Cisco Model DPC2325 DOCSIS Residential Gateway with Wireless Access Point

The Cisco® Model DPC2325 DOCSIS Residential Gateway with Wireless Access Point (DPC2325) 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 DPC2325 has been designed to meet DOCSIS® 2.0 specifications. In addition, the DPC2325 is fully backward compatible for use on both DOCSIS 1.1 and DOCSIS 1.0 networks.

Figure 1. Model DPC2325 DOCSIS 2.0 Wireless Residential Gateway with Wireless Access Point (image may vary from actual product and specification)

Designed for the active digital home or office, the DPC2325 integrated router features a Dynamic Host Configuration Protocol (DHCP) server, Network Address and Port Translation (NAT/NAPT) and a Stateful Packet Inspection (SPI) firewall. These features allow the user to share a single high-speed public Internet connection as well as share files and folders between devices within the home network by attaching multiple wired and wireless devices in the user's home or office to the wireless residential gateway.

Consumer-friendly features like Wireless Protected Setup (WPS) and user-configured Parental Control can protect the home network from unwelcome intruders and family members from access to undesirable websites.

Features

- A high-performance processor that supports near-line rate throughput for DOCSIS 2.0
- Compliant with DOCSIS 2.0, 1.1, and 1.0 standards to deliver high-end performance and reliability
- Plug-and-Play operation for easy setup and installation, including color-coded data ports and data cables compliant with the TR-068 specifications
- Support for Home Network Administration Protocol (HNAP) to allow simplified configuration and management
- 802.11g Wireless Access Point with four service set identifiers (SSIDs)
- Wireless MultiMedia (WMM) features including Wi-Fi Protected Setup (WPS), including a push-button switch to activate WPS for simplified and secure wireless setup
- Allows the user to attach multiple devices to the wireless home gateway for high-speed wired and wireless networking and sharing of files
- Four 10/100BASE-T auto-sensing with auto-MDIX Ethernet ports to provide connectivity for high-speed data services or to other Internet devices
- Advanced firewall technology deters hackers and protects the home network from unauthorized access
- Lockdown mode prevents unauthorized or accidental reset of gateway settings
- Configurable either locally or remotely through web interface, configuration file, or simple network management protocol (SNMP) protocols
- A detachable wireless antenna
- Attractive, compact design that allows for vertical, horizontal, or wall-mount placement
- DOCSIS-5 compliant LED labeling and behavior provides a user- and technician-friendly method to check operational status and act as a troubleshooting tool
- Simple setup with WebWizard graphical user interface
- Allows automatic software upgrades by the user’s service provider

Figure 2. Model DPC2325 Front Panel (image may vary from actual product and specification)

Table 1. Front Panel Features

Feature	Description
Indicators	Power, DS, US, Online, Ethernet, Wireless Link, Wireless Setup
Color	Black housing, black lens, silver text
Branding	Cisco logo and model number

Figure 3. Model DPC2325 Back Panel (image may vary from actual product and specification)

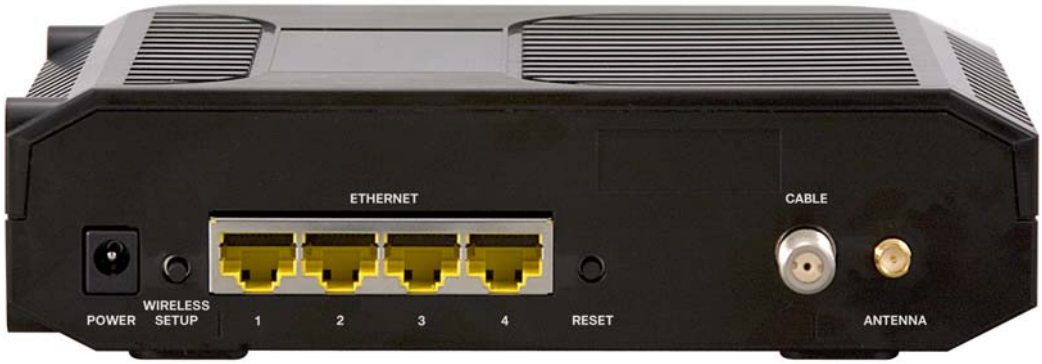

Table 2. Back Panel Features

Feature	Description
POWER Connector Color: Black	Connects the DPC2325 to the DC output of the AC power adapter
WIRELESS SETUP	Allows users to activate the WIRELESS SETUP mode for simplified and secure wireless setup of client devices featuring WPS
ETHERNET (1 – 4) Connector Color: Yellow	Four RJ-45 Ethernet ports connect to the Ethernet ports on the user's PC or home network
RESET	Power cycles the DPC2325
CABLE Connector Color: White	F-connector connects to an active cable signal from the service provider
ANTENNA (not shown)	Provides a communication connection for the built-in WAP

