Cisco Video Surveillance 2421 IP Dome

The Cisco® Video Surveillance 2421 Standard-Definition IP Dome is a feature-rich digital IP camera designed for superior performance in a wide variety of video surveillance applications. The camera employs MPEG-4 and MJPEG 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. 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 2421 IP Dome.

Figure 1.   Cisco Video Surveillance 2421 IP Dome

The Cisco Video Surveillance 2421 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 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.

- **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 internal ceiling tile mount deployments. There is an optional shroud for surface mount installations. The camera is equipped with a varifocal lens mounted to 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.

- **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.

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 2421 IP Dome.

Table 1. Cisco Video Surveillance 2421 IP Dome Features

Item	Specification
Imaging Device	1/3-in. progressive-scan RGB CMOS sensor with wide dynamic range
Image Control	Automatic white balance (AWB), automatic back lighting, automatic gain control (AGC), automatic exposure (AE), auto iris.
Dynamic Range	102 dB typical/120 dB maximum
Minimum Illumination	• Color mode: F1.4 @ 0.65 lux • Black and white mode: F1.4 @ 0.08 lux
Signal-to-Noise Ratio (SNR)	>48 dB
Shutter	Electronic shutter
Lens	DC auto-iris lens with day/night filter Zoom: 3.5x Field of view: • Horizontal: 22°–76° • Vertical: 17°–56°
Camera Angle Adjustment	Pan: 340° Tilt: 160° Rotation: 200°
Video Compression	MPEG-4 SP level 0 to 4, ASP level 0 to 5, MJPEG
Resolution and Frame Rate	NTSC/PAL • 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	• 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 　○ 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
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
Power	• 12 VDC or 24 VAC, isolated external power supply • PoE (802.3af) @ 48V/0.3A
Power Consumption	11W (max)

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

Connectors

Table 2 describes the connectivity and connectors of the Cisco Video Surveillance 2421 IP Dome.

Table 2. Cisco Video Surveillance 2421 IP Dome Connectors

Item	Specification
Network Connectivity	10/100 BASE-TX Ethernet with RJ-45 connector
Video	3.5-mm service connector, provides analog video (use with included mini cable with BNC adapter during installation)
Power input	3-pin terminal

Software

Table 3 describes the primary features of the Cisco Video Surveillance 2421 IP Dome software.

Table 3.   Cisco Video Surveillance 2421 IP Dome Primary Software Features

Item	Specification
Activity Detection	4 user-definable motion detection areas; e-mail alert and FTP uploading of captured video or JPEG snapshots triggered by motion alert
Video Format	NTSC and PAL
Day/night Settings	Auto or manual day/night operation with user-definable thresholds
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* (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	• Browser-based using Internet Explorer 6.x with SP2 and later • Multiple user access levels with password protection

