

## Cisco Video Surveillance 2500 Series IP Camera

The Cisco® Video Surveillance 2500 Series IP Camera is a high-resolution, feature-rich digital camera designed for superior performance in a wide variety of video surveillance applications. The camera employs MPEG-4 and MJPEG compression to stream 30 frames per second (fps) at D1 NTSC resolution (720 x 480) or 25 fps at D1 PAL resolution (720 x 576), offering efficient network utilization while providing high-quality video. Contact closures and two-way audio allow integration with microphones, speakers, and access control systems. (Note: Not all features are supported when using the camera with Cisco Video Surveillance Manager.) 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.** Figure 1. Wireless and Wired IP Cameras Shown with Optional DC Auto Iris Lens



The Cisco Video Surveillance 2500 Series IP Camera offers a variety of benefits, including:

- **Wide dynamic range.** The camera employs powerful digital imaging technology, allowing it to capture high-quality images in a wide variety of lighting conditions. It uses a progressive scan image sensor with global electronic shuttering to ensure natural color rendition, zero blooming and smear, and minimal motion blurring.
- **Dual streaming.** The camera can stream MPEG-4 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 that includes an IR filter that automatically switches to night mode in low light scenes. This function can be set to manual or automatic control.
- **Flexible power options.** The wired version of the 2500 camera supports Power over Ethernet (PoE) 802.3af or DC power through an optional external power supply.
- **Wireless capabilities.** The wireless IP camera model supports 1 x 2 Multiple Input Multiple Output (MIMO) communication, which provides better data throughput and higher link range than single antenna designs. The wireless IP camera offers strong wireless security using Wi-Fi Protected Access (WPA)/WPA2 and supports various network protocols for 802.1x authentication.

- **Embedded security and networking.\*** The camera provides 802.1X authentication and hardware-based Advanced Encryption Standard (AES). For enhanced bandwidth management, the camera supports IP Multicast.
- **Event notification.\*** The camera can examine designated areas in the video for motion activity and then notify users or other applications when it detects activity that exceeds a predefined threshold. The camera also provides two digital inputs and two digital outputs that can be used to initiate specific actions when an alarm is detected.
- **Mounting options.\*** The camera can be installed with a fixed mount or with an optional external pan/tilt mount and motorized zoom lens.

**Note:** Features with an asterisk are not available when the camera is used with Cisco Video Surveillance Manager.

## Features

Table 1 describes the features of the Cisco Video Surveillance 2500 Series IP Camera.

**Table 1.** Cisco Video Surveillance 2500 Series IP Camera Features

Item	Specification
<b>Imaging Device</b>	1/3-in. progressive-scan CMOS sensor with wide dynamic range
<b>Image Control</b>	Automatic white balance (AWB), automatic back lighting, automatic gain control (AGC), automatic exposure (AE), auto/manual iris
<b>Dynamic Range</b>	102 dB typical/120 dB maximum
<b>Minimum Illumination</b>	<ul style="list-style-type: none"> <li>• Color mode: F1.4 @ 0.65 lux</li> <li>• Black and white mode: F1.4 @ 0.08 lux</li> </ul>
<b>Signal-to-Noise Ratio (SNR)</b>	>48 dB
<b>Lens Selection</b>	Accepts manual or DC auto iris lens
<b>Lens Mount</b>	CS mount
<b>Shutter Speed</b>	Electronic shutter
<b>Video Compression</b>	MPEG-4 SP level 0 to 4, ASP level 0 to 5
<b>Audio Compression*</b>	G.711 A-Law, G.711 U-Law, G.726
<b>Signal-to-Noise Ratio (SNR)</b>	>48 dB
<b>Resolution and Frame Rate</b>	<ul style="list-style-type: none"> <li>• NTSC/PAL</li> <li>• 720 x 480/576 @ 30/25 fps (D1)</li> <li>• 704 x 480/576 @ 30/25 fps (4CIF)</li> <li>• 352 x 240/288 @ 30/25 fps (CIF)</li> </ul>
<b>Video Streaming</b>	<ul style="list-style-type: none"> <li>• Single-stream MPEG-4 up to D1 720 x 480/576 @ 30/25 fps</li> <li>• Single-stream MJPEG up to D1 720 x 480/576 @ 15 fps</li> <li>• Dual-stream: MPEG-4 and MJPEG</li> <li>• Primary stream MPEG-4 programmable up to 704 x 480/576 @ 25/20 fps</li> <li>• Secondary stream MPEG-4/MJPEG (selectable) programmable up to 352 x 240/288 @ up to 15 fps</li> </ul>
<b>Protocols*</b>	Dynamic Host Control Protocol (DHCP), File Transfer Protocol (FTP), 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)
<b>Quality of Service (QoS)*</b>	Differentiated services code point (DSCP) marking
<b>Power</b>	<ul style="list-style-type: none"> <li>• 12 VDC, through optional external power supply, available separately</li> <li>• PoE (802.3af) @ 48V/0.3A (wired only)</li> </ul>
<b>Power Consumption</b>	11W (max)

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

## Wireless Specifications

Table 2 provides wireless specifications for the Cisco Video Surveillance 2500 Series IP Camera.