Product Specifications

Table 3. Product Specifications

Specification	Value
RF Downstream	
Frequency Range	88 to 930 MHz
Demodulation	64 or 256 QAM
Maximum Data Rate	30 Mbps for 64 QAM 43 Mbps for 256 QAM
Bandwidth	6 MHz
Operating Level Range	-15 to +15 dBmV
Input Impedance	75 ohms
RF Upstream	
Frequency Range	5 to 42 MHz 5 to 55 MHz (Japan)
Modulation	QPSK 8 QAM 16 QAM 64 QAM 128 QAM TCM
Maximum Data Rate	5.12 Mbps for QPSK 10.2 Mbps for 16 QAM 30.0 Mbps for A-TDMA and SCDMA
Bandwidth	200 kHz to 6.4 MHz
Operating Level Range (all values +/- 0.5 dBµV) TDMA SCDMA	 QPSK +8 to +58 dBmV 8QAM +8 to +55 dBmV 16QAM +8 to +55 dBmV 32QAM +8 to +54 dBmV 64QAM +8 to +54 dBmV QPSK +8 to +53 dBmV 8QAM +8 to +53 dBmV 16QAM +8 to +53 dBmV 32QAM +8 to +53 dBmV 64QAM +8 to +53 dBmV 128QAM +8 to +53 dBmV
Output Impedance	75 ohms
Wireless Access Point	
Frequency Range	2.412~2.462 GHz, 11 Channels (North America; FCC) 2.412~2.472 GHz, 13 Channels (Europe; CE/ETSI)
Modulation	DSSS OFDM CCK DQPSK DBPSK
Data Rate: 802.11g	54 Mbps with Auto Fall-Back
Security	WPA2, WPA and 64/128-bit WEP
Transmit Power	14 dBm (typical for 802.11g)
Antenna System	One (1) external, detachable One (1) internal

Specification	Value
Other	
Input Voltage	12 VDC
Power Consumption (Modem Module)	5.8 Watts
Data Ports	Ethernet 10/100BASE-T (Auto-sensing with Auto-MDIX): RJ-45 Ethernet (4)
RF	Female “F” type
Mechanical	
Dimensions (W x D x H) (approximate)	Not including “F” connector: 6 15/16 in. x 5 11/16 in. x 2 15/16 in. (17.7 cm x 14.5 cm x 5 cm) Including “F” connector and wireless antenna: 6 15/16 in. x 6 in. x 2 15/16 in. (17.7 cm x 15.5 cm x 5 cm)
Weight (approximate)	12.9 oz (0.37 kg)
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	DOCSIS 2.0, DOCSIS 1.1, DOCSIS 1.0 IEEE 802.11g WEP, WPA, and WPA2 WMM, WPS
Regulatory and Safety Approvals	As required per country where the DPC2325 will be used

Ordering Information

Table 4. Ordering Information

Model	Description	Part Number
Model DPC2325	DPC2325 DOCSIS 2.0 Wireless Residential Gateway with Wireless Access Point. Includes: • 100-120 VAC/60 Hz, 15 VDC/1 A desktop linear switching power supply • Ethernet cable • CD-ROM containing user guide	4027245

Replacement Components

Table 5. Replacement Components

Description	Part Number
Power Supplies	
Class 2 Linear Switching	
100-120 VAC / 50-60 Hz, 12 VDC /1 A desktop linear switching power supply for North America and Japan	4018777
220 VAC / 50-60 Hz, 12 VDC /1 A desktop linear switching power supply for Argentina	4025790
230 VAC / 50-60 Hz, 12 VDC /1 A wall-mount linear switching power supply with Euro-style connector	4015453
240 VAC / 50-60 Hz, 12 VDC /1 A wall-mount linear switching power supply for Australia	4018797
Class 2 Switching Regulated	
100-240 VAC / 50-60 Hz, 12 VDC /1 A desktop switching regulated power supply with detachable power cord	4021485
Power Cords	
Power cord, 2 conductor, North America, NEMA 1-15 to C7 (non-polarized)	1002239
Power cord, 2 conductor, Argentina	4012938
Power cord, 2 conductor, Brazil	4009115
Power cord, 2 conductor, European, Euro plug CEE7/16 to C7	503414
Data Cables	
Ethernet data cable, 1.2 meters	748580
CD-ROM	
CD-ROM with User Guide	4029642

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Service Provider Video Technology Group
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