

# Cisco Video Surveillance 3520 IP Camera

## Product Overview

The Cisco® 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  |
|--|--|
| <b>Imaging device</b>                    | 1/4-in. progressive-scan CMOS  |
| <b>Image control</b>                     | Automatic white balance (AWB), automatic gain control (AGC), automatic exposure shutter (AES), and auto and manual iris  |
| <b>Wide dynamic range</b>                | Approximately 69 dB  |
| <b>Minimum illumination</b>              | <ul style="list-style-type: none"> <li>• Color mode: F1.4 @ 0.4 lux</li> <li>• Black and white mode: F1.2 @ 0.2 lux</li> </ul>   |
| <b>Lens</b>                              | 3-9 mm<br>DC-Iris  |
| <b>Field of view</b>                     | 66.09° to 25.03° (horizontal)<br>40.66° to 15.77° (vertical)<br>78.36° to 28.83° (diagonal)  |
| <b>Camera angle adjustment</b>           | Pan: 350°<br>Tilt: 80°<br>Rotate: 350°   |
| <b>Video compression</b>                 | H.264 and MJPEG  |
| <b>Audio compression</b>                 | G.711 A-Law, G.711 U-Law, G.726  |
| <b>Resolution and frame rate (H.264)</b> | Refer to Tables 2 and 3  |
| <b>Resolution and frame rate (MJPEG)</b> | Refer to Tables 2 and 3  |
| <b>Video streaming</b>                   | <ul style="list-style-type: none"> <li>• Single-stream H.264 or MJPEG up to 1280 x 800 @ 30 fps</li> <li>• Dual-stream H.264 and MJPEG <ul style="list-style-type: none"> <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> </li> </ul>  |
| <b>Protocols</b>                         | 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) |
| <b>Quality of service (QoS)</b>          | Differentiated services code point (DSCP) marking and class of service (CoS) marking   |
| <b>Power</b>                             | 12 VDC or 24 VAC through optional external power supply, available separately<br>PoE (802.3af)   |
| <b>Power consumption (max)</b>           | DC: 3.6W<br>AC: 5.1W<br>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<br>960 x 544<br>768 x 432<br>704 x 400<br>640 x 368<br>352 x 208<br>320 x 192<br>192 x 112<br>160 x 96 | 15          |
| 1280 x 720      | 30          | 1024 x 576<br>960 x 544<br>768 x 432<br>704 x 400<br>640 x 368<br>352 x 208<br>320 x 192<br>192 x 112<br>160 x 96 | 15          |
| 1024 x 576      | 30          | 1024 x 576<br>960 x 544<br>768 x 432<br>704 x 400<br>640 x 368<br>352 x 208<br>320 x 192<br>192 x 112<br>160 x 96 | 15          |
| 960 x 544       | 30          | 960 x 544<br>768 x 432<br>704 x 400<br>640 x 368<br>352 x 208<br>320 x 192<br>192 x 112<br>160 x 96               | 15          |
| 768 x 432       | 30          | 768 x 432<br>704 x 400<br>640 x 368<br>352 x 208<br>320 x 192<br>192 x 112<br>160 x 96                            | 15          |
| 704 x 400       | 30          | 704 x 400<br>640 x 368<br>352 x 208<br>320 x 192<br>192 x 112<br>160 x 96   | 15          |

