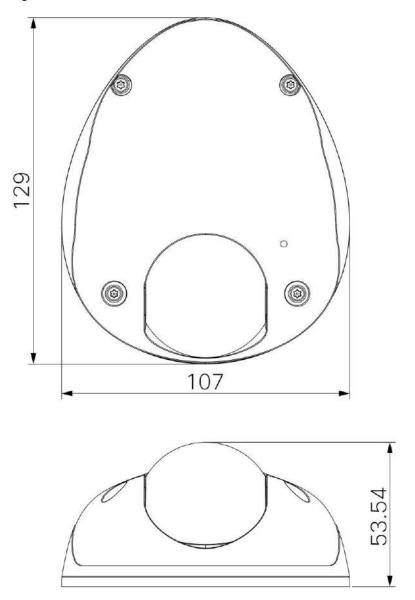
The following Table 3 shows support for 4:3 aspect ratios.

 Table 3.
 Support for 4:3 Aspect Ratios

Primary (H.264 or MJPEG)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
1280 x 960	30	800 x 600 640 x 480 480 x 360 320 x 240 240 x 184 160 x 120	15
1024 x 768	30	800 x 600 640 x 480 480 x 360 320 x 240 240 x 184 160 x 120	15
800 x 600	30	640 x 480 480 x 360 320 x 240 240 x 184 160 x 120	15
640 x 480	30	480 x 360 320 x 240 240 x 184 160 x 120	15
480 x 360	30	320 x 240 240 x 184 160 x 120	15
320 x 240	30	240 x 184 160 x 120	15
240 x 184	30	160 x 120	15
160 x 120	30	160 x 120	15

Figure 1 shows the dimensions for the Cisco Video Surveillance 3050 IP Camera.

Figure 1. Dimensions of the Cisco Video Surveillance 3050 IP Camera in Millimeters.



## **Package Contents**

The items that ship with the Cisco Video Surveillance 3050 IP Camera include:

Cisco Video Surveillance 3050 IP Camera

- Installation template and alignment sticker
- · Mounting plate
- Bushing and connectors
- L-type hex wrench

- · Screws, hex nuts, and wall anchors
- · Desiccant pack and double-sided tape
- · Documentation reference card
- · Regulatory documentation

#### Availability

The Cisco Video Surveillance 3050 IP Camera is available through Cisco Authorized Technology Provider (ATP) partners.

#### **Ordering Information**

Table 4 lists the part numbers for the Cisco Video Surveillance 3050 IP Camera and accessories.

Table 4. Ordering Information

Part Number	Description
CIVS-IPC-3050	Ruggedized Cisco Video Surveillance 3050 IP Camera

## Using the Camera with Cisco Video Surveillance Manager

Features that are marked with an asterisk (\*) are not supported when using the camera with Cisco Video Surveillance Manager.

## Services and Support

Cisco and our certified partners can help you accelerate success and improve your ROI in a Cisco Physical Security solution. The Cisco lifecycle approach to services defines the requisite activities at each phase of the solution lifecycle:

- · Reduce deployment costs by identifying the features that best meet your business requirements.
- Accelerate migration by assessing the readiness of your network to support the system and by developing a sound design.
- Support smooth implementation through effective planning and expert installation, configuration, and integration.
- Increase operational efficiency and extend the value of your investment with award-winning technical support.

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#### For More Information

For more information about the Cisco Video Surveillance 3050 IP Camera, visit <a href="http://www.cisco.com/go/videosurveillance">http://www.cisco.com/go/videosurveillance</a> or contact your local account representative.



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# Cisco Video Surveillance 3520 IP Camera

#### **Product Overview**

The Cisco<sup>®</sup> Video Surveillance 3520 IP Camera is a high-definition, full-functioned video endpoint with industry-leading image quality and processing power. The camera is capable of resolutions up to 1280 x 800 at 30 frames per second (fps) while optimizing network usage with either H.264 or MJPEG compression. Contact closures allow integration with access control systems. With its open, standards-based design, the camera provides an ideal platform for integration and operation as an independent device or as part of a Cisco Video Surveillance network.

Figure 1 shows the Cisco Video Surveillance 3520 IP Camera.

