Cisco IP Video Surveillance 16-Port Analog Video Gateway Network Module

The Cisco® IP Video Surveillance solution enables you to rapidly deploy highly distributed, IP-enabled video surveillance at your offices while migrating traditional analog surveillance equipment to IP.

The solution offers a low total cost of ownership (TCO) for the branch office, ease of integration through network transparency, reliable data interoperability, and maximized overall security. It allows you to consolidate costly branch-office servers and deploy new applications centrally while still offering real-time access to physical security video and data.

The Cisco IP Video Surveillance solution is comprised of:

- Cisco integrated services routers
- Cisco IP Video Surveillance 16-Port Analog Video Gateway (AVG) Network Module
- Cisco Video Management and Storage System (VMSS) Network Module
- The Cisco Video Surveillance Manager product line, consisting of the Cisco Video Surveillance Operations Manager Software and the Cisco Video Surveillance Media Server Software

This data sheet is for the Cisco IP Video Surveillance 16-Port Analog Video Gateway (AVG) Network Module for the 2800, 2900, 3800, and 3900 Series Integrated Services Routers.

Product Overview

The Cisco AVG offers a powerful solution for highly distributed video surveillance systems to aggregate video streams for transport across the network. By transporting the video over your existing IP network, you no longer need to maintain a separate, duplicate system. Specific capabilities of the Cisco AVG include:

- **High-density analog video encoding:** Up to 16 ports in a single module
- **Maximum-quality video resolution:**
  - Common Intermediate Format (CIF) to 4CIF
  - Frame rates up to 30 frames per second (fps) per port
- **Remote camera control:** Two independent RS-485 loops for serial pan-tilt-zoom (PTZ) control of traditional cameras
- **Flexible codec selection:** Motion JPEG (MJPEG), MPEG4, and H.264
- **Integrated contact closure ports:** Four input and four additional configurable inputs and outputs
- **Embedded motion detection**
- **Investment protection:** Hardware is based on a flexible digital-signal-processor (DSP) platform for continued opportunities for innovation within the same hardware platform

For additional information about Cisco AVG, please visit http://www.cisco.com/go/isrvideo.

Product Line

The Cisco IP Video Surveillance 16-Port AVG Network Module is a component of the Cisco Video Surveillance Manager line of products. Addressing varying customer needs based on branch size, bandwidth availability, and usage patterns, the Cisco Video Surveillance Manager product line is designed to scale to very large enterprisewide deployments.

The Cisco AVG and the Cisco VMSS modules are designed to be deployed in highly distributed environments as edge devices at branch offices; appropriate products exist for high-density locations (Figure 1). This product family can act as one homogenous solution for all of your video surveillance needs. For more details about the Cisco Video Surveillance Manager appliances, refer to http://www.cisco.com/web/solutions/ps/products.html#netcentric.

Figure 1. Cisco AVG Deployment

Security Operations Center

Stand Alone Appliances
- Video Surveillance Media Server
- Video Surveillance Operations Manager
- Video Surveillance Virtual Matrix

WAN

Large Sites
- > 32 ports, Stand Alone Appliances
- Video Surveillance Media Server
- Video Surveillance Operations Manager
- Video Surveillance Virtual Matrix

