

Cisco Model DPC2100 DOCSIS 2.0 Cable Modem

The Cisco® Model DPC2100 DOCSIS 2.0 Cable Modem provides broadband service providers with a cost-effective solution for delivering high-speed bi-directional data services.

The DPC2100 is designed to meet DOCSIS® 2.0 specifications, as well as offering backward compatibility for operation in DOCSIS 1.1, and 1.0 networks.

Figure 1. Cisco Model DPC2100 DOCSIS 2.0 Cable Modem (image may vary from actual product and specification)



The DPC2100 also features WebWizard, a browser-based user interface. WebWizard is a powerful tool that facilitates installation and troubleshooting, and eliminates the need to load set-up software on the customer premises equipment (CPE).

Features

DOCSIS

- Designed to meet DOCSIS 2.0 specifications
- Backward compatible with DOCSIS 1.1 and 1.0 networks
- Support for up to 64 users (1 USB port user and up to 63 users on user-supplied Ethernet hubs)
- Enhanced bi-directional performance maximizes data throughput
- Optional L2VPN support

Connections

- 100/10 Mbps Ethernet port with Auto-negotiate and Auto-MDIX
- USB 1.1 Type B client data port

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
- LED status indicators on the front panel provide an informative and easy-to-understand display that indicates the cable modem operational status and real-time data transmission activity
- Color-coded connectors and cables for easy installation and set-up
- Both vertical and horizontal installation options
- Rugged electronic components for long-term 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, Vista, Windows XP, and Windows 2000 operating systems

Figure 2. Cisco Model DPC2100 Front Panel (image may vary from actual product and specification)

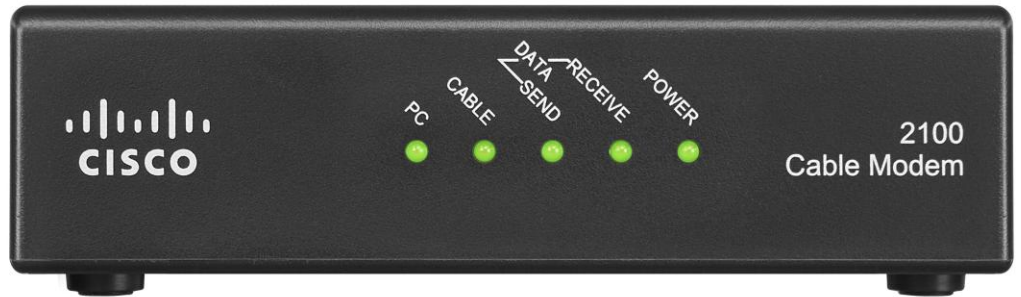


Table 1. Front Panel Features

Feature	Description
Indicators	PC, CABLE, DATA SEND, DATA RECEIVE, POWER
Color	Black textured, black face plate, silver text, green LEDs
Branding	Cisco and model number

Figure 3. Cisco Model DPC2100 Back Panel (image may vary from actual product and specification)



Table 2. Back Panel Features

Feature	Description
POWER Color: Black	Connects modem to the DC output of the AC power adapter
POWER SWITCH (not shown) Color: Black	Turn on and off device (power switch provided on all products carrying the CE mark)
MAC ADDRESS LABEL	Displays the MAC address of the cable modem
RESET	Resets the cable modem
ETHERNET Connector Color: Yellow	(1) RJ-45 Ethernet port connects to the Ethernet port on your PC or your home network
USB Connector Color: Blue	(1) Type B USB 1.1 client port connects to a USB port on your PC (optional on some part numbers)
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 930 MHz (H/W Revision 3.0) 88 to 860 MHz (H/W Revision 2.1 and earlier)
Tuner Frequency Range	88 to 930 MHz (H/W Revision 3.0) 88 to 860 MHz (H/W Revision 2.1 and earlier)
Demodulation	64 QAM or 256 QAM
Maximum Data Rate	42.88 Mbps for 256 QAM and 30.34 Mbps for 64 QAM
Bandwidth	6 MHz
Operating Level Range	-15 to +15 dBmV
Input Impedance	75 ohms
RF Upstream	
Operating Frequency Range	5 to 42 MHz or 5 to 55 MHz
Transmitter Frequency Range	5 to 42 MHz or 5 to 55 MHz
Modulation	QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM / ATDMA, 128 QAM / SCDMA

