Cisco Video Surveillance 2900 Series Standard Definition IP PTZ Cameras

Product Overview

Cisco® Video Surveillance 2900 Series Standard Definition IP PTZ Cameras are feature-rich cameras designed for superior performance, image quality, and ease of deployment. These cameras allow for viewing and control of analog video while simultaneously viewing, recording, and controlling IP video.

The cameras come with integrated camera optics packages. They offer 360° continuous pan rotation, as well as 256 PTZ presets. In addition, the back boxes for these cameras feature built-in memory, which can be used to store camera- and location-specific dome settings, including labels, presets, patterns, and zones.

Cisco Video Surveillance 2900 Series IP Cameras support two simultaneous video streams. The two streams can be compressed in MJPEG, MPEG-4, and H.264 formats across several resolution configurations. The streams can be configured in a variety of frame rates, bit rates, and group of pictures (GOP) structures for additional bandwidth administration.

All cameras in the Cisco Video Surveillance 2900 Series feature a Sony® EXview HAD® imager for increased sensitivity, and low light technology that allows the cameras to compensate for scenes where minimal light is present. In addition, the cameras feature built-in motion detection and advanced 128X wide dynamic range (WDR) that enables the system to compensate for scenes where dramatic contrasts in lighting are present. The 35X day/night camera also supports electronic image stabilization, which digitally reduces the blurring of the camera image due to vibration caused by external sources such as wind and traffic.

Web Interface

The Cisco Video Surveillance 2900 Series supports the Internet Explorer 8.0 browser for remote setup and administration.

Window Blanking

Window blanking is used to conceal user-defined privacy areas that cannot be viewed by an operator. The Cisco Video Surveillance 2900 Series supports up to four blanked windows. A blanked area will appear on the screen as a solid gray window.

Video Management

The Cisco Video Surveillance 2900 Series connects to Cisco Video Surveillance Manager Version 6.3.1 and later.

Features and Benefits

The Cisco Video Surveillance 2900 Series includes indoor and outdoor models.

The indoor camera features:

- In-ceiling mounting
- 27X zoom
- Smoked dome
- Separate PAL and NTSC models

The outdoor camera features:

- Pendant mounting
- IP-66 rating
- 35X zoom
- Clear dome
- Separate PAL and NTSC models

Cisco Video Surveillance 2900 Series IP PTZ Cameras offer a variety of benefits, including:

- Simultaneous IP and analog video
- H.264, MPEG-4, and MJPEG compression
- Integrated camera/optics packages with autofocus
- Window blanking
- 256 PTZ presets and 8 user-defined patterns
- 360° continuous pan rotation
- Motion detection
- Electronic image stabilization (35X models only)
- Onscreen compass and tilt display
- Wide dynamic range
- Day/night operation

Product Specifications

Table 1 lists the product specifications for the Cisco Video Surveillance 2900 Series Standard Definition IP PTZ Cameras.

Table 1. Product Specifications

General		
Available Languages	English	
Supported Protocols	TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, SNMP, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, mDNS (Bonjour)	
Security Access	Password-protected	
Certifications/Ratings/Patents	CE, Class B FCC, Class B UL /cUL Listed C-Tick	
Camera Optics	**Day/Night (35X) Pendant**	**Day/Night (27X) In-Ceiling**
Signal Format	NTSC (CIVS-IPC-2930) PAL (CIVS-IPC-2935)	NTSC (CIVS-IPC-2911) PAL (CIVS-IPC-2916)
Scanning System	Interlace/progressive selectable	
Image Sensor	1/4–inch Sony EXview HAD	
Effective Pixels	NTSC: 768(H) X 494 (V) PAL: 752(H) X 582 (V)	
Horizontal Resolution	>540 TV lines	
Lens	f/1.4 (focal length, 3.4 ~ 119 mm)	f/1.4 (focal length, 3.4 ~ 91.8 mm)
Zoom	35X optical, 12X digital	27X optical, 12X digital
Zoom Speed (Optical Range)	3.2/4.6/6.6 seconds	
Horizontal Angle of View Focus	55.8°at 3.4 mm wide zoom 1.7°at 119 mm telephoto zoom Automatic with manual override	55.8°at 3.4 mm wide zoom 2.3°at 91.8 mm telephoto zoom Automatic with manual override
Maximum Sensitivity at 35 IRE NTSC/EIA PAL/CCIR	0.55 lux at 1/60 sec (**color**) 0.018 lux at 1/2 sec (**color**) 0.00018 lux at 1/2 sec (**B-W**) 0.45 lux at 1/50 sec (**color**) 0.015 lux at 1/1.5 sec (**color**) 0.00015 lux at 1/1.5 sec (**B-W**)	
Sync System	Internal/AC line lock, phase adjustable, V-sync	
White Balance	Automatic with manual override	

