Cisco VC240 Bullet Network Camera

Today's small businesses are increasingly focused on protecting their offices, employees, and customers from theft, vandalism, unauthorized access, and other threats. With the right video surveillance solution, you can keep a close eye on your company—day and night, from any location.

Created specifically for small businesses, the affordable Cisco® VC240 Bullet Network Camera delivers superb video quality and rich monitoring features in a bullet form factor (Figure 1). It features an industry-standard dust- and moisture-resistant enclosure that is ideal for indoor and outdoor environments and places where moisture or dust might be of concern, such as manufacturing shop floors. The Cisco VC240 offers a wide dynamic range (WDR), so you can use just one camera in many situations for day and night surveillance. It works smoothly with your existing network to provide local and remote video monitoring. As part of a complete IP solution, this versatile camera can help your business see more ways to improve operations, safety, and security. The Cisco VC240 lets you:

- View live video and audio of your business from anywhere, regardless of light level day or night, using an Internet-connected PC or mobile phone
- Integrate alarms, door sensors, motion detectors, and other business systems into your video solution
- Receive automatic alerts, including video clips or still images, whenever motion is detected on your premises
- Mount the rugged indoor/outdoor camera on a ceiling or wall
- Rapidly search video archives, and configure and control your camera with the included video monitoring software

Figure 1.   Cisco VC240 Bullet Network Camera

Features and Benefits

The Cisco VC240 Bullet Network Camera provides:

- **Superior camera quality and control:** The Cisco VC240 features a WDR complementary metal-oxide semiconductor (CMOS) sensor and built-in infrared (IR) LEDs and IR cut filter for optimal image quality, regardless of light level day or night. Its bullet form factor lets you focus on a specific area of your business, such as a door or cash register, to safeguard sensitive locations or to perform analytics such as counting the number of people coming in and out of your business, and at what times.

- **Remote monitoring:** The Cisco VC240 lets you access real-time video and audio from any Internet-connected PC, mobile phone, or Universal Plug and Play (UPnP) audio/video (AV) client. Its remote accessibility lets you enjoy peace of mind when you are away from the office.

- **Protective enclosure:** The Cisco VC240 features a rugged enclosure suitable for challenging indoor and outdoor environments such as a manufacturing floor. With an Ingress Protection rating of IP66, the camera offers robust protection against dust and moisture.

- **Rich application support:** The Cisco VC240 supports two-way audio and input/output ports to support a variety of applications. You can link the camera surveillance system to door and motion sensors, alarms, lighting systems, or phone systems. In addition, you can add the Cisco Advanced Video Monitoring System (AVMS) software to integrate the solution with business systems such as point-of-sale (POS) equipment, perform count and analyze activities, search POS data, and retrieve video for particular transactions.

- **Fast, simple installation:** The Cisco VC240 is easy to install on a wall or ceiling. It features Power-over-Ethernet (PoE) support, so you can power and control the camera with just one network cable. Easy to set up, an intuitive graphical user interface in the included video software makes it easy to deploy cameras and sensor systems and set up intelligent alerts.

- **Included video monitoring software:** Other IP surveillance systems require costly video monitoring software. The Cisco VC240 includes—at no extra charge—a complete monitoring suite that lets you easily configure and control up to 16 cameras at once.

- **A complete surveillance solution:** The Cisco VC240 is part of a growing family of IP surveillance cameras designed as a fully integrated component of your Cisco Small Business network. With a broad portfolio of small business routing and switching, data storage, and telephony technologies, Cisco offers a comprehensive video, voice, and data solution for your business.

A summary of camera features follows:

- The bullet form factor of the camera supports flexible installation on ceilings or walls.

- A 1-/3.3-inch WDR sensor delivers high-quality video.

- The camera has a 3.3- to 12-mm varifocal board lens with auto-iris (3.6x optical zoom + 4x digital zoom).

- Built-in IR LEDs with an IR cut filter offer complete day and night functions.

- The camera has an audio input/output port for an external microphone or speaker.

- The rugged enclosure provides an IP66 Ingress Protection rating.

- I/O ports facilitate alarm triggers and facilitate turning on and off lights, etc.