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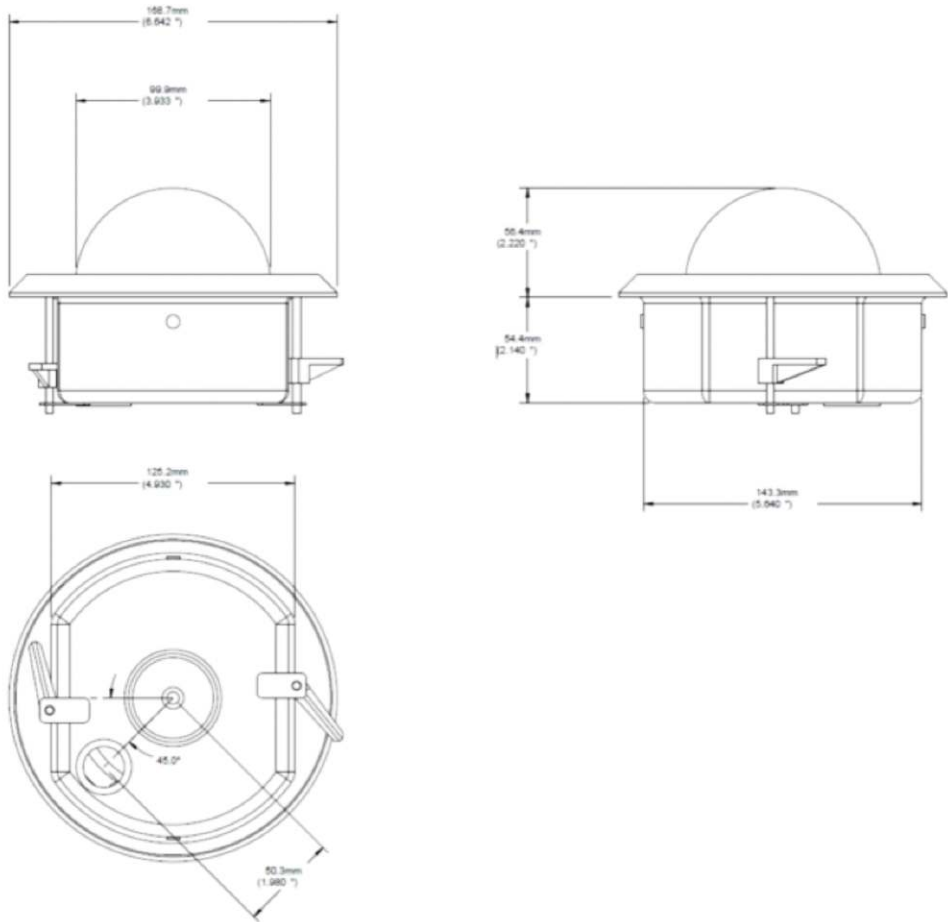
Specifications

Table 4 provides the specifications of the Cisco Video Surveillance 2421 IP Dome.

Table 4.   Cisco Video Surveillance 2421 IP Dome Mechanical Specifications

Item	Specification		
Housing	Metal base and polycarbonate transparent cover		
LEDs	Power and Ethernet		
Dimensions (W x H)	6.64 x 4.36 in. 169 x 111 mm		
Weight	2.2 lb 1.0 kg		
Standards Compliance	**Safety:** UL 60950-1 CAN/CSA-C22.2 No. 60950-1 EN 60950-1 IEC 60950-1 AS/NZS 60950-1	**EMC-Emissions:** 47CFR Part 15 (CFR 47) Class A AS/NZS CISPR22 Class A CISPR22 Class A EN55022 Class A ICES003 Class A VCCI Class A EN61000-3-2 EN6100-3-3 KN22 Class A CNS13438 Class A	**EMC-Immunity:** EN50082-1 EN61000-6-1 EN55024 CISPR24 EN50130-4 KN immunity series
Operating Temperature	0 to 50℃ 32 to 122℉		

Figure 2 shows the dimensions of the Cisco Video Surveillance 2421 Dome IP.

Figure 2. Cisco Video Surveillance 2421 IP Dome Dimensions

Package Contents

Table 5 describes the items that ship with the Cisco Video Surveillance 2421 IP Dome.

Table 5. Cisco Video Surveillance 2421 IP Dome Package Contents

Item
Cisco Video Surveillance 2421 IP Dome
Quick start guide
Regulatory compliance and safety information
Accessories: • Mini cable with BNC adapter • Y-cable for audio input/output • Black cylindrical snap-on ferrite core (qty. 1) • 0.9-mm Allen wrench for locking/unlocking the lens focus ring

Availability

The Cisco Video Surveillance 2421 IP Dome is available through Cisco Authorized Distributors.

Ordering Information

Table 6 lists the part numbers for the Cisco Video Surveillance 2421 IP Dome and accessories.

Table 6.   Cisco Video Surveillance 2421 IP Dome Ordering Information

Part Number	Description
CIVS-IPC-2421	Indoor Dome, Smoked, Lens 2.8–10 mm
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

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

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.

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