

## Cisco Advanced Video Monitoring System



The Cisco® Advanced Video Monitoring System (AVMS) is intelligent, enterprise-quality video surveillance software for small businesses. It offers:

- Advanced discovery and management of up to 64 Cisco Small Business Video Surveillance cameras and supported third-party cameras
- Support for remote and mobile viewing and playback of live and recorded video over a variety of devices
- Multiple viewing and video formats to match user and storage requirements
- Multifunction playback system that supports intelligent search
- Ability to integrate with business applications such as point-of-sale (POS) equipment using optional adapter for additional business intelligence
- Real-time digital enhancement during playback, allowing adjustment of video visibility, sharpness, brightness, contrast, and grayscale
- Multilanguage user interface for configuration in 22 languages, including English, French, German, Italian, Chinese (simplified and traditional), Japanese, Spanish, and more

### Product Overview

The Cisco AVMS solution is an ideal way to improve your company's operations, safety, and security (Figure 1). For organizations that need more robust, intelligent surveillance solutions, it delivers enterprise-class features at a price you can afford.

Cisco AVMS software lets you view and control your video surveillance cameras inside or outside the office, while providing flexibility to meet changing business needs. Cisco Small Business Video Surveillance cameras all support remote and mobile viewing through an Internet browser. For more advanced operations, Cisco AVMS software scales to easily monitor, record, and control up to 64 cameras using an intuitive graphical user interface.

Playback is fast and simple, with intelligent search support and real-time video-enhancement features. Intelligent event monitoring lets you watch an area of interest and track objects that disappear, or monitor for unsupervised objects left in a controlled area.

You can tailor Cisco AVMS to meet your specific needs, adjusting recorded or remote streamed video quality for your bandwidth or storage requirements. Optional software licenses let you add functions or integrate the solution with business systems such as POS equipment.

With the affordable flexibility and scalability of the Cisco Advanced Video Monitoring System, you can build a complete surveillance solution to meet your needs.

### Usage Scenarios

The Cisco Advanced Video Monitoring System is designed to integrate smoothly with business systems you use every day. This flexible solution lets you take advantage of the power of the network to tailor your solution to meet a variety of surveillance needs:

- **Automated surveillance:** Configure your Cisco Small Business Video Surveillance solution as an unmanned security solution, using the Cisco AVMS for scheduled and alert-based recording. Advanced analytics help prevent false alarms, and powerful search capabilities make it easy to retrieve video events.

- **Advanced surveillance:** Use integrated intelligent analytics to build a more flexible, responsive surveillance system. Configure the solution to locate events using a popup e-map, or automatically reposition pan/tilt/zoom (PTZ) cameras based on events. Combining alerts with remote transcoding lets you alert and display to mobile security professionals.
- **Remote surveillance:** Cisco AVMS provides full support for remote and mobile monitoring, to give you peace of mind when you are away from the office. Enjoy mobile and remote access to live video using Windows mobile clients, a remote desktop, or any browser-based viewer. Event alerts can find you at all times.
- **Point of sale:** Cisco AVMS lets you integrate your surveillance solution with POS systems for better insight into your business activities. You can record video based on POS events to track voided sales, returns, or sale of high-value items. Or with an optional module you can play back specific video based on POS transaction data.

**Figure 1.** Cisco Advanced Video Monitoring System main console showing 5+1 camera monitoring viewer configuration.



## Features

The Cisco Advanced Video Monitoring System:

- Allows simultaneous onscreen monitoring, recording, and playback of video from up to 64 Cisco Small Business Video Surveillance cameras and supported third-party cameras
- Records up to 30 frames per second (fps) per camera
- Offers business intelligence, including integration with business tools such as POS systems
- Supports MPEG-4 and MJPEG video compression formats
- Supports unlimited two-way audio (on cameras that support this feature), G.711, and G.726
- Provides advanced analytics with six event-detection alerts
- Provides image-enhancement capabilities (visibility, sharpness, brightness, contrast, and grayscale)
- With a verification tool, supports digital signature “watermark” to authenticate video

## Specifications

Table 1 lists the specifications and requirements for Cisco AVMS.

**Table 1.** Product Specifications, Package Contents, and Requirements

Specifications	
Standards	MPEG
Standards protocols	TCP/IP, HTTP, HTTPS, User Datagram Protocol (UDP), Real-Time Protocol (RTP)/Real-Time Streaming Protocol (RTSP)
Configuration	
Save and load	System configurations can be exported and imported to provide recovery points before making configuration changes, backup for archival and system recovery, and templates for configuration of new PCs for AVMS use.
Copy settings	Ability to copy schedules from one camera to another
Installation	Automatic camera discovery
Management	
Settings	General, camera, input/output, PTZ, account, and address book
Logging	System log, event log, counting log, POS transaction log, and resource report
Security	Password-protected user accounts with variable access settings
Backup location	CD-ROM, hard disk, network drive, and Cisco Small Business Network Storage System (NSS)
Divided screen	Ability to view up to 64 cameras onscreen at once
Viewing formats	Ten on-screen viewing formats (1, 4, 5+1, 9, 12+1, 16+1, 8+2, 12+1, 16, and user defined); support for 10 definable areas of detection and quick search and playback for areas where motion was detected
Language support	Chinese (Simplified & Traditional), Czech, Danish, English, Farsi, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Portuguese (Brazilian and European), Russian, Slovak, Spanish, Thai and Turkish
Onscreen status	Free hard disk space report
Video	
Video format	Audio Video Interleave (AVI) and Advanced Systems Format (ASF)
Export video	Ability to save video in standard format
Compression	MPEG-4 and MJPEG
Recording frame rate	Up to 30 frames per second per camera
Audio	Unlimited two-way audio (on cameras that support this feature), G.711, and G.726
Analytics	Signal Lost, General Motion, Foreign Object, Missing Object, Focus Lost, and Camera Occlusion
Backup database	Ability to back up video database by user-selectable time windows for playback on any AVMS system
Recording modes	Continuous, motion, scheduled, and manual, all with audio

