

# Cisco Video Surveillance 6050 IP Camera Data Sheet

## Product Overview

The Cisco® Video Surveillance 6050 IP Camera (shown in Figure 1) is a ruggedized, outdoor, high-definition video endpoint with industry-leading image quality and processing power. The camera was designed to be vibration resistant and is ideal for use in transportation applications such as buses, trains, and other moving vehicles. The IK10- and IP67-rated housing combined with a low profile also make this camera suitable for discreet placement in harsh environments. High quality video can be streamed at a full 1080p resolution 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.

**Figure 1.** Cisco Video Surveillance 6050 IP Camera



The Cisco Video Surveillance 6050 IP Camera offers a variety of benefits, including:

- **True high-definition video:** The camera streams crisp and clear 1080p (1920 x 1080) (2.1 megapixel) video at 30 fps while maintaining low network bandwidth.
- **Ruggedized construction:** Vibration and vandal resistant, the IK10- and IP67-rated housing protect the camera in demanding outdoor environments.
- **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.

- **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 6050 IP Camera.

**Table 1.** Cisco Video Surveillance 6050 IP Camera Features

Item	Specification
<b>Imaging device</b>	1/2.7-in. progressive-scan CMOS
<b>Image control</b>	Automatic white balance (AWB), automatic gain control (AGC), automatic exposure shutter (AES)
<b>Wide dynamic range</b>	Approximately 69 dB
<b>Minimum illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.5 lux</li> <li>• B/W: 0.05 lux</li> </ul>
<b>Lens</b>	<ul style="list-style-type: none"> <li>• 2.8 mm</li> <li>• Fixed Iris</li> </ul>
<b>Field of view</b>	<ul style="list-style-type: none"> <li>• 37.5° to 103.7° (horizontal)</li> <li>• 21.6° to 71.2° (vertical)</li> <li>• 42.6° to 111.21° (diagonal)</li> </ul>
<b>Camera angle adjustment</b>	Tilt range: 90° (0°-90°)
<b>Shutter speed</b>	1/5 to 1/32,000 sec
<b>Video compression</b>	H.264 and MJPEG
<b>Resolution and frame rate (H.264)</b>	Refer to Tables 2 and 3
<b>Resolution and frame rate (MJPEG)</b>	<ul style="list-style-type: none"> <li>• Refer to Tables 2 and 3</li> <li>• MJPEG is supported as the secondary stream only</li> </ul>
<b>Video streaming</b>	<ul style="list-style-type: none"> <li>• Single-stream H.264 or MJPEG up to 1080p (1920 x 1080) @ 30 fps</li> <li>• Dual-stream H.264 and MJPEG <ul style="list-style-type: none"> <li>◦ Primary stream programmable up to 1280 x 720 @ 30 fps</li> <li>◦ Secondary stream programmable up to 960 x 544 @ 15 fps</li> </ul> </li> </ul>
<b>Protocols</b>	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), TCP/IP, Cisco Discovery Protocol, Bonjour, Simple Network Management Protocol (SNMP), and Secure Shell (SSH) Protocol
<b>Quality of service (QoS)</b>	Differentiated-services-code-point (DSCP) marking and class-of-service (CoS) marking
<b>Power</b>	PoE (802.3af)
<b>Power consumption (max)</b>	TBD

Table 2 lists the video stream support for the Cisco Video Surveillance 6050 IP Camera for 16:9 aspect ratios.

**Table 2.** Cisco Video Surveillance 6050 IP Camera Video Stream Support for 16:9 Aspect Ratios

Primary (H.264)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
<b>1920 x 1080</b>	30	NA	—
<b>1920 x 1080</b>	15	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
<b>1536 x 864</b>	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
<b>1472 x 832</b>	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
<b>1280 x 720</b>	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
<b>1024 x 576</b>	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
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 192 192 x 112 160 x 96	30	320 x 192 192 x 112 160 x 96	15
192 x 112 160 x 96	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 6050 IP Camera for 4:3 aspect ratios.