Figure 1. Cisco Video Surveillance 3520 IP Camera



The Cisco Video Surveillance 3520 IP Camera offers a variety of benefits, including:

- True high-definition video. The camera streams crisp and clear video at resolutions of up to 1280 x 800 at 30 fps while maintaining low network bandwidth.
- **Dual streaming.** The camera can stream H.264 and MJPEG video simultaneously. Each video stream can be configured with individual resolution, quality, and frame-rate settings.
- Day/night operation. The camera provides true day/night functionality and includes an infrared filter that
  automatically switches to night mode in low-light scenes. This function can be set to manual, automatic, or
  scheduled control.
- Privacy regions. The camera supports up to four user-defined privacy regions. Any video within a privacy
  region is masked in the video stream.
- Local storage. Video data can automatically be recorded to a microSD card when the camera loses network connectivity.
- Bidirectional audio. The camera supports full-duplex audio and options for half-duplex operation.
- Open API. Support for ONVIF 2.0 allows for standards based interoperability and communications with other ONVIF appliances.

- Flexible power options. The camera supports Power over Ethernet (PoE) 802.3af, 12 VDC, or 24 VAC power through an optional external power supply.
- Medianet support. The camera supports the Cisco Medianet interface. When connected to a Cisco switch
  that also supports Medianet, the switch recognizes the camera as a video endpoint and then uses
  SmartPort macros to set the right network parameters for the video stream on the network. In addition, the
  camera can be automatically discovered and configured when connected to Cisco Video Surveillance
  Manager 7.0, thereby minimizing installation time and cost.

#### **Features**

Table 1 describes the features of the Cisco Video Surveillance 3520 IP Camera.

Table 1. Cisco Video Surveillance 3520 IP Camera Features

Item	Specification
Imaging device	1/4-in. progressive-scan CMOS
Image control	Automatic white balance (AWB), automatic gain control (AGC), automatic exposure shutter (AES), and auto and manual iris
Wide dynamic range	Approximately 69 dB
Minimum illumination	Color mode: F1.4 @ 0.4 lux Black and white mode: F1.2 @ 0.2 lux
Lens	3-9 mm DC-Iris
Field of view	66.09° to 25.03° (horizontal) 40.66° to 15.77° (vertical) 78.36° to 28.83° (diagonal)
Camera angle adjustment	Pan: 350° Tilt: 80° Rotate: 350°
Video compression	H.264 and MJPEG
Audio compression	G.711 A-Law, G.711 U-Law, G.726
Resolution and frame rate (H.264)	Refer to Tables 2 and 3
Resolution and frame rate (MJPEG)	Refer to Tables 2 and 3
Video streaming	<ul> <li>Single-stream H.264 or MJPEG up to 1280 x 800 @ 30 fps</li> <li>Dual-stream H.264 and MJPEG</li> <li>Primary stream programmable up to 1280 x 800 @ 30 fps</li> <li>Secondary stream programmable up to 1024 x 576 @ 15 fps</li> </ul>
Protocols	Dynamic Host Control Protocol (DHCP), Hypertext Transfer Protocol (HTTP), Secure HTTP (HTTPS), Network Time Protocol (NTP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP), Simple Mail Transfer Protocol (SMTP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), Transmission Control Protocol/Internet Protocol (TCP/IP), Secure Real-Time Transport Protocol (SRTP), Cisco Discovery Protocol, Bonjour, Simple Network Management Protocol (SNMP), and Secure Shell (SSH)
Quality of service (QoS)	Differentiated services code point (DSCP) marking and class of service (CoS) marking
Power	12 VDC or 24 VAC through optional external power supply, available separately PoE (802.3af)
Power consumption (max)	DC: 3.6W AC: 5.1W PoE: 5.28W

Table 2 lists the video stream support for the Cisco Video Surveillance 3520 IP Camera.

 Table 2.
 Cisco Video Surveillance 3520 IP Camera Video Stream Support

Primary (H.264)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
1280 x 800	30	1024 x 576 960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
1280 x 720	30	1024 x 576 960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
1024 x 576	30	1024 x 576 960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
960 x 544	30	960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
768 x 432	30	768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
704 x 400	30	704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15

Primary (H.264)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
640 x 368	30	640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
352 x 208	30	352 x 208 320 x 192 192 x 112 160 x 96	15
320 x 192	30	320 x 192 192 x 112 160 x 96	15
192 x 112	30	192 x 112 160 x 96	15
160 x 96	30	160 x 96	15

Table 3 lists the video stream support for the Cisco Video Surveillance 3520 IP Camera for 4:3 aspect ratios.