Playback speeds	Forward and backward speeds variable in 1x, 2x, 4x, 8x, and 16x
Digital zoom	64x digital zoom on playback
Playback timeline	Ability to view recording activity in a simple-to-understand timeline; ability to magnify timeline as needed
PTZ camera control	Support for PTZ camera control, including auto-patrol of preset locations (on cameras that include this feature)
Schedule recordings	Ability to customize camera recording schedules: Two modes of customization (week and day)
Video enhancement	Ability to digitally enhance each view in real time during playback (visibility, sharpness, brightness, contrast, and grayscale)
Business intelligence	Integrated counting tool that lets organizations track customers and traffic, collecting marketing and business data to make operations more efficient
<b>Pictures</b>	
Format	BMP and JPG
Printing	Ability to print images directly from the playback interface
<b>Minimum Requirements for up to 64-Camera Viewing</b>	
CPU	Intel Core i7
RAM	3 GB
Motherboard	Intel 55 or 57 chip or later; Intel chipset recommended
Video card	Dedicated display adaptor with 512 MB internal memory required. ATI Radeon 4650, nVIDIA GeForce GF-9600, or above (ATI recommended)
Ethernet	100BASE-T or later; Gigabit LAN recommended
Hard disk	250 GB or larger
Operating system	Microsoft Windows XP Pro SP3 (32-bit) or Microsoft Vista (32-bit)
<b>Minimum Requirements for up to 40-Camera Viewing</b>	
CPU	Intel Core i5
RAM	3 GB
Motherboard	Intel 55 or 57 chip or later; Intel chipset recommended
Video card	Dedicated display adaptor with 512 MB internal memory required. ATI Radeon 4650, nVIDIA GeForce GF-9600, or above (ATI recommended)
Ethernet	100BASE-T or later; Gigabit LAN recommended
Hard disk	250 GB or larger
Operating system	Microsoft Windows XP Pro SP3 (32-bit) or Microsoft Vista (32-bit)
<b>Minimum Requirements for up to 32-Camera Viewing</b>	
CPU	Intel Core 2 Quad Q9400
RAM	2 GB
Motherboard	Intel 33 or 35 chip or later; Intel chipset recommended
Video card	Dedicated display adaptor with 512 MB internal memory required. ATI Radeon 4650, nVIDIA GeForce GF-9600, or above (ATI recommended)
Ethernet	100BASE-T or later; Gigabit LAN recommended
Hard disk	250 GB or larger
Operating system	Microsoft Windows XP Pro SP3 (32-bit) or Microsoft Vista (32-bit)
<b>Minimum Requirements for up to 16-Camera Viewing</b>	
CPU	Intel Core 2 Duo E5300
RAM	1 GB
Motherboard	Intel 33 or 35 chip or later; Intel chipset recommended
Video card	Dedicated display adaptor with 512 MB internal memory required. ATI Radeon 4650, nVIDIA GeForce GF-9600, or above (ATI recommended)
Ethernet	100BASE-T or later; Gigabit LAN recommended
Hard disk	250 GB or larger
Operating system	Microsoft Windows XP Pro SP3 (32-bit) or Microsoft Vista (32-bit)

Camera Hardware Requirements	
Supported Cisco Small Business cameras	Cisco PVC 300, Cisco VC 220, Cisco VC 240, Cisco PVC 2300, Cisco WVC 210, and Cisco WVC 2300
Supported third-party camera vendors	Axis, Arecont, Cisco, IQeye, JVC, Cisco Linksys®, LevelOne, Lorex, Lumenera, Mobotix, Panasonic, Samsung, Sony, and Toshiba

## Ordering Information

Table 2 gives ordering information for the Cisco AVMS, which is licensed-based. The license is activated through e-delivery.

**Table 2.** Ordering Information

Part Number	Product Description
L-VM300-64	Advanced Video Monitoring System (AVMS) supporting up to 64 cameras
L-VM300-32	Advanced Video Monitoring System (AVMS) supporting up to 32 cameras
L-VM300-16	Advanced Video Monitoring System (AVMS) supporting up to 16 cameras
L-VM300-08	Advanced Video Monitoring System (AVMS) supporting up to 8 cameras
L-VM300-04	Advanced Video Monitoring System (AVMS) supporting up to 4 cameras
L-VM200-32	Basic Plus Video Monitoring System (VMS) supporting up to 32 cameras

## Cisco Limited Warranty for Cisco Small Business Series Products

This Cisco Small Business product comes with a 90-day limited software warranty. In addition, 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>.

## For More Information

For more information about Cisco Small Business video surveillance cameras, visit: <http://www.cisco.com/go/surveillance>.



Americas Headquarters  
Cisco Systems, Inc.  
San Jose, CA

Asia Pacific Headquarters  
Cisco Systems (USA) Pte. Ltd.  
Singapore

Europe Headquarters  
Cisco Systems International BV  
Amsterdam, The Netherlands

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