- PoE allows for single-cable installation.

- The camera supports two codecs: MPEG-4 and MJPEG.

- IP Multicast is supported.

- The camera supports Real Time Streaming Protocol (RTSP) video and audio streaming to IP Unicast and IP Multicast clients.

- Third-Generation Partnership Project (3GPP) support allows viewing of video on a mobile device.
- When motion is detected an Event Notifications is sent to an email account or alarm log in the monitoring software.
- Privacy mask available to block certain areas of image from being viewed.
- RS-485 port for Pan Tilt base control.
- JPEG snapshots taken at multiple resolutions can be sent to an FTP server.
- The camera offers overlay text and time stamps.
- A configurable intraframe setting saves bandwidth.
- The camera supports up to 10 IP Unicast users and an unlimited number of IP Multicast users.
- The camera supports up to a 20-user local database for access management.
- The camera has a built-in web server for remote access over IP.
- Management is secure, over Secure HTTP (HTTPS).
- The camera housing is moisture- and dust-resistant.
- Software for monitoring and recording up to 16 cameras simultaneously is included.

Specifications

Table 1 gives the specifications, package contents, and minimum requirements for the Cisco VC240 Bullet Network Camera, and Table 2 gives ordering information.

Table 1. Product Specifications, Package Contents, and Requirements

Specifications	
Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.1p (quality of service [QoS] Priority), IEEE 802.1q (VLAN), and IEEE 802.3af
Protocols supported	TCP/IP, HTTP, HTTPS, Dynamic Host Configuration Protocol (DHCP), Simple Mail Transfer Protocol (SMTP), FTP, Network Time Protocol (NTP), Domain Name System (DNS), UPnP, Real-Time Transport Protocol (RTP), Real Time Streaming Protocol (RTSP), Dynamic DNS (DDNS), Bonjour, and Jabber
Ports	Ethernet with PoE, microphone IN, speaker OUT, power (12V, 1A), general-purpose I/O (GPIO)
Buttons	Reset
Cabling type	Unshielded twisted pair (UTP) Category 5
LEDs	Power and Network
Camera type	Fixed bullet
I/O ports	• Input control x 1 (2 pins) • Output control x 1 (2 pins)
Lens	
Sensor	1-/3.3-inch WDR sensor
Illumination	0.4 lux @ F1.7 in day mode, 0 lux in night mode
Lens type	Board-mount lens, varifocal
Focal length	500 mm to ~infinity (for included lens)
Field of view	23.9 to ~89.9º
Video resolution	640 x 480 (VGA), 320 x 240 (QVGA), and 176 x 144 (QCIF for mobile client)
Frame rate	Selectable 1 to 30 frames per second (fps), dual streams, and 3rd generation (3G) mobile stream
Iris	Fixed iris
Setup, Configuration, and Management	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP)

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Management	
Web browser	Internet Explorer 6.0 or later and limited support for Firefox 3.0
Event logging	Event logging (syslog)
Web firmware upgrade	Firmware upgradable through web browser
Video Compression	
Dual codec	• MPEG-4 simple profile • MJPEG • Simultaneous dual stream
Snapshot	JPEG
Image settings	Brightness and contrast
Zoom	4x digital zoom
Night vision	Automatic IR filter switching for no or low light
Video controls	Auto-white balance (AWB) and auto-electric shutter (AES)
Image control	Select video by quality (variable bit rate [VBR]), bandwidth (constant bit rate [CBR]), and frame rate
Mobile Format	3GPP for use with 3G phones
Alerts	
Motion detection	Three detection areas with individual sensitivity
Email alert	One email address per event setting
FTP uploading	FTP server address and login settings
Instant messaging	Jabber client support
Scheduled	Schedule by day or time
Triggers	Motion detection, periodic trigger by configurable minutes, digital input (1), PIR sensor, and system boot
Actions	GPIO Output messaging, email, and FTP
Audio	
Summary	2-way audio (simplex) and 1-way audio
Built-in microphone	6 mm, –33 dB, and + 21 dB
Microphone input	3.5-mm phone jack
Speaker output	3.5-mm phone jack
Compression	Advanced Audio Coding (AAC) and Global System for Mobile Communications-Adaptive Multi-rate (GSM-AMR)
Sampling rate	8 kHz
Included Cisco Video Monitoring System Software (SWVMS16)	
Monitoring and recording software	• Monitoring and recording for up to 16 cameras • Advanced search histogram or by time and date • Recording set up to record by motion trigger, manual, or schedule recording and playback
Security	
User privilege	Provides user rights list to view video or to control camera functions
Username and password	Authenticates login with optional minimum password strength
Privacy mask	Block specific areas of image from being viewed and recorded
Network	
RTP and RTSP	Allow for viewing from any client supporting these protocols, such as 3G phones or Apple QuickTime client
NTP	Keeps time of camera in sync with your network
SMTP	Allows video clips to be emailed
FTP client	Facilitates scheduling transfer of images to an FTP server
DDNS	Facilitates reaching the camera by a name irrespective of IP address of camera; supports DynDNS and TZO Dynamic DNS services
UPnP	Allows autodiscovery of the camera by other UPnP devices
IP filtering	Allows or denies access by IP address