Specification	Value																														
Maximum Data Rate per channel	<table border="1"> <thead> <tr> <th>Modulation</th> <th>Channel Bandwidth (MHz)</th> <th>Raw Data Rate (Mbps)</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>1.6</td> <td>2.56</td> </tr> <tr> <td>16 QAM</td> <td>1.6</td> <td>5.12</td> </tr> <tr> <td>QPSK</td> <td>3.2</td> <td>5.12</td> </tr> <tr> <td>16 QAM</td> <td>3.2</td> <td>10.2</td> </tr> <tr> <td>32 QAM</td> <td>3.2</td> <td>12.8</td> </tr> <tr> <td>64 QAM</td> <td>3.2</td> <td>15.4</td> </tr> <tr> <td>16 QAM</td> <td>6.4</td> <td>20.5</td> </tr> <tr> <td>32 QAM</td> <td>6.4</td> <td>25.6</td> </tr> <tr> <td>64 QAM</td> <td>6.4</td> <td>30.7</td> </tr> </tbody> </table>	Modulation	Channel Bandwidth (MHz)	Raw Data Rate (Mbps)	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
	Modulation	Channel Bandwidth (MHz)	Raw Data Rate (Mbps)																												
	QPSK	1.6	2.56																												
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	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	+8 dBmV to +58 dBmV (QPSK) +8 dBmV to +55 dBmV (8QAM, 16QAM) +8 dBmV to +54 dBmV (32QAM, 64QAM, ATDMA) +8 dBmV to +53 dBmV (SCDMA)																														
Electrical																															
Input Voltage	12 VDC																														
Power Consumption (modem module)	~ 4.1 Watts																														
Data Ports	100/10 Mbps BASE-T (Auto-negotiate with Auto-MDIX): RJ-45 Ethernet (1) USB 1.1: USB Type 2 (1) (optional on some part numbers)																														
RF	Female F-Type																														
Output Impedance	75 ohms																														
Mechanical																															
Dimensions (H x D x W)	1.5 in. x 4.0 in. x 5.25 in. (3.8 cm x 10.3 cm x 13.3 cm)																														
Weight	9.0 oz. (0.26 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	DOCSIS 2.0																														
Regulatory Compliance																															
Regulatory and Safety Approvals	As required per country where the DPC2100 will be used																														

Ordering Information

Table 4. Ordering Information

DPC2100 Hardware Revision 3.0 Description	Part Number
5-42/88-930 MHz Diplex Filter	
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 100-120 VAC/50-60 Hz, 12 VDC/1 A desktop style linear-switching power supply • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers North America	4029170
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 100-240 VAC/50-60 Hz, 12 VDC/1 A desktop style universal switching regulated power supply • Power cord, 2 conductor, North America • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers North America	4029670
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 100-120 VAC/50-60 Hz, 12 VDC/1 A wall-mount linear-switching power supply • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Taiwan	4029780
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • No USB port • No AC power supply provided • Ethernet cable • CD-ROM with User Guides <i>Customer and Distributor Specific Configuration</i> Korea	4031272
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 230 VAC/50-60 Hz, 12 VDC/1 A wall-mount style linear-switching power supply with Euro-style power connector • Ethernet cable • No USB cable included • CD-ROM with User Guides and USB drivers India	4031271
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 230 VAC/50-60 Hz, 12 VDC/1 A wall-mount style linear-switching power supply with Euro-style power connector • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Indonesia	4035693