**Table 2.** Cisco Video Surveillance 2500 Series IP Camera Wireless Specifications

Item	Specification
Wireless Interface	802.11b/g
Transmitted Power	<ul style="list-style-type: none"> <li>802.11g: 12–14 dBm</li> <li>802.11b: 16–18 dBm</li> </ul>
Receive Sensitivity	<ul style="list-style-type: none"> <li>802.11g: 54 Mbps @ –75 dBm</li> <li>802.11b: 11 Mbps @ –88 dBm</li> </ul>
Data Rate	<ul style="list-style-type: none"> <li>802.11g: 6–54 Mbps</li> <li>802.11b: 1–11 Mbps</li> </ul>
Antenna Gain	2 dBi
Antenna Connector Type	Reverse polarity SMA
Mode	Infrastructure
Protocols*	802.1x, AES, Temporal Key Integrity Protocol (TKIP), Wired Equivalent Privacy (WEP), WPA/WPA2 Personal, WPA/WPA2 Enterprise, Extensible Authentication Protocol-Transport Layer Security (EAP-TLS), EAP-Tunneled TLS (EAP-TTLS), Microsoft Challenge-Handshake Authentication Protocol (MS-CHAP), MS-CHAPv2, Protected EAP (PEAP), EAP-Message Digest 5 (EAP-MD5)

## Connectors

Table 3 describes the connectivity and connectors of the Cisco Video Surveillance 2500 Series IP Camera.

**Table 3.** Cisco Video Surveillance 2500 Series IP Camera Connectors

Item	Specification
Network Connectivity	10/100 BASE-TX Ethernet with RJ-45 connector
Video	1 analog output BNC connector, 75 ohms
Audio*	<ul style="list-style-type: none"> <li>1, 3.5-mm output jack for optional external speaker</li> <li>1, 3.5-mm input jack for optional external microphone</li> <li>Built-in microphone</li> <li>Two-way (full- and half-duplex), one-way, or audio off</li> </ul>
Serial Port*	RS-485 (2-wire), Pelco D protocol only
Alarm Input*	2, logic level programmable
Alarm Output*	2, logic level programmable
Power Input	2-pin terminal

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

## Software

Table 4 describes the primary features of the Cisco Video Surveillance 2500 Series IP Camera software.

**Table 4.** Cisco Video Surveillance 2500 Series IP Camera Primary Software Features

Item	Specification
<b>Activity Detection</b>	4 user-definable motion detection areas, e-mail alert, and FTP uploading of captured video or JPEG snapshots triggered by motion alert
<b>Wireless Security</b>	Wired Equivalent Privacy (WEP) 64/128, Temporal Key Integrity Protocol (TKIP), Wi-Fi Protected Access Preshared Key (WPA-PSK), WPA2
<b>Video Format</b>	NTSC and PAL
<b>Day/night Settings</b>	Auto or manual day/night operation with user-definable thresholds
<b>Image Settings</b>	Configurable brightness, sharpness, contrast, saturation, and white balance
<b>Overlay Capabilities</b>	Time, date, and text
<b>Selectable Bit Rate</b>	Support for Constant Bit Rate or Variable Bit Rate* (constant quality)
<b>IP Filtering*</b>	Users can enter a list of allowed or blocked IP addresses for viewing video and configuring camera settings
<b>Discovery*</b>	Cisco Discovery Protocol, Bonjour Zero-Configuration discovery
<b>Configuration</b>	<ul style="list-style-type: none"> <li>• Browser-based using Internet Explorer 6.x with SP2 and later</li> <li>• Multiple user access levels with password protection</li> </ul>

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

## Specifications

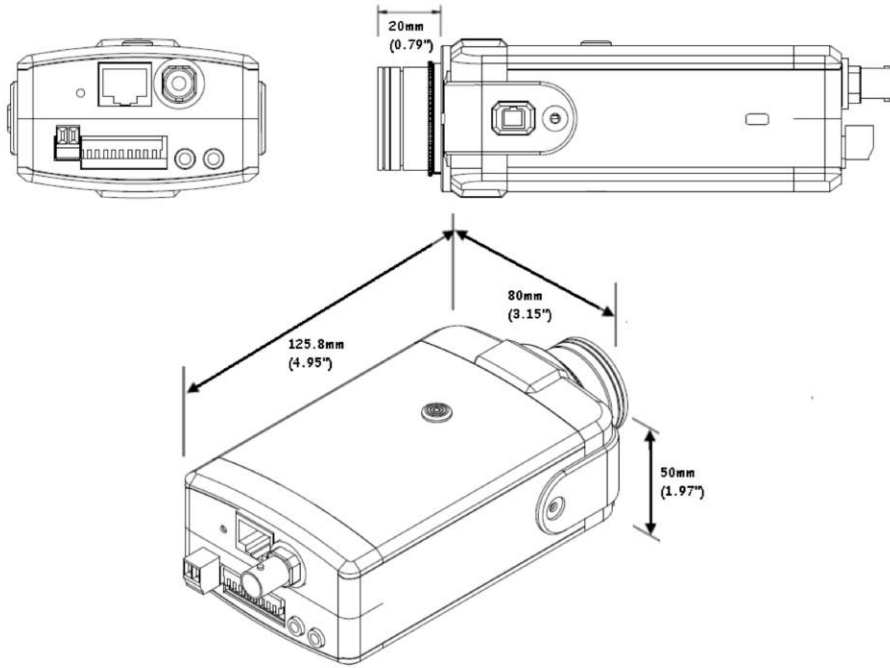
Table 5 provides specifications of the Cisco Video Surveillance 2500 Series IP Camera.

