



Cisco uMG9850 QAM Module Compatibility Matrix

May 12, 2005

This publication contains information on the Cisco platforms and software versions that support the Cisco uMG9850 QAM Module (model number WS-X4712-UMG9850). The Cisco uMG9850 is a switching module for Cisco Catalyst 4500 series switches that allows cable operators to deliver digital broadcast and Video-on-Demand (VoD) services to their subscribers.



Note

Cisco IOS Release 12.2(20)EU is not longer available. There are no changes in functionality.

[Table 1](#) lists the Cisco Catalyst switches and configuration options that support the Cisco uMG9850, and the Cisco Catalyst switching modules and SFP modules that are compatible with the Cisco uMG9850. The minimum Cisco IOS software release required to support these products and compatible hardware is also provided.

Table 1 *Cisco uMG9850 QAM Module Hardware Compatibility Matrix*

	Product Number	Description	Minimum Software Release
Cisco Catalyst Switches	WS-C4503	Cisco Catalyst 4503 switch chassis	12.2(20)EU1
	WS-C4506	Cisco Catalyst 4506 switch chassis	
	WS-C4507R	Cisco Catalyst 4507R switch chassis	
Memory	MEM-C4K-FLD64M=	Cisco Catalyst 4500 Series Compact Flash, 64-MB option	
	MEM-C4K-FLD128M=	Cisco Catalyst 4500 Series Compact Flash, 128-MB option	



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Table 1 Cisco uMG9850 QAM Module Hardware Compatibility Matrix (Continued)

	Product Number	Description	Minimum Software Release
Supervisor Engine	WS-X4013+	Cisco Catalyst 4500 Series Supervisor Engine II-Plus	12.2(20)EU1
	WS-X4013+/2	Cisco Catalyst 4507R Redundant Supervisor Engine II-Plus	
	WS-X4515	Cisco Catalyst Supervisor Engine IV	
	WS-X4515/2	Cisco Catalyst 4507R Redundant Supervisor Engine IV	
Power Supplies	PWR-C45-1000AC	1000 W AC power supply	
	PWR-C45-1000AC/2	Redundant power supply	
	PWR-C45-1400DC-P	1400 W DC power supply	
	PWR-C45-1400DC-P/2	Redundant power supply	
	PWR-C45-1400AC	1400 W AC power supply	
	PWR-C45-1400AC/2	Redundant power supply	
Switching Modules	WS-X4148-RJ	48-port 10/100 Fast Ethernet RJ-45 switching module	
	WS-X4306-GB	6-port 1000BASE-X (GBIC) Gigabit Ethernet switching module	
SFPs	GLC-SX-MM=	1000BASE-SX SFP	
	GLC-LX-SM=	1000BASE-LX SFP	
	CWDM-SFP-xxxx=	Cisco 1000BASE-CWDM xxxx nm SFP	

Table 1 *Cisco uMG9850 QAM Module Hardware Compatibility Matrix (Continued)*

	Product Number	Description	Minimum Software Release
GBICs	WS-G5483=	1000BASE-T GBIC	12.2(20)EU1
	WS-G5484=	1000BASE-SX short-wavelength GBIC (multimode only)	
	WS-G5486=	1000BASE-LX/LH long-haul GBIC (single-mode or multimode)	
	WS-G5487=	1000BASE-ZX extended-reach GBIC (single-mode)	
	CWDM-GBIC-xxxx	Cisco 1000BASE-CWDM xxxx nm GBIC	
	DWDM-GBIC-xx.yy	Cisco 1000BASE-DWDM ITU 100-GHz grid 15xx.yy nm GBIC	
	WDM-GBIC-REC=	Cisco receive-only 1000BASE-WDM GBIC	

Related Documentation

The latest information is always online. To view or print an online document in its original format, click the PDF icon. You can also order printed copies of many documents. See [Ordering Documentation, page 6](#).

To find online user documentation (PDF and HTML formats), go to the following URL:

<http://www.cisco.com/univercd/home/home.htm>



Tip

To navigate to the next higher level in the documentation hierarchy, click on CONTENTS in the navigation bar at the top of each page.

Cisco uMG9850 QAM Module Documentation

Hardware Documents

The quick start guide describes how to install a Cisco uMG9850 QAM Module in a Cisco Catalyst 4500 series switch. You can find this quick start guide at the following URL:

<http://www.cisco.com/univercd/cc/td/doc/product/cable/vod/umg9850/9850qsg.htm>

Software Documents

The software feature module provides additional detailed configuration information specific to Cisco uMG9850 QAM Modules.