 Table 3.
 Cisco Video Surveillance 3520 IP Camera Video Stream Support for 4:3 Aspect Ratio

Primary (H.264)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
720 x 480/576	30/25	720 x 480/576 704 x 480/576 352 x 240/288	15
704 x 480/576	30/25	704 x 480/576 352 x 240/288	15
352 x 240/288	30/25	352 x 240/288	15

### Connectors

Table 4 describes the connectivity and connectors of the Cisco Video Surveillance 3520 IP Camera.

Table 4. Cisco Video Surveillance 3520 IP Camera Connectors

Item	Specification
Network connectivity	100 BASE-TX Ethernet with RJ-45 connector
Alarm input	One logic level programmable
Alarm output	One logic level programmable
Storage	MicroSD card slot
Audio	<ul> <li>3.5-mm audio jack: Audio input for optional external microphone and audio output for optional external speaker supported through cable adapter</li> <li>Two-way (full- and half-duplex), one-way, or audio off</li> </ul>
Power input	Terminal block

<sup>\*</sup> Not supported when the camera is used with Cisco Video Surveillance Manager.

#### Software

Table 5 describes the primary features of the Cisco Video Surveillance 3520 IP Camera software.

 Table 5.
 Cisco Video Surveillance 3520 IP Camera Primary Software Features

Item	Specification
Activity detection	User-definable alerts with configurable sensitivities and thresholds, e-mail alert, and HTTP notifications
Video format	NTSC and PAL
Image settings	Configurable brightness, sharpness, contrast, saturation, and white balance
Overlay capabilities	Time, date, and text
Selectable bit rate	Support for constant bit rate or variable bit rate
IP filtering	Users can enter a list of allowed or blocked IP addresses for viewing video and configuring camera settings
Discovery	Cisco Discovery Protocol, Bonjour Zero-Configuration discovery
Configuration	Browser-based using Internet Explorer 8 and later     Two levels of user access with password protection
Security	Support for IEEE 802.1X authentication

## **Specifications**

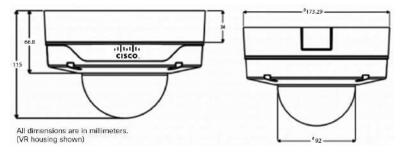
Table 6 provides mechanical specifications of the Cisco Video Surveillance 3520 IP Camera.

 Table 6.
 Cisco Video Surveillance 3520 IP Camera Mechanical Specifications

Item	Specification	
Housing	Aluminum	
LEDs	Power and activity	
Dimensions (D x H)	6.9 x 4.5 in. (174 x 115 mm)	
Weight	1708 g	
Certifications	Safety:  • UL60950-1 2 <sup>nd</sup> edition  • CSA22.2-No.60950-1  • IEC/EN60950-1 2 <sup>nd</sup> edition  • IEC/EN60825	EMC-Requirements:
Operating temperature	32 to 122°F (0 to 50°C)	

Figure 2 shows the dimensions of the Cisco Video Surveillance 3520 IP Camera.

Figure 2. Cisco Video Surveillance 3520 IP Camera Dimensions



### **Package Contents**

Table 7 describes the items that ship with the Cisco Video Surveillance 3520 IP Camera.

Table 7. Package Contents

ltem .
Cisco Video Surveillance 3520 IP Camera
Installation template and alignment sticker
Screwdriver
Screws and anchors
Documentation reference card
Regulatory documentation

## Availability

The Cisco Video Surveillance 3520 IP Camera is available through Cisco Authorized Technology Provider (ATP) Partners.

## **Ordering Information**

Table 8 lists the part numbers for the Cisco Video Surveillance 3520 IP Camera and accessories.

Table 8. Ordering Information

Part Number	Description
CIVS-IPC-3520	Cisco Video Surveillance IP Dome Body, Indoor, 1-MP DN, IO
CIVS-6KA-FLSHMNT	Indoor Flush Mount Housing
CIVS-6KA-FLSHD-S	Indoor Smoked Flush Dome
CIVS-6KA-FLSHD-C	Indoor Clear Flush Dome
CIVS-6KA-VRCNDBS	VR Conduit Base
CIVS-6KA-VRD-S	Smoked Vandal-Resistant Dome
CIVS-6KA-VRD-C	Clear Vandal-Resistant Dome
CIVS-6KA-INSURF-S	Indoor Surface Mount with Smoked Dome
CIVS-6KA-INSURF-C	Indoor Surface Mount with Clear Dome
CIVS-IPCA-PWR12V	12 VDC Power Supply
CIVS-AVCABLE	Audio Video Cable for 35xx, 6k, and 7k Series IP Cameras