**Table 5.** Cisco Video Surveillance 2500 Series IP Camera Specifications

Item	Specification			
<b>Housing</b>	Aluminum			
<b>LEDs</b>	Power, Ethernet link, and activity			
<b>Dimensions (L x W x H)</b>	<ul style="list-style-type: none"> <li>• 4.8 x 3.1 x 2 in.</li> <li>• 122 x 80 x 50 mm</li> </ul>			
<b>Weight</b>	<ul style="list-style-type: none"> <li>• 1.15 lb</li> <li>• 0.52 kg</li> </ul>			
<b>Certifications</b>	<table border="0"> <tr> <td style="vertical-align: top;"> <b>Safety:</b>            IEC 60950-1:2001            EN 60950-2:2001 +A11:2004         </td> <td style="vertical-align: top;"> <b>EMC-Emissions:</b>            FCC Part 12 Subpart B, Class B            CISPR 22 Class B            ICES-003, Class B            ANSI C63.4            EN 55022: Class B            EN 61000-3-2            EN61000-3-3         </td> <td style="vertical-align: top;"> <b>EMC-Immunity:</b>            EN 55024            EN 61000-4-2            EN 61000-4-3            EN 61000-4-4            EN 61000-4-5            EN 61000-4-6            EN 61000-4-8            EN 61000-4-11         </td> </tr> </table>	<b>Safety:</b> IEC 60950-1:2001 EN 60950-2:2001 +A11:2004	<b>EMC-Emissions:</b> FCC Part 12 Subpart B, Class B CISPR 22 Class B ICES-003, Class B ANSI C63.4 EN 55022: Class B EN 61000-3-2 EN61000-3-3	<b>EMC-Immunity:</b> EN 55024 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 EN 61000-4-11
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<b>Operating Temperature</b>	<ul style="list-style-type: none"> <li>• 32 to 122°F</li> <li>• 0 to 50°C</li> </ul>			

Figure 2 shows the dimensions of the Cisco Video Surveillance 2500 Series IP Cameras.

**Figure 2.** Cisco Video Surveillance 2500 Series IP Camera Dimensions



**Package Contents**

Table 6 describes the items that ship with the Cisco Video Surveillance 2500 Series IP Camera.

**Table 6.** Package Contents

Item
Cisco Video Surveillance 2500 Series IP Camera (wired or wireless model)
Accessories: Lens opening dust cap, mounting hole protector, terminal block for power connection, C mount lens adaptor, 0.9-mm Allen wrench, two antennas (wireless model only)
Regulatory compliance and safety information
Quick start guide

**Availability**

The Cisco Video Surveillance 2500 Series IP Camera is available through Cisco Authorized Technology Provider (ATP) Partners.

**Ordering Information**

Table 7 lists the part numbers for the Cisco Video Surveillance 2500 Series IP Camera and for the lenses that the camera supports.

**Table 7.** Ordering Information

Part Number	Description
<b>CIVS-IPC-2500</b>	Cisco Video Surveillance 2500 Series IP Camera, Full Resolution, Day/Night
<b>CIVS-IPC-2500W</b>	Cisco Video Surveillance 2500Series IP Camera, Full Resolution, Day/Night, Wireless
<b>CIVS-PWRPAC-12V</b>	Cisco Video Surveillance External Dual-Voltage Power Supply for Encode/Decode

Part Number	Description
<b>Lenses</b>	
<b>CIVS-IPC-VT38</b>	Cisco IP Camera Tamron 3–8 mm Varifocal Lens
<b>CIVS-IPC-VT31</b>	Cisco IP Camera Tamron 3–11 mm Varifocal Lens
<b>CIVS-IPC-VT55</b>	Cisco IP Camera Tamron 5–50 mm Varifocal Lens
<b>CIVS-IPC-VF38</b>	Cisco IP Camera Fujinon 3–8 mm Varifocal Lens
<b>CIVS-IPC-VF31</b>	Cisco IP Camera Fujinon 3–11 mm Varifocal Lens
<b>CIVS-IPC-VF55</b>	Cisco IP Camera Fujinon 5–50 mm Varifocal Lens

## 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 4.2/6.2 for more information:

[http://www.cisco.com/en/US/docs/security/physical\\_security/video\\_surveillance/network/media\\_server/6\\_2/release\\_notes/rn42\\_62.pdf](http://www.cisco.com/en/US/docs/security/physical_security/video_surveillance/network/media_server/6_2/release_notes/rn42_62.pdf)

## 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:

- 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 2500 Series IP Camera, visit <http://www.cisco.com/go/videosurveillance> or contact your local account representative.



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