# Cisco Model EPR2320 EuroDOCSIS 2.0 Residential Gateway with Wireless Access Point

The Cisco<sup>®</sup> Model EPR2320 EuroDOCSIS<sup>™</sup> 2.0 Residential Gateway (EPR2320) combines a cable modem, router, and wireless access point in a single device to provide a cost-effective solution for both home and small office networking.

The EPR2320 has been designed and built to meet EuroDOCSIS 2.0 specifications and CableHome<sup>®</sup> 1.1 specifications. In addition, it is backward compatible with EuroDOCSIS 1.1 and EuroDOCSIS 1.0 networks. The "Dual Mode" feature of the EPR2320 also allows it to operate in DOCSIS<sup>®</sup> networks<sup>1</sup>. Designed for the active digital home or office, the EPR2320 features integrated CableHome-ready Network Address Translation (NAT), parental control, firewall technology, and a Dynamic Host Configuration Protocol (DHCP) server.

The EPR2320 features a dual antenna design. One antenna is an external antenna and the other is internal to the housing. The two antennas work together to provide more uniform wireless coverage within the service area.

The housing of the EPR2320 incorporates a hide-away stabilizer that pivots out from the bottom base when standing the gateway on end, or it tucks neatly into the casing when the gateway is set horizontally on a desktop. Convenient, recessed cutouts on the bottom surface of the housing allow the EPR2320 to be mounted on the wall.

Figure 1. EPR2320 EuroDOCSIS 2.0 Residential Gateway



<sup>&</sup>lt;sup>1</sup> The EPR2320R2 Hardware revision 2.0 and later can be deployed in DOCSIS networks with either 6 MHz or 8 MHz channel spacing. EPR2320 revisions prior to revision 2.0 can operate in DOCSIS networks with 8 MHz channel spacing only.

# WebWizard

To facilitate setup and troubleshooting, the EPR2320 includes WebWizard—a browserbased graphical user interface. WebWizard also eliminates the need to load setup software on the customer premises equipment (CPE). In addition, the LEDs on the front panel provide an informative and easy-to-understand display that indicates cable modem status along with visual feedback of real-time data transmission.

# Features

- Designed and built to meet EuroDOCSIS 2.0 specifications and CableHome 1.1 specifications
- Integrated router featuring NAT, a DHCP server, and parental control technology
- Lockdown mode prevents unauthorized or accidental reset of gateway settings
- Configurable either locally or remotely through Web interface, configuration file, or SNMP protocols
- Service provider-defined CableHome, Residential Gateway (default), or Bridge modes of operation
- One 10/100Base-T auto-sensing with auto-MDIX Ethernet port and a USB 1.1 port
- 802.11g Wireless Access Point

# **Product Specifications**

# Table 1. Product Specifications

Specification	Value
Wireless Access Point	
Frequency Range	2.412~2.472 GHz, 13 Channels (Europe; CE/ETSI)
Modulation	DSSS (Direct Sequence Spread Spectrum)
Data Rate: 802.11g	54 Mbps with Auto Fall-Back
Security (North America)	RC4 with 64-bit and 128-bit WEP
Transmit Power (North America)	14 dBm (average)
Antenna System	One (1) external One (1) internal
RF Downstream	
Frequency Range	112 MHz to 860 MHz
Demodulation	64 QAM or 256 QAM
Maximum Data Rate	41.4 Mbps (for 64 QAM)
	55.2 Mbps (for 256 QAM)
Bandwidth	8 MHz
Operating Level Range	43 dBuV to 73 dBuV for 64 QAM
	47 dBuV to 77 dBuV for 256 QAM
Input Impedance	75 ohms
RF Upstream	
Frequency Range	5 MHz to 65 MHz
Modulation	16 QAM QPSK 64 QAM ATDMA 128 QAM SCDMA
Maximum Data Rate	10.2 Mbps (for 16 QAM) 5.12 Mbps (for QPSK) 30.0 Mbps (for ATDMA or SCDMA)
Bandwidth	200 kHz to 6.4 MHz
Operating Level Range	+8 dBmV to +58 dBmV +8 dBmV to +55 dBmV ( 8 QAM, 16 QAM ) +8 dBmV to +54 dBmV ( 32 QAM, 64 QAM )
Output Impedance	75 ohms
Other	
Input Voltage	12 V DC
Power Consumption	6.25 Watts, maximum
(Modem Module) Data Ports	Ethernet 10/100Base-T (Auto-sensing with Auto-MDIX): RJ-45 Ethernet (1) USB: Type 2 (1)
RF	Female "F" type
Mechanical Specification	
Dimensions	Not including "F" connector:
(W x D x H)	16.5 cm x 12.5 cm x 3.5 cm
Horizontal orientation	(6.625 in. x 5.0 in. x 1.375 in.)
	Including "F" connector:     16.5 cm x 14 cm x 3.5 cm
<b>M</b>	(6.625 in. x 5.5 in. x 1.375 in.)
Weight (approximate)	0.34 kg (12 oz)
Operating Temperature	0° to 40°C (32° to 104°F)
Operating Humidity	0-90% RH non-condensing
Storage Temperature	-20° to 70°C (-4° to 158°F)