Shutter Speed
  NTSC
  PAL
	Automatic(electronic iris)/Manual
	1/2 ~ 1/30,000
	1/1.5 ~ 1/30,000	

Iris Control	Automatic, with manual override	
Gain Control	Automatic/OFF	
Video Output	1 Vp-p, 75 ohms	
Video Signal-to-Noise Ratio	>50 dB	
Wide Dynamic Range	128X	
Electronic Image Stabilization	Integrated/selectable	Not available
Image Enhancement	Integrated/selectable	Not available
Motion Detection	Integrated	
Electrical		
Ports	RJ-45 connector for 100BASE-TX Auto MDI/MDI-X, Autonegotiate/manual setting	
Cabling Type	Cat5 or better for 100BASE-TX	
Input Voltage	18 to 32 VAC; 24 VAC nominal 22 to 27 VDC; 24 VDC nominal	

Input Power	24 VAC	23 VA nominal (without heater)	
		73 VA nominal (with heater)	
	24 VDC	0.7A nominal (without heater)	
		3A nominal (with heater)	
Fuse	1.25A		
Alarm Inputs	2		
Auxiliary Outputs	7		
Mechanical (Dome Drive Only)			
Pan Movement	360° continuous pan rotation		
Vertical Tilt	Unobstructed +2° to –92°		
Manual Pan/Tilt Speeds			
Pan	0.1° to 80°/sec manual operation, 150°/sec Turbo		
Tilt	0.1° to 40°/sec manual operation		
Preset Speeds			
Pan	400°/sec		
Tilt	200°/sec		
Audio			
Streaming	Bidirectional; full- or half-duplex		
Input/Output	Terminal block, analog for microphone and speaker; 600-ohm differential; 1 Vp-p maximum signal level		
Compression	G.711 PCM 8-bit, 8 KHz mono at 64 kbit/s		
Video			
Video Encoding	H.264 high, main, or base profile and MJPEG		
Video Streams	Up to 2 simultaneous streams; the second stream is variable based on the setup of the primary stream		
Frame Rate	Up to 30, 25, 24, 15, 12.5, 12, 10, 8, 7.5, 6, 5, 4, 3, 2, 1 (dependent upon coding, resolution, and stream configuration)		
Resolutions			
NTSC	704 x 480		
	352 x 240		
PAL	704 x 576		

Physical	**Day/Night (35X) Pendant**	**Day/Night (27X) In-Ceiling**
Construction		
Black Box	Aluminum	
Dome Drive	Aluminum, thermoplastic	
Lower Dome	Acrylic	
Light Attenuation		
Smoked	f/0.5 light loss	
Clear	Zero light loss	
Cable Entry	Through 1.5 inch pendant mount	0.75 inch conduit fitting
Weight	7.6 lb (3.5 kg)	5.2 lb (2.4 kg)
Color	Grey	White
Environmental	**Day/Night (35X) Pendant**	**Day/Night (27X) In-Ceiling**
Operating Temperature	140°F (60°C) absolute maximum; 122°F (50°C) sustained maximum –60°F (–51°C) Absolute minimum; prevents icing at sustained minimum of –50°F (–45°C); de-ices 0.1 inch (2.5 mm) within 3 hours after power-up	32 to 122°F (0 to 50°C)
Outdoor Use	Yes	No
Outdoor Rating	NEMA Type 4X, IP66 when installed properly	Not applicable