Cisco 2800 ISR Solution 16 ports
- NME-VMSS-16
- EVM-IPVS-16A

Cisco 3800 ISR Solution 32 ports
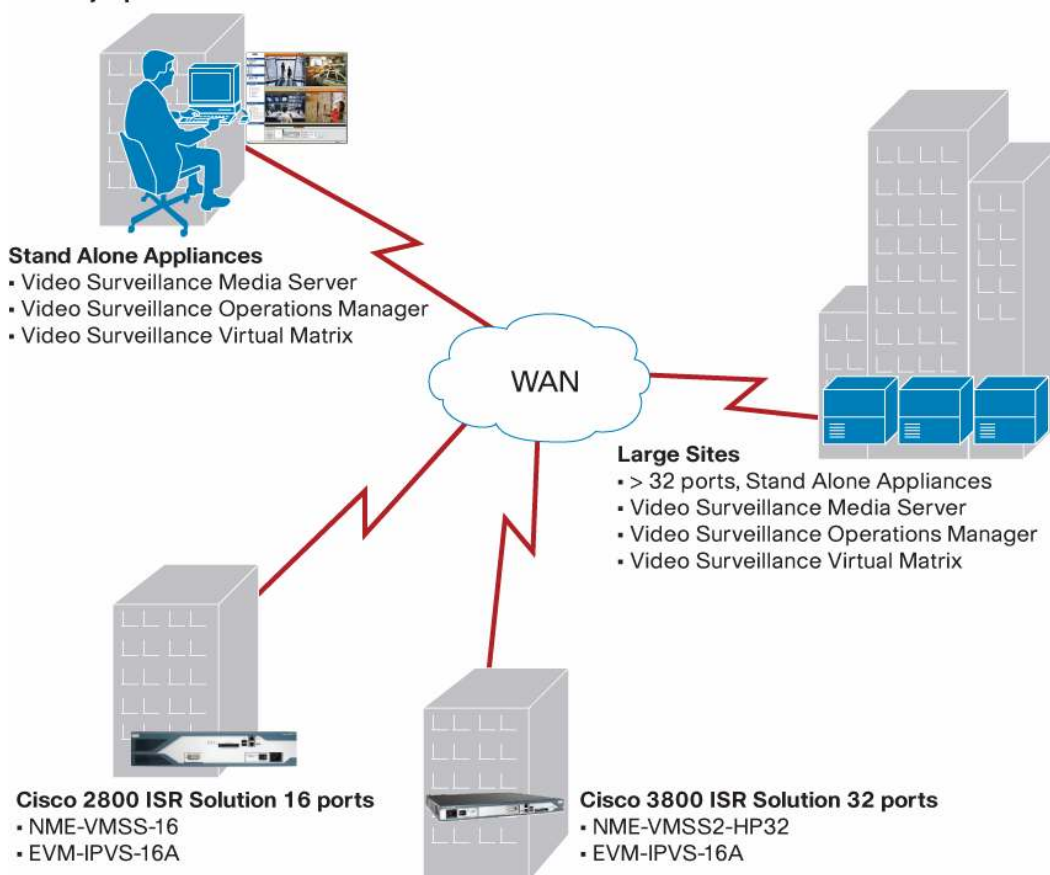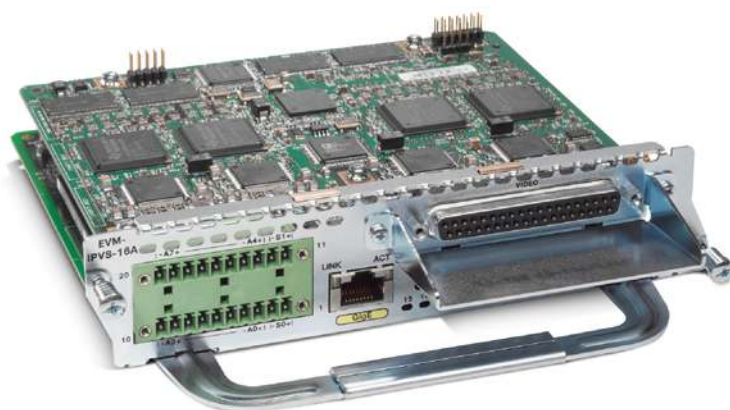- NME-VMSS2-HP32
- EVM-IPVS-16A

Figure 2.   Cisco AVG Network Module

Product Specifications

Table 1 gives product specifications.

