

Cisco Model EPC3000 EuroDOCSIS 3.0 Cable Modem

The Cisco® Model EPC3000 EuroDOCSIS 3.0 Cable Modem (EPC3000) provides EuroDOCSIS® broadband service providers with a cost-effective solution for delivering high-speed bi-directional data services. The EPC3000 provides a faster connection to the Internet by incorporating four bonded downstream channels along with four bonded upstream channels to deliver downstream data rates in excess of 200 Mbps and upstream data rates approaching 120 Mbps, up to four times faster than conventional single-channel EuroDOCSIS 2.0 cable modems.

The EPC3000 is designed to meet EuroDOCSIS 3.0 specifications as well as offering backward compatibility for operation in EuroDOCSIS 2.0, 1.1 and 1.0 networks.

Figure 1. Model EPC3000 EuroDOCSIS 3.0 Cable Modem



Features

EuroDOCSIS

- Four (4) bonded channels with total downstream throughput in excess of 200 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

Connections

- Bridged 1000/100/10 Mbps Ethernet port with Auto-negotiate and Auto-MDIX and USB 2.0 data port
- Support for up to 64 users (1 USB port user and up to 63 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 shows the cable modem operational status
- Designed for reliability

Management

- 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. Model EPC3000 EuroDOCSIS 3.0 Cable Modem Front Panel

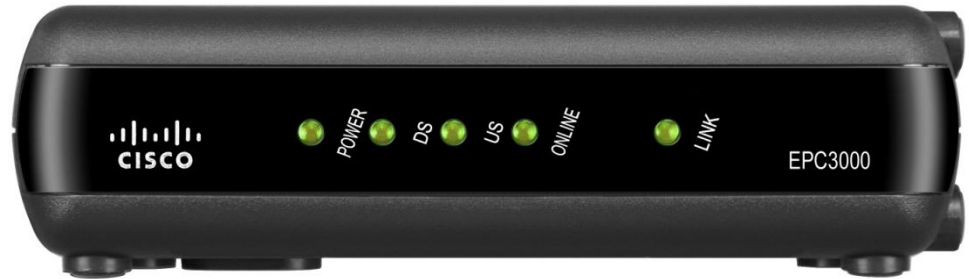


Table 1. Front Panel Features

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

Figure 3. Model EPC3000 EuroDOCSIS 3.0 Cable Modem Back Panel**Table 2.** Back Panel Features

Feature	Description
POWER Switch	Turns power on and off to the device (power switch provided on all products carrying the CE mark)
ETHERNET Connector Color: Yellow	(1) RJ-45 Ethernet port connects to the Ethernet port on your PC or your home network
USB (Option) Connector Color: Blue	(1) Type B USB 2.0 port connects to a USB port on your PC
REBOOT	Power cycles the cable modem
MAC ADDRESS LABEL	Lists 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	88 to 1002 MHz
Tuner Frequency Range	108 to 1000 MHz
Tuner	(1) Frequency agile block tuner, 82 MHz bandpass typical, 64 MHz minimum
Demodulation	4 demodulators, each demodulator; 64 QAM or 256 QAM
Maximum Data Rate	4 downstream channels, each channel: 41.4 Mbps for 64 QAM 55.2 Mbps for 256 QAM
Bandwidth	6 or 8 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

Specification	Value				
RF Upstream					
Operating 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 (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	TDMA	<u>One Channel</u>			
		<u>2 Channels</u>			
		<u>3 or 4 Channels</u>			
		QPSK	+121 dB μ V	+118 dB μ V	+115 dB μ V
		8 QAM	+118 dB μ V	+115 dB μ V	+112 dB μ V
		16 QAM	+118 dB μ V	+115 dB μ V	+112 dB μ V
	SCDMA	32 QAM	+117 dB μ V	+114 dB μ V	+111 dB μ V
		64 QAM	+117 dB μ V	+114 dB μ V	+111 dB μ V
		QPSK	+116 dB μ V	+113 dB μ V	+113 dB μ V
		8 QAM	+116 dB μ V	+113 dB μ V	+113 dB μ V
		16 QAM	+116 dB μ V	+113 dB μ V	+113 dB μ V
		32 QAM	+116 dB μ V	+113 dB μ V	+113 dB μ V
		64 QAM	+116 dB μ V	+113 dB μ V	+113 dB μ V
128 QAM	+116 dB μ V	+113 dB μ V	+113 dB μ V		
Electrical					
Input Voltage	12 VDC				
Power Consumption (modem module)	~ 4 Watts				
Data Ports	GigE (Auto-negotiate with Auto-MDIX): RJ-45 Ethernet (1) USB 2.0: USB Type B (1)				
RF	Female "F" type				
Output Impedance	75 ohms				
Mechanical					
Dimensions (HxDxW)	1.4 in. x 5.6 in. x 6.5 in. (3.5 cm x 14.25 cm x 16.5 cm)				
Weight	10.3 oz. (0.292 kg)				
Operating Temperature	32 to 104°F (-0 to 40°C)				
Operating Humidity	0 to 95% RH non-condensing				
Storage Temperature	-4 to 158°F (-20 to 70°C)				
Standards and Approvals					
Designed to meet with the following standards	EuroDOCSIS 3.0				
Regulatory Compliance					
Regulatory and Safety Approvals	As required per country where the EPC3000 will be used				

Ordering Information

Table 4. Ordering Information

Description	Part Number
5-65/108-1002 MHz Diplex Filter Hardware Revision 2.0	
EPC3000 EuroDOCSIS 3.0 Channel Bonded Cable Modem. Includes: <ul style="list-style-type: none"> • GigE port • USB 2.0 port • 230 VAC / 50-60 Hz, 12 VDC /1 A wall-mount linear switching power supply, Europe • Ethernet cable • USB cable • CD-ROM containing user guides and USB driver Europe	4027672
5-65/108-1002 MHz Diplex Filter Hardware Revision 1.2	
EPC3000 EuroDOCSIS 3.0 Channel Bonded Cable Modem. Includes: <ul style="list-style-type: none"> • GigE port • USB 2.0 port • 220 VAC / 50-60 Hz, 12 VDC /1 A wall-mount linear switching power supply, China • Ethernet cable • USB cable • CD-ROM containing user guides and USB driver China	4025539
EPC3000 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, UK • Ethernet cable • USB cable • CD-ROM containing user guides and USB driver United Kingdom (<i>Customer-specific configuration</i>)	4024174

Replacement Components

Table 5. Replacement Components

AC Power Supplies	Part Number
Linear-Switching, Class 2	
230 VAC / 50-60 Hz, 12 VDC/1 A wall-mount linear-switching power supply, Europe	4015453
220 VAC / 50-60 Hz, 12 VDC/1 A wall-mount linear-switching power supply, China	4024112
230-240 VAC / 50-60 Hz, 12 VDC/1 A wall-mount linear-switching power supply, UK	4018794
Cables	Part Number
Ethernet cable, 1.2 meters	740580
USB cable, 1.0 meter	740579
User Guide and USB Drivers	Part Number
CD-ROM with user guide and USB drivers	4023779



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