Dome Drive Features

- 256 Presets
- ±0.1° preset accuracy
- Electronic image stabilization (35X model)
- Image enhancement (35X model)
- Multilingual menus (English, Spanish, Portuguese, Italian, French, German, Russian, Polish, Turkish, and Czech)
- RJ-45 data port for software update and setup
- On-screen compass, tilt, and zoom display
- Password protection
- 400°/sec pan preset speed and 200°/sec tilt preset speed
- Rotating discreet liner with sealed fixed bubble
- **Window blanking:** Up to eight 4-sided, user-defined shapes
- Eight zones (configurable in size) can be labeled with up to 20 characters each or set to output blank video
- Seven alarm inputs
- One auxiliary (Form C) relay output and one open collector auxiliary output (can be alternately programmed to operate upon alarm)
- Configurable locations of labels and on-screen displays
- **Action on alarm:** Alarms can be individually programmed for three priority levels, to initiate a stored pattern, or to go to an associated preset when received
- **Resume after alarm:** Allows the dome to return to a previously programmed state after alarm acknowledgement or to its previous position before alarm
- Multiple park and power-up action
- **Patterns:** Up to eight on-screen, user-defined configurable patterns; includes pan, tilt, zoom, and preset functions
- **Proportional pan/tilt:** Continually decreases pan/tilt speeds in proportion to depth of zoom
- **Variable scan speed:** Scan speed can be configurable between 1° and 40°/sec
- Pan motion allows 0.1° to 150°/sec pan speed
- Configurable limit stops for auto/random/frame scan modes
- Autosensing protocol (Coaxitron®, RS-422 Pelco P and Pelco D, Sensormatic®, Vicon®); accepts other control protocols with optional translator card
- Digital position and zoom control and feedback through Pelco D protocol
- Built-in menu system for setup of configurable functions
- "Auto flip" rotates dome 180° at bottom of tilt travel
- Configurable zoom speeds
- Freeze frame during presets

System Requirements

Table 2 provides the system requirements.

Table 2. System Requirements

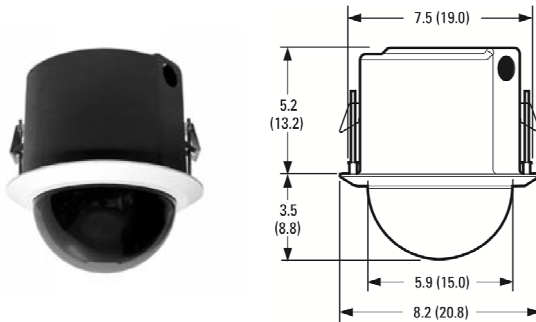|	Requirements
Processor	Intel® Core® 2 Duo microprocessor, 2.6 GHz
Operating System	Microsoft® Windows® XP
Memory	2 GB RAM
Network Interface Card	100 megabits (or greater)
Monitor	Minimum of 1024 x 768 resolution, 16- or 32-bit pixel color resolution
Web Browser	Internet Explorer® 8.0
Media Player*	QuickTime® 7.6.5 for Windows XP

*This product is not compatible with QuickTime Version 7.6.4 for Windows XP. If you have this version installed on your PC, you will need to upgrade to QuickTime Version 7.6.5.

Certifications/Ratings/Patents

- CE, Class B
- FCC, Class B
- UL /cUL Listed
- C-Tick
- Patents Pending

Back Box Features

In-Ceiling Indoor

- Built-in memory stores camera/dome settings
- Single back box for suspended or hard ceiling applications
- Requires 5.25-inch space above ceiling and 3.15 inches below
- Minimum ceiling thickness 0.5 inch; maximum 1.75 inches
- Quick disconnect to dome drive
- Aluminum construction
- Suitable for use in environmental air-handling spaces

Environmental Pendant

- Built-in memory stores camera/dome settings

- Grey finish, aluminum construction

- Quick disconnect to dome drive

- Includes sun shield, fan, and heater

Warranty Information

Find warranty information on Cisco.com at the Product Warranties page.

Ordering Information

Availability

Cisco Video Surveillance IP Cameras are available through Cisco Advanced Technology Provider (ATP) program partners. Table 3 lists part numbers for the Cisco Video Surveillance 2900 Series.

Table 3.   Ordering Information

Product Name	Part Number
Cisco Video Surveillance 2911 IP Camera, Indoor PTZ In-Ceiling Dome, 27X, Smoked Bubble, NTSC	CIVS-IPC-2911
Cisco Video Surveillance 2916 IP Camera, Indoor PTZ In-Ceiling Dome, 27X, Smoked Bubble, PAL	CIVS-IPC-2916
Cisco Video Surveillance 2930 IP Camera, Outdoor PTZ Pendant, 35X, Clear Bubble, NTSC	CIVS-IPC-2930
Cisco Video Surveillance 2935 IP Camera, Outdoor PTZ Pendant, 35X, Clear Bubble, PAL	CIVS-IPC-2935

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For More Information

For more information about Cisco Video Surveillance IP Cameras, visit http://www.cisco.com/go/physec or contact your local account representative.

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