

Cisco Video Surveillance 3421V IP Camera

Product Overview

The Cisco® Video Surveillance 3421V IP Camera is a high-definition 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. 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 3421V 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.
- **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.
- **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 or 12 VDC 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 3421V IP Camera.

Table 1. Cisco Video Surveillance 3421V IP Camera Features

Item	Specification
Imaging device	1/4-in. progressive-scan CMOS
Image control	Automatic white balance (AWB), automatic gain control (AGC), and automatic exposure shutter (AES)
Wide dynamic range	Approximately 69 dB
Minimum illumination	Color mode: F1.4 @ 0.4 lux
Lens	3.3-12 mm Fixed-iris

Item	Specification
Field of view	61.34° to 24.13° (horizontal) 37.56° to 15.08° (vertical) 72.85° to 28.18° (diagonal)
Camera angle adjustment	Pan: 350° Tilt: 72° Rotate: 350°
Video compression	H.264 and MJPEG
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 style="list-style-type: none"> • Single-stream H.264 or MJPEG up to 1280 x 800 @ 30 fps • Dual-stream H.264 and MJPEG <ul style="list-style-type: none"> ◦ Primary stream programmable up to 1280 x 800 @ 30 fps ◦ Secondary stream programmable up to 1024 x 576 @ 15 fps
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 through optional external power supply, available separately PoE (802.3af)
Power consumption (max)	DC: 2.4W AC: N/A PoE: 3.12W

Table 2 lists the video stream support for the Cisco Video Surveillance 3421V IP Camera.

Table 2. Cisco Video Surveillance 3421V 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

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 3421V IP Camera for 4:3 aspect ratios.

Table 3. Cisco Video Surveillance 3421V 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 3421V IP Camera.

Table 4. Cisco Video Surveillance 3421V IP Camera Connectors

Item	Specification
Network connectivity	100 BASE-TX Ethernet with RJ-45 connector
Power input	Terminal block
Storage	MicroSD card slot

Software

Table 5 describes the primary features of the Cisco Video Surveillance 3421V IP Camera software.

Table 5. Cisco Video Surveillance 3421V 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"> • 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 3421V IP Camera.

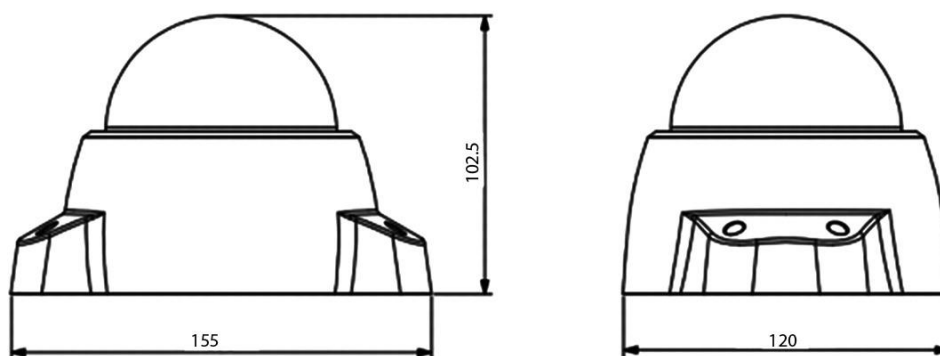
Table 6. Cisco Video Surveillance 3421V IP Camera Mechanical Specifications

Item	Specification
Housing	Aluminum
LEDs	Power and activity
Dimensions (L x W x H)	4 x 6.1 x 4.7 in. (102.5 x 155 x 120 mm)
Weight	1036 g

Item	Specification	
Certifications	Safety: <ul style="list-style-type: none"> • UL60950-1 2nd edition • CSA22.2-No.60950-1 • IEC/EN60950-1 2nd edition • IEC/EN60825 	EMC-Requirements: <ul style="list-style-type: none"> • CISPR22 Class B • ICES-003 • EN55022 • EN55024 • EN61000-3-2/-3-3 Class A • VCCI Class B • KN22 Class B • KN24
Operating temperature	32 to 122°F (0 to 50°C)	

Figure 1 shows the dimensions of the Cisco Video Surveillance 3421V IP Camera.

Figure 1. Cisco Video Surveillance 3421V IP Camera Dimensions



All dimensions shown in millimeters

Package Contents

Table 7 describes the items that ship with the Cisco Video Surveillance 3421V IP Camera.

Table 7. Package Contents

Item
Cisco Video Surveillance 3421V IP Camera
Installation template and alignment sticker
Screwdriver
Screws and anchors
Documentation reference card
Regulatory documentation

Availability

The Cisco Video Surveillance 3421V IP Camera is available through Cisco Authorized Technology Provider (ATP) Partners.

Ordering Information

Table 8 lists the part numbers for the Cisco Video Surveillance 3421V IP Camera and accessories.

Table 8. Ordering Information

Part Number	Description
CIVS-IPC-3421V	Cisco Video Surveillance 1-MP IP Indoor Dome Camera
CIVS-IPCA-PWR12V	12 VDC Power Supply

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.

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 3421V IP Camera, visit <http://www.cisco.com/go/videosurveillance> or contact your local account representative.



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