Specification	Value	
Standards and Approvals		
Designed and built to meet the following standards	EuroDOCSIS 2.0, 1.1 and 1.0 CableHome 1.1 IEEE 802.11g WEP, WPA WHQL RoHS	
Regulatory Approvals	Approvals as required per country where the EPR2320 will be used	

# **Ordering Information**

#### Table 2. Hardware

Model	Description	Part Number
Hardware Revision 2.0		
EPR2320R2	<ul> <li>EuroDOCSIS Residential Gateway with 802.11g Wireless Access Point. Includes:</li> <li>230 VAC / 50 Hz, 12 VDC / 1A In-line linear power supply with attached power cord and CEE7/16 style 2- pin power connector for Europe</li> <li>Ethernet and USB cables</li> <li>CD-ROM containing user guide and USB driver</li> </ul>	4019626
EPR2320R2	<ul> <li>EuroDOCSIS Residential Gateway with 802.11g Wireless Access Point. Includes:</li> <li>230 VAC / 50 Hz, 12 VDC / 1A In-line linear power supply with attached power cord and CEE7/16 style 2- pin power connector for Europe</li> <li>Ethernet and USB cables</li> <li>CD-ROM containing user guide and USB driver Ono Configuration</li> </ul>	4013370
EPR2320R2	EuroDOCSIS Residential Gateway with 802.11g Wireless Access Point. Includes: • 12 VDC input, AC-to-DC Power supply NOT included • Bridge factory default configuration • Ethernet and USB cables • CD-ROM containing user guide and USB driver	4015520
Hardware Revision 1.0 (No longer in production)		
EPR2320R2	<ul> <li>EuroDOCSIS Residential Gateway with 802.11g Wireless Access Point. Includes:</li> <li>230 VAC / 50 Hz, 12 VDC / 1A In-line linear power supply with attached power cord and CEE7/16 style 2- pin power connector for Europe</li> <li>Ethernet and USB cables</li> <li>CD-ROM containing user guide and USB driver Note: Not RoHS compliant</li> </ul>	4003266

### Table 3.Replacement Parts

Specification	Part Number
AC Power Supplies, 12 VDC	
12 VDC High Efficiency Linear-Switching, Class 2	
230 VAC / 50-60 Hz, 12 VDC /1A Plug-in linear-switching power supply for Australia	4018797
230 VAC / 50-60 Hz, 12 VDC /1A Plug-in linear-switching power supply with Euro-style connector	4015453
230-240 VAC / 50-60 Hz, 12 VDC /1A Plug-in linear-switching power supply with BS-1363 United Kingdom-style 3-pin connector	4018794
12 VDC Universal Switching Mode, Class 2	
100-240 VAC / 50-60 Hz, 12 VDC / 1A In-line universal switching mode power supply, Class II, C7 AC connector, 2 conductor power cord	4009116
(Power cord not included, order power cord separately)	

Specification	Part Number
AC Power Supplies, 12 VDC	
12 VDC, Linear, Class 2	
230 VAC / 50 Hz, 12 VDC / 1A In-line linear power supply with attached power cord and CEE7/16 Euro plug connector	4002193
230-240 VAC / 50 Hz, 12 VDC / 1A In-line linear power supply with attached power cord and BS-1363 United Kingdom-style 3-pin connector	4004768
Power Cords	
Class 2	
Power cord, 2 conductor, European, Euro plug CEE7/16 to C7	503414
Power cord, 2 conductor, United Kingdom, BS1363 to C7	1002798
Cables	
Ethernet cable, standard length, 48 inches long	740580
USB cable	740579
User Guide and USB Drivers	
CD-ROM with user guide and USB drivers	4001911

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### For More Information

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