**Table 3.** Cisco Video Surveillance 6050 IP Camera Video Stream Support for 4:3 Aspect Ratios

Primary (H.264)	Maximum fps	Secondary (H.264 or MJPEG)	Maximum fps
1280 x 960	30	720 x 576 720 x 480 704 x 576 704 x 480 352 x 240 352 x 288	15
720 x 576	30	720 x 576 704 x 576 352 x 288	15
720 x 480	30	720 x 480 704 x 480 352 x 240	15
704 x 576	30	704 x 576 352 x 288	15
704 x 480	30	704 x 480 352 x 240	15
352 x 240	30	352 x 240	15
352 x 288	30	352 x 288	15

## Connectors

Table 4 describes the connectivity and connectors of the Cisco Video Surveillance 6050 IP Camera.

**Table 4.** Cisco Video Surveillance 6050 IP Camera Connectors

Item	Specification
Network connectivity	100 BASE-TX Ethernet with locking M12 connector
Storage	MicroSD card slot
Power input	PoE

Table 5 describes the primary features of the Cisco Video Surveillance 6050 IP Camera software.

**Table 5.** Cisco Video Surveillance 6050 IP Camera Primary Software Features

Item	Specification
Activity detection	User-definable alerts with configurable sensitivities and thresholds, email alert, and HTTP notifications
Video format	NTSC and PAL
Image settings	Configurable brightness, sharpness, contrast, saturation, hue, 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 and Bonjour Zero-Configuration discovery
Configuration	<ul style="list-style-type: none"> <li>Browser-based using Internet Explorer 8 and later</li> <li>Two levels of user access with password protection</li> </ul>
Security	Support for IEEE 802.1X authentication

## Specifications

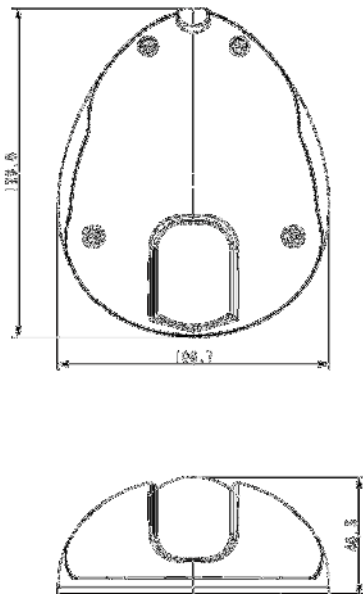
Table 6 provides mechanical specifications of the Cisco Video Surveillance 6050 IP Camera.

**Table 6.** Cisco Video Surveillance 6050 IP Camera Mechanical Specifications

Item	Specification	
<b>Housing</b>	Aluminum	
<b>LEDs</b>	Power and activity	
<b>Dimensions</b>	5.1 x 4.2 x 1.9 in. (130 x 107 x 47 mm)	
<b>(D x H)</b>	450 g	
<b>Weight</b>	<b>Safety:</b> UL60950-1 2nd edition CSA22.2-No.60950-1 IEC/EN60950-1 2nd edition IEC/EN60825	<b>EMC Requirements:</b> CISPR22 Class B ICES-003 EN55022 EN55024 EN61000-3-2/-3-3 Class A EN50121-4 VCCI Class B KN22 Class B KN24
<b>Operating temperature</b>	-13 to 122°F (-25 to 50°C)	

Figure 2 shows the dimensions of the Cisco Video Surveillance 6050 IP Camera.

**Figure 2.** Cisco Video Surveillance 6050 IP Camera Dimensions



All dimensions shown in millimeters

## Package Contents

Table 7 describes the items that ship with the Cisco Video Surveillance 6050 IP Camera.

**Table 7.** Package Contents

Item
Cisco Video Surveillance 6050 IP Camera
Installation template and alignment sticker
Screwdriver
Screws and anchors
Desiccant pack
Documentation reference card
Regulatory documentation

## Availability

The Cisco Video Surveillance 6050 IP Camera is available through Cisco Authorized Technology Provider (ATP) Partners.

## Ordering Information

Table 8 lists the part numbers for the Cisco Video Surveillance 6050 IP Camera

**Table 8.** Ordering Information

Part Number	Description
<b>CIVS-IPC-6050</b>	Cisco Video Surveillance IP Camera, Outdoor VR HD Dome Body
<b>CIVS-6KA-M12RJ45</b>	M12 to RJ45 Adapter

## 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](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

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For more information about Cisco Services, please visit <http://www.cisco.com/go/services>.

### For More Information

For more information about the Cisco Video Surveillance 6050 IP Camera, please visit <http://www.cisco.com/go/physec> or contact your local Cisco account representative.



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