## Using the Camera with Cisco Video Surveillance Manager

Features that are marked with an asterisk (\*) are not supported when using the camera with Cisco Video Surveillance Manager. Please refer to the release notes for Cisco Video Surveillance Manager 6.3 for more information:

 $\frac{\text{http://www.cisco.com/en/US/docs/security/physical\_security/video\_surveillance/network/vsm/release\_notes/6\_3/vsm.rn\_63.html.}{\text{m\_rn\_63.html}}.$ 

#### Services and Support

Cisco and our certified partners can help you accelerate success and improve the return on your investment in a Cisco Physical Security solution. The Cisco lifecycle approach to services defines the requisite activities at each phase of the solution lifecycle. This approach allows you to:

- · Reduce deployment costs by identifying the features that will best meet your business requirements
- Accelerate migration by assessing the readiness of your network to support the system and by developing a sound design
- Support smooth implementation through effective planning and expert installation, configuration, and integration
- Increase operational efficiency and extend the value of your investment with award-winning technical support

For more information about Cisco services, visit http://www.cisco.com/go/services.

#### For More Information

For more information about the Cisco Video Surveillance 3520 IP Camera, please visit <a href="http://www.cisco.com/go/videosurveillance">http://www.cisco.com/go/videosurveillance</a> or contact your local account representative.



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# Cisco Video Surveillance 3535 IP Camera

#### **Product Overview**

The Cisco® Video Surveillance 3535 IP Camera is an outdoor high-definition, full-function video endpoint with industry-leading image quality and processing power. The camera is capable of resolutions up to 1280 x 960 at 30 frames per second (fps) while optimizing network usage with either H.264 or Motion JPEG (MJPEG) compression. Contact closures allow integration with access control systems. With its open, standards-based design, the camera provides an ideal platform for integration and operation as an independent device or as part of a Cisco Video Surveillance network.

The Cisco Video Surveillance 3535 IP Camera offers a variety of benefits, including:

- True high-definition video: The camera streams crisp and clear video at resolutions of up to 1280 x 960 at 30 fps while maintaining low network bandwidth.
- Outdoor-ready: An IK10 and IP67-rated enclosure enables outdoor mounting.
- **Dual streaming:** The camera can stream H.264 and MJPEG video simultaneously. Each video stream can be configured with individual resolution, quality, and frame rate settings.
- **Application-ready platform:** You can easily add functions by installing and running applications directly on the camera.
- Day/night operation: The camera provides true day/night functionality and includes an infrared filter that
  automatically switches to night mode in low-light scenes. This function can be set to manual, automatic, or
  scheduled control.
- Privacy regions: The camera supports up to four user-defined privacy regions. Any video within a privacy
  region is masked in the video stream.
- Local storage: Video data can automatically be recorded to a microSD card when the camera loses network connectivity.
- Bidirectional audio: The camera supports full-duplex audio and options for half-duplex operation.
- Open API: Support for Open Network Video Interface Forum (ONVIF) 2.0 allows for standards-based interoperability and communications with other ONVIF appliances.
- Flexible power options: The camera supports Power over Ethernet (PoE) 802.3af, 12 VDC, or 24 VAC power through an optional external power supply.
- Medianet support: The camera supports the Cisco Medianet interface. When connected to a Cisco switch
  that also supports Medianet, the switch recognizes the camera as a video endpoint and then uses
  SmartPort macros to set the correct network parameters for the video stream on the network. In addition,
  the camera can be automatically discovered and configured when connected to Cisco Video Surveillance
  Manager 7.0, thereby reducing installation time and cost.

### **Features**

Table 1 describes the features of the Cisco Video Surveillance 3535 IP Camera.

