

Cisco Model EPC3008 EuroDOCSIS 3.0 8x4 Cable Modem

The Cisco® Model EPC3008 EuroDOCSIS 3.0 8x4 Cable Modem (EPC3008) provides EuroDOCSIS™ broadband service providers with a cost-effective solution for delivering high-speed bi-directional data services. The EPC3008 provides a faster connection to the Internet by incorporating eight bonded downstream channels along with four bonded upstream channels. These bonded channels deliver downstream data rates in excess of 440 Mbps. That's up to eight times faster than conventional single-channel EuroDOCSIS 2.0 cable modems.

The EPC3008 is designed to meet EuroDOCSIS 3.0 specifications as well as being backward compatible with EuroDOCSIS 2.0, 1.1, and 1.0 networks.

Figure 1. EPC3008 EuroDOCSIS 3.0 8x4 Cable Modem (image may vary from actual product and specification)



Features

EuroDOCSIS

- Eight (8) bonded downstream channels with data rates in excess of 440 Mbps
- Four (4) bonded upstream channels with data rates in excess of 120 Mbps
- Designed to meet EuroDOCSIS 3.0 specifications as well as backward compatibility with existing EuroDOCSIS 2.0, 1.1 and 1.0 networks
- Enhanced packet processing technology to maximize performance
- Expanded tuning range, 88-1002 MHz
- Color-coded connectors and cables for easy installation and setup

Connections

- 10/100/1000BASE-T auto-sensing/autoMDIX Ethernet port
- Support for up to 64 users (on user-supplied Ethernet hubs)

Design and Function

- Attractive compact design and versatile orientation to stand vertically, lie flat on the desktop or shelf, or mount easily on a wall
- Dual color LED status indicators on the front-panel provide an informative and easy-to-understand display that indicates the cable modem operational status
- Easy-to-understand generic icons indicate purpose of LEDs
- Rugged electronic components for long-term reliability

Management

- Software upgradeable by network download
- Remote manageability using SNMP V1/V2 and V3

Software and Documentation

- CD-ROM containing user guide

Figure 2. EPC3008 Front Panel (image may vary from actual product and specification)**Table 1.** Front Panel Features

Feature	Description
Indicators	POWER, DS, US, ONLINE, LINK, and corresponding icons
Color	Black case, black faceplate, silver text, green/amber LEDs
Branding	Cisco logo and model number

Figure 3. EPC3008 Back Panel (image may vary from actual product and specification)**Table 2.** Back Panel Switch and Connections

Feature	Description
POWER SWITCH	Switches power to the unit (power switch provided only on products carrying the CE mark)
POWER Connector Color: Black	Connects modem to the DC output of the AC power adapter
ETHERNET Connector Color: Yellow	RJ-45 Ethernet port connects to the Ethernet port on your PC or your home network
REBOOT EMTA	Power cycles the modem
CABLE Connector Color: White	F-connector connects to an active cable signal from your service provider

