

# Cisco Model EPC3000 EuroDOCSIS 3.0 Cable Modem

The Cisco<sup>®</sup> Model EPC3000 EuroDOCSIS 3.0 Cable Modem (EPC3000) provides EuroDOCSIS<sup>®</sup> 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.





### 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-tounderstand 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.

#### 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 dBμV for 64 QAM +47 to +77 dBμV for 256 QAM			
Input Impedance	75 ohms			

Specification	Value					
RF Upstream						
Operating Frequency Range	5 to 65 MHz					
Upstream Transmission	4 upstrea	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	Modulation QPSK 16 QAM QPSK 16 QAM 32 QAM 64 QAM 16 QAM 32 QAM 64 QAM	Channe Bandwi 1.6 3.2 3.2 3.2 3.2 3.2 6.4 6.4 6.4 6.4	l dth (MHz)	Raw Data Rate 2.56 5.12 5.12 10.2 12.8 15.4 20.5 25.6 30.7	<u>(Mbps)</u>	
Bandwidth	200 kHz t	o 6.4 MHz				
Maximum Operating Level TDMA	QPSK 8 QAM 16 QAM 32 QAM 64 QAM	<u>One Channel</u> +121 dBμV +118 dBμV +118 dBμV +117 dBμV +117 dBμV	2 Channels +118 dBµ\ +115 dBµ\ +115 dBµ\ +114 dBµ\ +114 dBµ\		3 or 4 Channels +115 dBµV +112 dBµV +112 dBµV +111 dBµV +111 dBµV	
SCDMA	8 QAM 16 QAM 32 QAM 64 QAM	+116 dBμV +116 dBμV +116 dBμV +116 dBμV +116 dBμV +116 dBμV +116 dBμV	+113 dBµ\ +113 dBµ\ +113 dBµ\ +113 dBµ\ +113 dBµ\ +113 dBµ\		+113 dBμV +113 dBμV +113 dBμV +113 dBμV +113 dBμV +113 dBμV +113 dBμV	
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	Female "F" type				
Output Impedance	75 ohms					
Mechanical						
Dimensions (HxDxW)	1.4 in. x 5	.6 in. x 6.5 in. (3.5 cr	m x 14.25 cm x	16.5 cm)		
Weight	10.3 oz. (	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						
Regulatory Compliance						
Regulatory and Safety         As required per country where the EPC3000 will be used           Approvals         Approvals						

# **Ordering Information**

Table 4.         Ordering Information	
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Description	Part Number
5-65/108-1002 MHz Diplex Filter	
Hardware Revision 2.0	
EPC3000 EuroDOCSIS 3.0 Channel Bonded Cable Modem. Includes:	4027672
GigE port	
USB 2.0 port	
<ul> <li>230 VAC / 50-60 Hz, 12 VDC /1 A wall-mount linear switching power supply, Europe</li> </ul>	
Ethernet cable	
USB cable	
<ul> <li>CD-ROM containing user guides and USB driver</li> </ul>	
Europe	
5-65/108-1002 MHz Diplex Filter	
Hardware Revision 1.2	
EPC3000 EuroDOCSIS 3.0 Channel Bonded Cable Modem. Includes:	4025539
GigE port	
USB 2.0 port	
<ul> <li>220 VAC / 50-60 Hz, 12 VDC /1 A wall-mount linear switching power supply, China</li> </ul>	
Ethernet cable	
USB cable	
<ul> <li>CD-ROM containing user guides and USB driver</li> </ul>	
China	
EPC3000 EuroDOCSIS 3.0 Channel Bonded Cable Modem. Includes:	4024174
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	
<ul> <li>CD-ROM containing user guides and USB driver</li> </ul>	
United Kingdom (Customer-specific configuration)	

### **Replacement Components**

Table 5.	Replacement Components
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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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