Table 1.   Cisco AVG Network Module Specifications

	Cisco AVG (EVM-IPVS-16A)
Router Platforms	Cisco 2821, 2851, 3825, 3845, 2911, 2921, 2951, 3925, 3945 Integrated Services Routers
Minimum Cisco IOS Software Release for 2800 and 3800 Series ISRs	Cisco IOS Software Release 12.4(15)T
Minimum Cisco IOS® Software Release for 2900 and 3900 Series ISRs	Cisco IOS Software Release 15.0(1)M
Minimum Cisco IOS Software Feature Set or License	IP Base
Cisco VSOM and VSMS Software Compatibility	Cisco Video Surveillance Operations Manager (VSOM) 3.0 and Video Surveillance Media Server (VSMS) 5.0 or later
Internal Network Interfaces	10/100/1000 Gigabit Ethernet connectivity to router backplane
External network Interfaces	10/100/1000 Gigabit Ethernet
Physical Characteristics	• Dimensions (H x W x D): 1.55 x 7.10 x 7.2 in. (3.9 x 18.0 x 18.3 cm) • Weight: 1.5 lb (0.7 kg) maximum
Operating Environment	• Operating temperature: 41 to 104°F (5 to 40°C) • Nonoperating and storage temperature: −40 to 158°F (−40 to 70°C) • Operating humidity: 5 to 85% (noncondensing) • Operating altitude: −197 to 6000 ft (−60 to 1800m)
Safety	• UL 60950-1, Safety of Information Technology Equipment-Safety-Part 1: General Requirements (USA); plastic materials that are exposed to the end user shall meet the requirements of fire enclosure (UL94V-1) as defined in UL 60950 • CSA 60950-1, Second Edition, Safety of Information Technology Equipment-Safety-Part 1: General Requirements (Canada) • IEC 60950-1, Second Edition, Safety of Information Technology Equipment-Safety-Part 1: General Requirements, including all national deviations as specified in the current CB Bulletin • EN 60950-1, Second Edition, Safety of Information Technology Equipment-Safety-Part 1: General Requirements (European Union) incorporating all Deviations, as applicable • GB 4943-95, Safety of Information Technology Equipment (Including Electrical Business Equipment) (standard for China, equivalent to IEC 60950) • AS/NZS 60950.1 Information technology equipment, Safety Part 1: General requirements (Australia)

EMC	**Emission:**
	• 47 CFR Part 15 Class A
	• CISPR22 Class A
	• EN300386 Class A
	• EN55022 Class A
	• EN61000-3-2
	• EN61000-3-3
	• SD/EMI (India)
	• KN22 (Korea)
	• VCCI Class I
	• AS/NZS CISPR 22 Class A
	Immunity:
	• CISPR24
	• EN300386
	• EN50082-1
	• EN55024
	• SD/EMI (India)
	• KN22 (Korea)
	• EN61000-6-1

Note: Support for the AVG network module in the 2911, 2921, 2951, 3925, and 3945 will be via the network module adapter card (SM-NM-ADPTR).

Ordering Information

Refer to Table 2 for ordering information.

Table 2. Part Numbers for Cisco AVG Network Modules and Software

Product Part Number	Product Description
EVM-IPVS-16A	Cisco IP Video Surveillance 16-Port Analog Video Gateway Network Module for Cisco 2800 and 3800 Series Integrated Services Routers
SW-IPVS-K9-1.2	Cisco IP Video Surveillance Analog Video Gateway Network Module Software Version 1.2
CAB-EVM-IPVS-16A	Cisco 16-Port Cable for EVM-IPVS Module
SM-NM-ADPTR	Network Module Adapter for SM Slot on Cisco 2900 and 3900 Series ISR

Cisco and Partner Services for the Branch

Services from Cisco and our certified partners can help you transform the branch experience and accelerate business innovation and growth in the Borderless Network. We have the depth and breadth of expertise to create a clear, replicable, optimized branch footprint across technologies. Planning and design services align technology with business goals and can increase the accuracy, speed, and efficiency of deployment. Technical services help improve operational efficiency, save money, and mitigate risk. Optimization services are designed to continuously improve performance and help your team succeed with new technologies. For more information, visit http://www.cisco.com/go/services.

For More Information

For more information about the Cisco IP Video Surveillance 16-Port Analog Video Gateway and Cisco Video Surveillance Manager solutions, visit http://www.cisco.com/go/isrvideo or contact your local Cisco account representative.

For more information about Cisco integrated services routers, visit http://www.cisco.com/go/isr or contact your local Cisco account representative.

CISCO

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

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Printed in USA

C78-462228-03   10/09