| Primary (H.264) | Maximum fps | Secondary (H.264 or MJPEG)                                   | Maximum fps |
|-----------------|-------------|--|-------------|
| 640 x 368       | 30          | 640 x 368<br>352 x 208<br>320 x 192<br>192 x 112<br>160 x 96 | 15          |
| 352 x 208       | 30          | 352 x 208<br>320 x 192<br>192 x 112<br>160 x 96              | 15          |
| 320 x 192       | 30          | 320 x 192<br>192 x 112<br>160 x 96                           | 15          |
| 192 x 112       | 30          | 192 x 112<br>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<br>704 x 480/576<br>352 x 240/288 | 15          |
| 704 x 480/576   | 30/25       | 704 x 480/576<br>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  |
|-----------------------------|--|
| <b>Network connectivity</b> | 100 BASE-TX Ethernet with RJ-45 connector  |
| <b>Alarm input</b>          | One logic level programmable   |
| <b>Alarm output*</b>        | One logic level programmable   |
| <b>Storage</b>              | MicroSD card slot  |
| <b>Audio</b>                | <ul style="list-style-type: none"> <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> |
| <b>Power input</b>          | 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 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        | <ul style="list-style-type: none"><li>• Browser-based using Internet Explorer 8 and later</li><li>• Two levels of user access with password protection</li></ul> |
| Security             | Support for IEEE 802.1X authentication   |

## Specifications

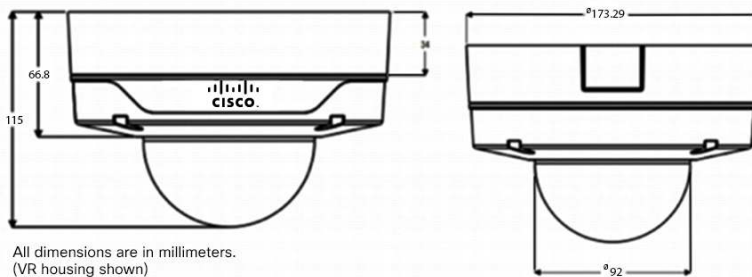
Table 6 provides mechanical specifications of the Cisco Video Surveillance 3520 IP Camera.

**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        | <div><div><b>Safety:</b><ul style="list-style-type: none"><li>• UL60950-1 2<sup>nd</sup> edition</li><li>• CSA22.2-No.60950-1</li><li>• IEC/EN60950-1 2<sup>nd</sup> edition</li><li>• IEC/EN60825</li></ul></div><div><b>EMC-Requirements:</b><ul style="list-style-type: none"><li>• CISPR22 Class B</li><li>• ICES-003</li><li>• EN55022</li><li>• EN55024</li><li>• EN61000-3-2/-3-3 Class A</li><li>• VCCI Class B</li><li>• KN22 Class B</li><li>• KN24</li></ul></div></div> |
| 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

| Item  |
|---|
| 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  |
|--------------------------|--|
| <b>CIVS-IPC-3520</b>     | Cisco Video Surveillance IP Dome Body, Indoor, 1-MP DN, IO |
| <b>CIVS-6KA-FLSHMNT</b>  | Indoor Flush Mount Housing                                 |
| <b>CIVS-6KA-FLSHD-S</b>  | Indoor Smoked Flush Dome                                   |
| <b>CIVS-6KA-FLSHD-C</b>  | Indoor Clear Flush Dome                                    |
| <b>CIVS-6KA-VRCNDBS</b>  | VR Conduit Base  |
| <b>CIVS-6KA-VRD-S</b>    | Smoked Vandal-Resistant Dome                               |
| <b>CIVS-6KA-VRD-C</b>    | Clear Vandal-Resistant Dome                                |
| <b>CIVS-6KA-INSURF-S</b> | Indoor Surface Mount with Smoked Dome                      |
| <b>CIVS-6KA-INSURF-C</b> | Indoor Surface Mount with Clear Dome                       |
| <b>CIVS-IPCA-PWR12V</b>  | 12 VDC Power Supply  |
| <b>CIVS-AVCABLE</b>      | 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:

[http://www.cisco.com/en/US/docs/security/physical\\_security/video\\_surveillance/network/vsm/release\\_notes/6\\_3/vsm\\_rn\\_63.html](http://www.cisco.com/en/US/docs/security/physical_security/video_surveillance/network/vsm/release_notes/6_3/vsm_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 <http://www.cisco.com/go/videosurveillance> or contact your local account representative.



**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
Singapore

**Europe Headquarters**  
Cisco Systems International BV Amsterdam,  
The Netherlands

---

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)