 Table 1.
 Cisco Video Surveillance 3535 IP Camera Features

Itom.	Specification
Item	·
Imaging device	1/3-in. progressive-scan CMOS
Image control	Automatic white balance (AWB), automatic gain control (AGC), automatic exposure shutter (AES), and auto and manual iris
Wide dynamic range	~69dB
Minimum illumination	Color mode: F1.2 @ 0.4 lux Black-and-white mode: F1.2 @ 0.2 lux
Lens	3-9 mm DC-Iris
Field of view	93° to 31.7° (horizontal) 68.4° to 23.8° (vertical) 118.9° to 39.6° (diagonal)
Camera angle adjustment	Pan: 350° Tilt: 80° Rotate: 350°
Video compression	H.264 and MJPEG
Audio compression	G.711 A-Law, G.711 U-Law
Resolution and frame rate (H.264)	Refer to Tables 2 and 3
Resolution and frame rate (MJPEG)	Refer to Tables 2 and 3
Video streaming	<ul> <li>Single-stream H.264 or MJPEG up to 1280 x 960 @ 30 fps</li> <li>Dual-stream H.264 and MJPEG</li> <li>Primary stream programmable up to 1280 x 960 @ 30 fps</li> <li>Secondary stream programmable up to 800 x 600 @ 15 fps</li> </ul>
Protocols	Dynamic Host Control Protocol (DHCP), Hypertext Transfer Protocol (HTTP), Secure HTTP (HTTPS), Network Time Protocol (NTP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP), Simple Mail Transfer Protocol (SMTP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), Transmission Control Protocol/Internet Protocol (TCP/IP), Secure Real-Time Transport Protocol (SRTP), Cisco Discovery Protocol, Bonjour, Simple Network Management Protocol (SNMP), and Secure Shell (SSH)
Quality of service (QoS)	Differentiated services code point (DSCP) marking and class of service (CoS) marking
Power	12 VDC or 24 VAC through optional external power supply, available separately PoE (802.3af)
Power consumption (max)	DC: 9 W AC: 10.5 W PoE: 11 W

Table 2 lists the video stream support for the Cisco Video Surveillance 3535 IP Camera for a 16:9 aspect ratio.

 Table 2.
 Cisco Video Surveillance 3535 IP Camera Video Stream Support for 16:9 Aspect Ratio

Primary (H.264)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
1280 x 720	30	1024 x 576	15
		960 x 544	
		768 x 432	
		704 x 400	
		640 x 368	
		352 x 208	
		320 x 192	
		192 x 112	
		160 x 96	

Primary (H.264)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
1024 x 576	30	1024 x 576 960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
960 x 544	30	960 x 544 768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
768 x 432	30	768 x 432 704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
704 x 400	30	704 x 400 640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
640 x 368	30	640 x 368 352 x 208 320 x 192 192 x 112 160 x 96	15
352 x 208	30	352 x 208 320 x 192 192 x 112 160 x 96	15
320 x 192	30	320 x 192 192 x 112 160 x 96	15
192 x 112	30	192 x 112 160 x 96	15
160 x 96	30	160 x 96	15

Table 3 lists the video stream support for the Cisco Video Surveillance 3535 IP Camera for a 4:3 aspect ratio.

 Table 3.
 Cisco Video Surveillance 3535 IP Camera Video Stream Support for 4:3 Aspect Ratio

Primary (H.264)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
1280 x 960	30	800 x 600 640 x 480 480 x 360 320 x 240 240 x 184 160 x 120	15
1024 x 768	30	800 x 600 640 x 480 480 x 360 320 x 240 240 x 184 160 x 120	15
800 x 600	30	640 x 480 480 x 360 320 x 240 240 x 184 160 x 120	15
640 x 480	30	480 x 360 320 x 240 240 x 184 160 x 120	15
480 x 360	30	320 x 240 240 x 184 160 x 120	15
320 x 240	30	240 x 184 160 x 120	15
240 x 184	30	160 x 120	15
160 x 120	30	160 x 120	15

#### Connectors

Table 4 describes the connectivity and connectors of the Cisco Video Surveillance 3535 IP Camera.

 Table 4.
 Cisco Video Surveillance 3535 IP Camera Connectors

Item	Specification
Network connectivity	100BASE-TX Ethernet with RJ-45 connector
Alarm input	One logic-level programmable
Alarm output	One logic-level programmable
Storage	MicroSD card slot
Audio	<ul> <li>3.5-mm audio jack: Audio input for optional external microphone and audio output for optional external speaker supported through Y-cable adapter</li> <li>Two-way (full- and half-duplex), one-way, or audio off</li> </ul>
Power input	Terminal block

\*Not supported when the camera is used with Cisco Video Surveillance Manager.

### Software

Table 5 describes the primary features of the Cisco Video Surveillance 3535 IP Camera software.