Power	
Power options	• IEEE 802.3af Power over Ethernet (PoE): 48V, 0.3A • 12 VDC: Common AC wall adapter (optional) • 24 VAC: Common security voltage (optional)
Power consumption	10W
Environmental	
Dimensions (H x D)	4.17" x 5.63"
Unit weight	2.76 lb (1.25 kg)
Power	PoE 48V, 0.3A or optional power adapter; 12 or 24 VDC, 1A 110 to 240 VAC, 60-Hz switching
Certification	FCC part 15C class B, CE, UL, EMC/EMI part 15B class B for US, GOST-R
Operating temperature	-4 to 140 degrees F (-20 to 60 degrees C)
Storage temperature	-40 to 158 degrees F (-40 to 70 degrees C)
Operating humidity	20 to 80%
Storage humidity	0 to 90%

Package Contents

- Cisco VC240 Bullet Network Camera
- Wall and ceiling mount arm
- Mounting accessories (ceiling-mount anchors and screws, terminal connectors)
- 6-foot (1.83m) weatherproofed cable bundle (includes connections for Ethernet, 12v 1A external power supply, microphone input, audio output, 24VAC, IO port, RS-485 port, LED and ground wire)
- Quick installation guide
- CD with discovery tool, Cisco Video Monitoring System software, and user documentation

Minimum Requirements (Computer with 1-Camera Viewing via browser)

- Wired Ethernet network
- Wired or wireless PC with TCP/IP protocol installed
- Switch or router to support multiple connection points
- Internet Explorer Version 6 or later with ActiveX support for viewing
- Microsoft Windows Vista, or XP
- 2-GHz Pentium 4, or AMD Athlon Class CPU with 512-MB RAM
- Video adapter with 128-MB memory

Minimum Video Monitoring System Requirements (4-Camera Viewing)

- CPU: Intel Pentium 4; 2.4 GHz
- RAM: 512 MB
- Motherboard: Intel 945 or 965 chip or later; Intel chipset recommended
- Video card: ATI Radeon 9200, NVIDIA GeForce FX-5200, or Intel 945G/965G or later; ATI recommended
- Ethernet: 100BASE-T or later; Gigabit LAN recommended
- Hard disk: 80 GB or more
- Operating system: Microsoft Windows XP Pro Service Pack 2, or Microsoft Vista

Table 2.   Ordering Information

Part Number	Description
VC240-K9	Cisco VC240 Bullet Network Camera

Cisco Limited Warranty for Cisco Small Business Series Products

In addition to a 3-year limited hardware warranty with return to factory replacement and a 90-day limited software warranty, Cisco offers software application updates for bug fixes and telephone technical support at no charge for the first 12 months following the date of purchase. To download software updates, go to: http://www.cisco.com/go/smallbiz.

Product warranty terms and other information applicable to Cisco products are available at http://www.cisco.com/go/warranty.

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For More Information

For more information about Cisco Small Business video surveillance camera solutions, visit:
http://www.cisco.com/go/surveillance.

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