You can find this information at the following URL:

<http://www.cisco.com/univercd/cc/td/doc/product/cable/vod/umg9850/>

Cisco uMG9850 Release Notes

Product release notes provide the most current information that is specific to a release of Cisco uMG9850 QAM Modules, including important notes, limitations and restrictions, and caveats.

You can find this information at the following URL:

<http://www.cisco.com/univercd/cc/td/doc/product/cable/vod/umg9850/>

Regulatory Compliance and Safety Information

The Regulatory Compliance and Safety Information document provides essential safety information applicable to your Cisco Catalyst 4500 series switch and Cisco uMG9850 QAM Module. This document contains multiple-language translations of the safety warnings that appear in this quick start guide.

You can find this document at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/lan/cat4000/hw_doc/78_13233.htm

Cisco Catalyst 4500 Series Switches

Technical documentation for Cisco Catalyst 4500 series switches provide complete installation and configuration information about the Cisco Catalyst 4500 series switches.

You can find these documents at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/lan/cat4000/hw_doc/index.htm

Release Notes

Cisco IOS release notes for Cisco Catalyst 4500 series switches provide up-to-date information about Cisco IOS software releases used on Cisco Catalyst 4500 series switches.

You can find these documents at the following URL:

<http://www.cisco.com/univercd/cc/td/doc/product/lan/cat4000/relnotes/index.htm>

Cisco IOS Software Documentation

Master Index to Software Documentation

The master index provides links to topics and commands for each Cisco IOS software release. This includes configuration guides, command references, release notes, new feature documentation, and system error messages.

You can find master indexes at the following URL:

<http://www.cisco.com/univercd/cc/td/doc/product/software/index.htm>

Cisco SFP Documentation

Cisco SFP documentation provides additional installation information for Cisco SFP modules.

Cisco CWDM GBIC and CWDM SFP Installation Note can be found at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/gbic_sfp/gbic_doc/78_15222.pdf

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation at this URL:

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Documentation DVD

Cisco documentation and additional literature are available in a Documentation DVD package, which may have shipped with your product. The Documentation DVD is updated regularly and may be more current than printed documentation. The Documentation DVD package is available as a single unit.

Registered Cisco.com users (Cisco direct customers) can order a Cisco Documentation DVD (product number DOC-DOCDVD=) from the Ordering tool or Cisco Marketplace.

Cisco Ordering tool:

<http://www.cisco.com/en/US/partner/ordering/>

Cisco Marketplace:

<http://www.cisco.com/go/marketplace/>

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:

<http://www.cisco.com/en/US/partner/ordering/>

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 1 800 553-NETS (6387).

Documentation Feedback

You can send comments about technical documentation to bug-doc@cisco.com.

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

From this site, you can perform these tasks:

- Report security vulnerabilities in Cisco products.
- Obtain assistance with security incidents that involve Cisco products.
- Register to receive security information from Cisco.

A current list of security advisories and notices for Cisco products is available at this URL:

<http://www.cisco.com/go/psirt>

If you prefer to see advisories and notices as they are updated in real time, you can access a Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed from this URL:

http://www.cisco.com/en/US/products/products_psirt_rss_feed.html

Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you might have identified a vulnerability in a Cisco product, contact PSIRT:

- Emergencies—security-alert@cisco.com
- Nonemergencies—psirt@cisco.com



Tip

We encourage you to use Pretty Good Privacy (PGP) or a compatible product to encrypt any sensitive information that you send to Cisco. PSIRT can work from encrypted information that is compatible with PGP versions 2.x through 8.x.

Never use a revoked or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one that has the most recent creation date in this public key server list:

<http://pgp.mit.edu:11371/pks/lookup?search=psirt%40cisco.com&op=index&exact=on>

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532

Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year, at this URL:

<http://www.cisco.com/techsupport>

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>



Note

Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support Website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

<http://www.cisco.com/go/marketplace/>

- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

<http://www.cisco.com/go/iqmagazine>

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

<http://www.cisco.com/ipj>

- World-class networking training is available from Cisco. You can view current offerings at this URL:


<http://www.cisco.com/en/US/learning/index.html>

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