

Cisco Video Surveillance 2400 Series IP Dome

The Cisco® Video Surveillance 2400 Series IP Dome is a high-resolution, feature-rich digital IP camera designed for superior performance in a wide variety of environments. The camera employs MPEG-4 compression of up to 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. It also supports MJPEG compression. 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 a Cisco Video Surveillance 2400 Series IP Dome camera with a recessed mount.

Figure 1. Cisco Video Surveillance 2400 Series IP Dome



The Cisco Video Surveillance 2400 Series IP Dome 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 indoor and outdoor 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.
- **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 for 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 initiate specific actions when an alarm is detected.
- **Flexible power options.** The camera supports Power over Ethernet (PoE) 802.3af, and 12 VDC or 24 VAC power through an optional external power supply.
- **Mounting options.** The camera was designed specifically for ceiling tile mount deployments. There is an optional shroud for surface mount installations. The camera is equipped with a varifocal lens that has a manual pan and tilt mechanism that allows the camera to be rotated and placed at the proper angle.

- **Day/night operation.** The camera provides true day/night operation and includes an IR filter that automatically switches to night mode in low-light scenes. This function can be set to manual or automatic control.
- **Cisco Media Application Programming Interface.** The camera supports the Cisco Media API, which is an open, standards-based interface that allows integration with compatible video surveillance management systems.

Features

Table 1 describes the features of the Cisco Video Surveillance 2400 Series IP Dome.

Table 1. Cisco Video Surveillance 2400 Series IP Dome Features

Item	Specification
Imaging device	1/3-in. complementary metal oxide semiconductor (CMOS) with wide dynamic range
Image control	Automatic white balance (AWB), automatic back lighting, automatic gain control (AGC), sharpness, image quality, time stamp, and camera ID
Dynamic range	102 dB typical/120 dB maximum
Minimum illumination	<ul style="list-style-type: none"> • Color mode: F1.4 @ 0.4 lux (.04 fc) • Black and white mode: F1.4 @ 0.04 lux (0.004 fc)
Signal-to-noise ratio (SNR)	>48 dB
Lens selection	DC iris lens
Video compression	MPEG-4 SP level 0 to 4, ASP level 0 to 5, MJPEG
Resolution and frame rate	NTSC/PAL <ul style="list-style-type: none"> • 720 x 480/576 @ 30/25 fps (D1) • 704 x 480/576 @ 30/25 fps (4CIF) • 352 x 240/288 @ 30/25 fps (CIF)
Video streaming	<ul style="list-style-type: none"> • Single-stream MPEG-4 up to D1 720 x 480/576 @ 30/25 fps • Single-stream MJPEG up to D1 720 x 480/576 @ 15 fps • Dual-stream: MPEG-4 and MJPEG <ul style="list-style-type: none"> ◦ Primary stream MPEG-4 programmable up to 704 x 480/576 @ 25/20 fps ◦ Secondary stream MPEG-4/MJPEG (selectable) programmable up to 352 x 240/288 @ up to 15 fps
Memory	64 MB flash, 128 MB SDRAM
Protocols	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)
Quality of service (QoS)	Differentiated Services Code Point (DSCP) marking

Connectors

Table 2 describes the connectivity and connectors of the Cisco Video Surveillance 2400 Series IP Dome.

Table 2. Cisco Video Surveillance 2400 Series IP Dome Connectors

Item	Specification
Network connectivity	10/100 BASE-TX Ethernet with RJ-45 connector
Video	Analog output BNC adapter, 1 V P-P; 75 ohms
Power	<ul style="list-style-type: none"> • 12 VDC or 24 VAC, through optional external power supply (available separately) • PoE (802.3af) @ 48V/0.3A

Software

Table 3 describes the primary features of the Cisco Video Surveillance 2400 Series IP Dome software.

Table 3. Cisco Video Surveillance 2400 Series IP Dome Primary Software Features

Item	Specification
Activity detection	Three user-definable detection areas; e-mail alert and FTP uploading of captured video or JPEG snapshots triggered by motion alert
Video format	NTSC and PAL
Image settings	Configurable color level, brightness, sharpness, contrast, white balance, and exposure control
Overlay capabilities	Time, date, camera ID
Selectable bit rate	Support for Constant Bit Rate or Variable Bit Rate (constant quality)
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"> • Browser-based using Internet Explorer 6.x with SP2 and later • Multiple user access levels with password protection

Specifications

Table 4 provides specifications of the Cisco Video Surveillance 2400 Series IP Dome.

Table 4. Cisco Video Surveillance 2400 Series IP Dome Mechanical Specifications

Item	Specification
Housing	Metal base and polycarbonate transparent cover
LEDs	Power, Ethernet link, and activity
Dimensions (W x H)	6.6 x 4.5 in. 146.5 x 114.3 mm
Weight	146.5 x 114.3 mm 1.9 kg
Certifications	FCC, CE, and UL
Operating temperature	Indoors: 32 to 122°F 0 to 50°C

Package Contents

Table 5 describes the items that ship with the Cisco Video Surveillance 2400 Series IP Dome.

Table 5. Cisco Video Surveillance 2400 Series IP Dome Package Contents

Item
Cisco Video Surveillance 2400 Series IP Dome
Accessories: Mini cable with BNC adapter, 0.9-mm Allen wrench
Regulatory compliance and safety information
Quick start guide

System Requirements

Table 6 describes the minimum system requirements for the Cisco Video Surveillance 2400 Series IP Dome.

Table 6. Cisco Video Surveillance 2400 Series IP Dome Minimum System Requirements

Item
10/100 BASE-T hub, router, or switch (802.3af-compliant switch required for optional PoE)
Windows XP Pro with SP2 and Internet Explorer 6.x or above
2-GHz Pentium 4 or AMD Athlon-class CPU with 512 MB RAM, with 64 MB AGP video adapter

Availability

The Cisco Video Surveillance 2400 Series IP Dome is available through Cisco Authorized Dealers.

Ordering Information

Table 7 lists the part numbers for the Cisco Video Surveillance 2400 Series IP Dome and accessories.

Table 7. Cisco Video Surveillance 2400 Series IP Dome Ordering Information

Part Number	Description
CIVS-IPC-2421	Indoor Dome Lens 2.8–10 mm, Vandal Resistant
Accessories	
CIVS-IPCA-1000=	Ceiling Tile Mount Support, 2400 Series
CIVS-IPCA-1001=	Dome, Clear, 2400 Series
CIVS-IPCA-1002=	Dome, Smoked, 2400 Series
CIVS-IPCA-1003=	Shroud, Surface Mount, 2400 Series

Service and Support

Cisco offers a wide range of services programs to accelerate customer success. These innovative programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco services help you to protect your network investment, optimize network operations, and prepare your network for new applications to extend network intelligence and the power of your business. For more information about Cisco services, visit [Cisco Technical Support Services](#) or [Cisco Advanced Services](#).

For More Information

For more information about Cisco Video Surveillance solutions, visit <http://www.cisco.com/en/US/products/ps6712/index.html> 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.

CCDE, CCENT, Cisco Eos, Cisco HealthPresence, the Cisco logo, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, Cisco WebEx, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCI, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website 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. (0812R)