 Table 5.
 Cisco Video Surveillance 3535 IP Camera Primary Software Features

Item	Specifications and Features
Activity detection	User-definable alerts with configurable sensitivities and thresholds, email alert, and HTTP notifications
Camera-tamper detection	User-definable alerts, email alert, and HTTP notifications
Video format	NTSC and PAL
Image settings	Configurable brightness, sharpness, contrast, saturation, and white balance
Overlay capabilities	Time, date, and text
Selectable bit rate	Support for constant bit rate or variable bit rate
IP filtering	Users can enter a list of allowed or blocked IP addresses for viewing video and configuring camera settings
Discovery	Cisco Discovery Protocol, Bonjour Zero-Configuration discovery
Configuration	Browser-based using Internet Explorer 8 and later
	Two levels of user access with password protection
Security	Support for IEEE 802.1X authentication

## **Specifications**

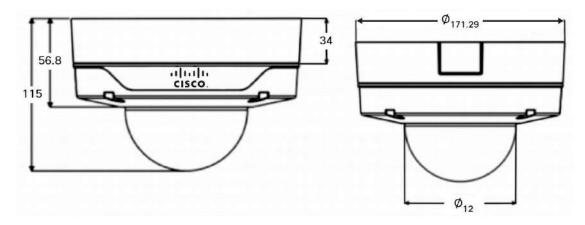
Table 6 provides mechanical specifications of the Cisco Video Surveillance 3535 IP Camera.

 Table 6.
 Cisco Video Surveillance 3535 IP Camera Mechanical Specifications

Item	Specification		
Housing	Aluminum	Aluminum	
LEDs	Power and activity		
Dimensions (D x H)	6.9 x 4.5 in. (174 x 115 mm)		
Weight	1500 g		
Certifications	<b>Safety</b> UL60950-1 2 <sup>nd</sup> edition CSA22.2-No.60950-1 IEC/EN60950-1 2 <sup>nd</sup> edition IEC/EN60825	EMC-Requirements CISPR22 Class B ICES-003 EN55022 EN55024 EN61000-3-2/-3-3 Class A VCCI Class B KN22 Class B KN24	
Operating Temperature	-40 to 122°F (-40 to 50°C) Cold startup: -40°C		

Figure 1 shows the dimensions of the Cisco Video Surveillance 3535 IP Camera. All dimensions are in millimeters.

Figure 1. Cisco Video Surveillance 3535 IP Camera Dimensions



## **Package Contents**

Table 7 describes the items that ship with the Cisco Video Surveillance 3535 IP Camera.

Table 7. Package Contents

ltem
Cisco Video Surveillance 3535 IP Camera
Installation template and alignment sticker
Bushing and connectors
L-type hex wrench
Screws and nuts
Desiccant pack
Documentation reference card
Regulatory documentation

### Availability

The Cisco Video Surveillance 3535 IP Camera is available through Cisco Authorized Technology Provider (ATP) Partners.

## **Ordering Information**

Table 8 lists the part numbers for the Cisco Video Surveillance 3535 IP Camera and accessories.

 Table 8.
 Ordering Information

Part Number	Description
CIVS-IPC-3535	Cisco Video Surveillance IP Dome Body, Outdoor, 1.3MP DN, IO
CIVS-6KA-VRD-S	Smoked Vandal-Resistant Dome
CIVS-6KA-VRD-C	Clear Vandal-Resistant Dome
CIVS-IPCA-PWR12V	12 VDC Power Supply
CIVS-AVCABLE	Audio Video Cable for 35xx, 6k, and 7k Series IP Cameras

## Using the Camera with Cisco Video Surveillance Manager

Features that are marked with an asterisk (\*) are not supported when using the camera with Cisco Video Surveillance Manager.

#### Services and Support

Cisco and our certified partners can help you improve the return on your investment in a Cisco Physical Security solution. The Cisco lifecycle approach to services defines the requisite activities at each phase of the solution lifecycle. This approach allows you to:

- · Reduce deployment costs by identifying the features that will best meet your business requirements
- Accelerate migration by assessing the readiness of your network to support the system and by developing a sound design
- Support smooth implementation through effective planning and expert installation, configuration, and integration
- Increase operational efficiency and extend the value of your investment with award-winning technical support

For more information about Cisco services, visit <a href="http://www.cisco.com/go/services">http://www.cisco.com/go/services</a>.

#### For More Information

For more information about the Cisco Video Surveillance 3535 IP Camera, please visit <a href="http://www.cisco.com/go/videosurveillance">http://www.cisco.com/go/videosurveillance</a> or contact your local account representative.



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