Product Specifications

Table 3. Product Specifications

Specification	Value				
RF Downstream					
Operating Frequency Range	88 to 1002 MHz				
Tuner Frequency Range	88 to 1002 MHz				
Tuner	(1) Frequency agile block tuner, 96 MHz bandpass				
Demodulation	8 demodulators, 4 per tuner, each demodulator; 64 QAM or 256 QAM				
Maximum Data Rate	8 downstream channels, each 6 MHz channel: 42.88 Mbps for 256 QAM and 30.34 Mbps for 64 QAM				
Bandwidth	8 and/or 6 MHz				
Operating Level Range	43 to 73 dB μ V for 64 QAM 47 to 77 dB μ V for 256 QAM				
Input Impedance	75 ohms				
RF Upstream					
Operating Frequency Range	5 to 65 MHz				
Transmitter Frequency Range	5 to 65 MHz				
Upstream Transmission	4 upstream channels				
Modulation	QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM at ATDMA mode QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM, 128 QAM at SCDMA mode				
Maximum Data Rate per Channel	<u>Modulation</u>	<u>Channel Bandwidth (MHz)</u>	<u>Raw Data Rate (Mb/s)</u>		
	QPSK	1.6	2.56		
	16 QAM	1.6	5.12		
	QPSK	3.2	5.12		
	16 QAM	3.2	10.24		
	32 QAM	3.2	12.8		
	64 QAM	3.2	15.4		
	16 QAM	6.4	20.5		
	32 QAM	6.4	25.6		
	64 QAM	6.4	30.72		
Bandwidth	200 kHz to 6.4 MHz				
Maximum Operating Level (+/-2)	<u>Modulation</u>	<u>1 Channel</u>	<u>2 Channels</u>	<u>3 or 4 Channels</u>	
	TDMA	QPSK	+121 dBmV	+118 dBmV	+115 dBmV
		8 QAM	+118 dBmV	+115 dBmV	+112 dBmV
		16 QAM	+118 dBmV	+115 dBmV	+112 dBmV
		32 QAM	+117 dBmV	+114 dBmV	+111 dBmV
		64 QAM	+117 dBmV	+114 dBmV	+111 dBmV
	SCDMA	QPSK	+116 dBmV	+113 dBmV	+113 dBmV
		8 QAM	+116 dBmV	+113 dBmV	+113 dBmV
		16 QAM	+116 dBmV	+113 dBmV	+113 dBmV
		32 QAM	+116 dBmV	+113 dBmV	+113 dBmV
		64 QAM	+116 dBmV	+113 dBmV	+113 dBmV
		128 QAM	+116 dBmV	+113 dBmV	+113 dBmV

Specification	Value
Electrical	
Input Voltage	12 VDC / 50-60 Hz
Power Consumption (Modem Module)	~ 5.0 Watts
Data Ports	Ethernet 10/100/1000BASE-T (Auto-sensing with Auto-MDIX) RJ-45 Ethernet (1)
RF	Female "F" type
Impedance	75 ohms
Mechanical	
Dimensions (W x D x H) (Approximate)	Not including "F" connector: 7 in. x 5.9 in. x 2.76 in. (17.8 cm x 14.9 cm x 7.0 cm)
Weight (Approximate)	0.24 kg (8.4 oz)
Battery Type and Capacity	1 cartridge, Li-Ion, 3 cells, 2600 mAh
Operating Temperature	32° to 104°F (0° to 40°C)
Operating Humidity	0 to 90% RH non-condensing
Storage Temperature	-4° to 140°F (-20° to 60°C)
Standards and Approvals	
Designed to Comply with the Following Standards	EuroDOCSIS 3.0, 2.0, 1.1, 1.0
Regulatory and Safety Approvals	As required per country where the EPC3008 will be used

Ordering Information

Table 4. Ordering Information

Description	Part Number
5-65/108-1002 MHz Diplex Filter	
EPC3008 DOCSIS 3.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 230 VAC / 50-60 Hz, 12 VDC/1 A desktop linear switching power supply, Europe • Ethernet cable • CD-ROM containing user guides Europe	4038334
EPC3008 DOCSIS 3.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 230 VAC / 50-60 Hz, 12 VDC/1 A desktop linear switching power supply, Europe • Ethernet cable • CD-ROM containing user guides China	4039648

Replacement Components

Table 5. Replacement Components

Description	Part Number
Power Supply	
Class 2 Linear Switching	
230-240 VAC / 50-60 Hz, 12 VDC/1 A wall-mount linear switching power supply, Europe	4015453
220-230 VAC / 50-60 Hz, 12 VDC/1 A wall-mount linear switching power supply, China	4039337
230-240 VAC / 50-60 Hz, 12 VDC/1 A wall-mount linear switching power supply, UK	4018794
Data Cable	
Ethernet, 1.2 meters	740580
CD-ROM	
CD-ROM with user guide	4040234



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Cisco Systems, Inc.
800 722-2009 or 678 277-1120
www.cisco.com

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