

Cisco Model EPC3010 8x4 EuroDOCSIS 3.0 Cable Modem

The Cisco® Model EPC3010 8x4 EuroDOCSIS 3.0 Cable Modem (EPC3010) provides EuroDOCSIS™ broadband service providers with a cost-effective solution for delivering high-speed bi-directional data services. The EPC3010 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 (up to eight times faster than conventional single-channel EuroDOCSIS 2.0 cable modems) and upstream data rates four times as fast.

The EPC3010 is designed to meet EuroDOCSIS 3.0 specifications as well as offering backward compatibility in EuroDOCSIS 2.0, 1.1 and 1.0 networks.

Figure 1. Cisco Model EPC3010 8x4 EuroDOCSIS 3.0 Cable Modem (image may vary from actual product and specification)



Features

EuroDOCSIS

- Compliant with EuroDOCSIS 3.0, 2.0, 1.1, and 1.0 standards to deliver high-end performance and reliability

Connections

- 1000/100/10BASE-T auto-sensing/auto-MDIX Ethernet port
- USB 2.0 data port (option)
- Support for up to 64 users (1 USB port user and up to 63 users on user-supplied Ethernet hubs)

Design and Function

- Dual color LEDs provide a user-friendly method to check real-time operational status
- Attractive, compact design and versatile orientation to stand vertically, lie flat on the desktop or shelf, or mount easily on a wall
- TR-068 compliant color-coded interface ports and corresponding cables simplify installation and setup
- Rugged electronic components for long-term reliability

Management

- Allows automatic software upgradeable by network download
- Remote manageability using SNMP V1/V2 and V3

Software and Documentation

- CD-ROM containing user guide and USB driver installation software for Microsoft Windows 7, Windows Vista, Windows XP, and Windows 2000 operating systems

Figure 2. Cisco Model EPC3010 Front Panel (image may vary from actual product and specification)



Table 1. Front Panel Features

Feature	Description
Indicators	POWER, DS, US, ONLINE, LINK
Color	Charcoal gray, black faceplate, silver text, green LEDs
Branding	Cisco and model number

Figure 3. Cisco Model EPC3010 Back Panel (image may vary from actual product and specification)



Table 2. Back Panel Features

Feature	Description
POWER Connector Color: Black	Connects modem to the DC output of the AC power adapter
POWER SWITCH	Power switch turns the modem on and off
ETHERNET Connector Color: Yellow	RJ-45 Ethernet port connects to the Ethernet port on your PC or your home network
USB (option) Connector Color: Blue	USB 2.0 Type B port connects to a USB port on your PC
RESET	Power cycles the cable modem
MAC ADDRESS LABEL	Displays the MAC address of the cable 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	108 to 1002 MHz					
Tuner Frequency Range	108 to 1002 MHz					
Tuner	(2) Frequency agile block tuners, 32 MHz bandpass each					
Demodulation	8 demodulators, 4 per tuner, each demodulator; 64 QAM or 256 QAM					
Maximum Data Rate	8 downstream channels, each 8 MHz channel: 55.62 Mbps for 256 QAM and 41.71 Mbps for 64 QAM					
Bandwidth	8 or 6 MHz					
Operating Level Range	+43 to +73 dBμV for 64 QAM +47 to +77 dBμV 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 / ATDMA mode, 128 QAM / SCDMA mode					
Maximum Data Rate per channel	<u>Modulation</u>	<u>Channel Bandwidth (MHz)</u>	<u>Raw Data Rate (Mbps)</u>			
	QPSK	1.6	2.56			
	16 QAM	1.6	5.12			
	QPSK	3.2	5.12			
	16 QAM	3.2	10.2			
	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	30.7			
Bandwidth	200 kHz to 6.4 MHz					
Maximum Operating Level	<u>Modulation</u>	<u>One Channel</u>	<u>2 Channels</u>	<u>3 or 4 Channels</u>		
		TDMA	QPSK	+121 dBμV	+118 dBμV	+115 dBμV
		8 QAM	+118 dBμV	+115 dBμV	+112 dBμV	
		16 QAM	+118 dBμV	+115 dBμV	+112 dBμV	
		32 QAM	+117 dBμV	+114 dBμV	+111 dBμV	
	64 QAM	+117 dBμV	+114 dBμV	+111 dBμV		
	SCDMA	QPSK	+116 dBμV	+113 dBμV	+113 dBμV	
		8 QAM	+116 dBμV	+113 dBμV	+113 dBμV	
		16 QAM	+116 dBμV	+113 dBμV	+113 dBμV	
		32 QAM	+116 dBμV	+113 dBμV	+113 dBμV	
		64 QAM	+116 dBμV	+113 dBμV	+113 dBμV	
		128 QAM	+116 dBμV	+113 dBμV	+113 dBμV	

Specification	Value
Electrical	
Input Voltage	12 VDC
Power Consumption (modem module)	~7 Watts
Data Ports	GigE (Auto-negotiate with Auto-MDIX): RJ-45 Ethernet (4) USB 2.0: Type B (1)
RF	Female F-Type
Output Impedance	75 ohms
Mechanical	
Dimensions (W x D x H)	Without F-Type connector: 15 cm x 12.2 cm x 3.5 cm (6 in. x 4.75 in. x 1.6 in.) With F-Type connector: 15 cm x 13.3 cm x 3.5 cm (6 in. x 5.5 in. x 1.6 in.)
Weight	0.280 kg (9.9 oz)
Operating Temperature	-0° to 40°C (32° to 104°F)
Operating Humidity	0 to 95% RH non-condensing
Storage Temperature	-20° to 70°C (-4° to 158°F)
Standards and Approvals	
Designed to meet with the following standards	EuroDOCSIS 3.0, 2.0, 1.1, 1.0
Regulatory Compliance	
Regulatory and Safety Approvals	As required per country where the EPC3010 will be used

Ordering Information

Table 4. Ordering Information

Description	Part Number
5-65/108-1002 MHz Diplex Filter	
EPC3010 EuroDOCSIS 3.0 Channel Bonded Cable Modem. Includes: <ul style="list-style-type: none"> • GigE port • USB 2.0 port • 230-240 VAC/50-60 Hz, 12 VDC/ 1 A wall-mount linear switching power supply, Europe • Ethernet cable • USB cable • CD-ROM with user guides and USB driver Europe	4027673
EPC3010 EuroDOCSIS 3.0 Channel Bonded Cable Modem. Includes: <ul style="list-style-type: none"> • GigE port • USB 2.0 port • 230-240 VAC/50-60 Hz, 12 VDC/ 1 A wall-mount linear switching power supply, Europe • Ethernet cable • USB cable • CD-ROM with user guides and USB driver Russia	4039756

Replacement Components

Table 5. Replacement Components

Description	Part Number
Power Supply - Class 2 Linear Switching	
230-240 VAC / 50-60 Hz, 12 VDC/1A wall-mount linear-switching power supply, Europe	4015453
Data Cables	
Ethernet cable, 1.2 meters	740580
USB cable, 1.0 meter	740579
CD-ROM	
CD-ROM with user guides and USB driver	4029645



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

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