

## Cisco Unified Video Camera

Cisco® Unified Communications Solutions enable collaboration so that organizations can quickly adapt to market changes while increasing productivity, improving competitive advantage through speed and innovation, and delivering a rich-media experience across any workspace, securely and with optimal quality.

**Figure 1.** Cisco Unified Video Camera



### Product Overview

The Cisco Unified Video Camera for the Cisco Unified IP Phones 9900 Series is a standard-definition video accessory that enables two-way along with voice-activated switching and continuous presence multi-party video calling between Cisco Unified IP Phones 9900 Series endpoints. Multiparty video communications are supported with the addition of a multipoint control unit (MCU).

### Features and Benefits

Key features of the Cisco Unified Video Camera include:

- The Unified Video Camera appears on the back end of the phone display
- The camera supports H.264 video for two-way standard-definition calling. Multiparty video calls require use of a customer-supplied multipoint control unit (MCU).
- The camera does its own encoding and presents video in 24 frames per second in VGA resolution, or 30 frames per second in Common Intermediate Format (CIF) or Source Intermediate Format (SIF).
- The camera also provides a self-view display in full screen or picture-in-picture on the phone.

Table 1 lists the features and benefits of the Cisco Unified Video Camera.

**Table 1.** Features and Benefits of Cisco Unified Video Camera

Feature	Benefits
<b>Hardware</b>	
<b>Industrial design</b>	The camera supports a direct plug-in connection through a USB connection to the Cisco Unified IP Phones 9900 Series endpoint. With an accessory clip and cable supplied with the camera, mounting on the display of a PC or another location close to the phone is an option, if preferred. The Cisco Unified Video Camera is powered directly from the IP phone in either case.
<b>Customization</b>	You can order the camera in arctic white or charcoal gray to match the color of the Cisco Unified IP Phones 9900 Series endpoint.
<b>Display (on Cisco Unified IP Phone 9900)</b>	The camera provides VGA presentation for calling, video calling, and applications; a graphical TFT color display; 24-bit color depth; 640 x 480 effective pixel resolution; and backlighting.

### Cisco Unified Communications Manager Support

- Cisco Unified Communications Manager Version 7.1(3) or later
- Cisco Unified IP Phone Firmware Version 9.0(2) or later required

### Licensing

The Cisco Unified Video Camera has no Device License Unit (DLU) requirements. DLUs to support the Cisco Unified Video Camera are addressed by the DLUs for the Cisco Unified IP Phone 9971 and 9951 endpoints.

### Product Specifications

Table 2 gives specifications for the Cisco Unified Video Camera.

**Table 2.** Product Specifications

Feature	Specification
<b>Protocols</b>	<ul style="list-style-type: none"> <li>• Session Initiation Protocol (SIP) for signaling</li> <li>• H.264 for video</li> </ul>
<b>Connectivity</b>	USB
<b>Options</b>	Arctic white or charcoal gray color
<b>Digital image sensor</b>	One-fourth-inch complementary metal oxide semiconductor (CMOS)
<b>Processor</b>	2.0-megapixel system on a chip (SOC)
<b>Chief ray angle (CRA)</b>	22.1°
<b>Sensitivity</b>	0.53 V/Lux-sec
<b>Signal/noise ratio</b>	37.7 dB
<b>Dynamic range</b>	59.5 dB
<b>Pixel size</b>	2.2 x 2.2 micrometers
<b>Vertical tilt</b>	+30 to -40°
<b>Vertical field of view</b>	38° total
<b>Total horizontal field of view</b>	49.6°
<b>Total diagonal field of view</b>	60°
<b>Anti-flicker detection and compensation</b>	Yes
<b>F-stop</b>	F2.8
<b>Auto-focus</b>	Yes
<b>Focus range</b>	3.94 in. (10 cm) ~ infinity
<b>Automatic white balance</b>	Yes
<b>Activity LED</b>	Yes

<b>Power</b>	Using the camera as the sole accessory with the phone does not exceed IEEE 802.3af Class 3 power for the phone plus camera.
<b>Operating temperature</b>	Temperature: 32°F (0°C) ~ 113°F (45°C)
<b>Non-operating temperature (shock)</b>	Temperature: -13°F (-25°C) ~ 158°F (70°C)
<b>Temperature: Altitude (operating)</b>	140°F (40°C) Ambient condition to 9843 ft (3000m)
<b>Temperature: Altitude (nonoperating)</b>	Ambient condition to 15,000 ft (4572m)
<b>Relative humidity (nonoperating)</b>	90% ± 5%
<b>Nonoperating hot temperature (storage)</b>	158°F (70°C) ± 2°C
<b>Nonoperating cold temperature (storage)</b>	-40°F (-40°C) ± 2°C

## Ordering Information

To place an order, visit the Cisco Ordering Home Page and refer to Table 3. To download software, visit the Cisco Software Center.

**Table 3.** Ordering Information

Product Name	Part Number
Cisco Unified Video Camera for the 9900 Series IP Phone, Charcoal	CP-CAM-C=
Cisco Unified Video Camera for the 9900 Series IP Phone, White	CP-CAM-W=

## Cisco Services

Using the Cisco Lifecycle Services approach, Cisco and our partners offer a broad portfolio of end-to-end services to support the Cisco Unified Communications System. These services are based on proven methodologies for deploying, operating, and optimizing IP Communications solutions. Initial planning and design services, for example, can help you meet aggressive deployment schedules and minimize network disruption during implementation. Operate services reduce the risk of communications downtime with expert technical support, and optimize services enhance solution performance for operational excellence. Cisco and our partners offer a system-level service and support approach that can help you create and maintain a resilient, converged network that meets your business needs.

## For More Information

For more information about the Cisco Unified Video Camera, please visit: [www.cisco.com/go/ipphones/accessories](http://www.cisco.com/go/ipphones/accessories) or contact your local Cisco account representative.



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