DPC2100 Hardware Revision 3.0 (continued) Description	Part Number
5-42/88-930 MHz Diplex Filter	
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 230 VAC/50-60 Hz, 12 VDC/1 A wall-mount style linear-switching power supply with Euro-style power connector • Ethernet cable • USB cable included • CD-ROM with User Guides and USB drivers India (Customer-specific configuration)	4036816
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 100-120 VAC/50-60 Hz, 12 VDC/1 A wall-mount style linear-switching power supply • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Taiwan (Customer-specific configuration)	4037024
5-55/88-860 MHz Diplex Filter	
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • No USB port • 100-120 VAC/50-60 Hz, 12 VDC/1 A desktop style linear-switching power supply • Ethernet cable, 2 meters • User Guides, Japanese, printed Japan	4037425
DPC2100 Hardware Revision 2.1 Description	Part Number
5-42/88-860 MHz Diplex Filter	
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 100-120 VAC/50-60 Hz, 12 VDC/1 A desktop style linear-switching power supply • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers North America	4012460
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 100-120 VAC/50-60 Hz, 12 VDC/1 A wall-mount style linear-switching power supply • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers North America	4018546
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • No USB port • 100-120 VAC/50-60 Hz, 12 VDC/1 A wall-mount style linear-switching power supply • Ethernet cable • CD-ROM with User Guides North America (Customer-specific configuration)	4034438

DPC2100 Hardware Revision 2.1 (continued) Description	Part Number
5-42/88-860 MHz Diplex Filter	
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 100-120 VAC/50-60 Hz, 12 VDC/1 A wall-mount style linear-switching power supply • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Taiwan	4028656
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 230 VAC/50 Hz, 12 VDC/1 A wall-mount style linear-switching power supply for Europe • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Israel (Customer-specific configuration)	4017977
DPC2100 DOCSIS 2.0 Cable Modem for International markets with: <ul style="list-style-type: none"> • PAL/NTSC tuning plan • 100/10 Ethernet port • USB 1.1 port Includes: <ul style="list-style-type: none"> • 100-120 VAC/50-60 Hz, 12 VDC/1 A desktop style linear-switching power supply • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers International Tuning Plan	4013701
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • PAL/NTSC Tuning plan • 100/10 Ethernet port • USB 1.1 port • 100-240 VAC/50-60 Hz, 12 VDC/1 A desktop style linear-switching power supply with detachable power cord • Power cord, 2 conductor with Euro style connector • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Europe	4013702
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • PAL/NTSC Tuning plan • 100/10 Ethernet port • USB 1.1 port • 230 VAC/50-60 Hz, 12 VDC/1 A wall-mount style linear-switching power supply, Europe • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Europe	4013700
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • PAL/NTSC Tuning plan • 100/10 Ethernet port • USB 1.1 port • 240 VAC/50 Hz, 12 VDC/1 A desktop style linear power supply with UK power connector • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers United Arab Emirates (Customer-specific configuration)	4013703

DPC2100 Hardware Revision 2.1 (continued) Description	Part Number
5-42/88-860 MHz Diplex Filter	
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 100-240 VAC/50-60 Hz, 12 VDC/1 A desktop style universal power supply with detachable power cord • Power cord ordered and shipped separately • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers 	4013706
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 220 VAC/50 Hz, 12 VDC/1 A desktop style linear power supply for Argentina • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Argentina	4013711
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 220 VAC/50 Hz, 12 VDC/1 A desktop style linear power supply for Argentina • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Argentina (Customer-specific configuration)	4013710
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 120 VAC/50-60 Hz, 12 VDC/1 A desktop style linear power supply • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Columbia (Customer-specific configuration)	4031273
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 220 VAC/50 Hz, 12 VDC/1 A desktop style linear power supply for Korea • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Korea	4013730
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • No AC power supply provided • Ethernet cable Korea (Customer- and Distributor-specific configuration)	4013729

DPC2100 Hardware Revision 2.1 (continued) Description	Part Number
5-42/88-860 MHz Diplex Filter	
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • No USB port • No AC power supply provided • Ethernet cable Korea (Customer-specific configuration)	4018775
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • Modem PCB only North America (Customer-specific OEM configuration)	4015415
Hardware Revision 2.11 Description	Part Number
5-55/88-860 MHz Diplex Filter	
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • No USB port • 100-120 VAC/50-60 Hz, 12 VDC/ 1 A wall-mount style linear-switching power supply • Ethernet cable, 2 meters • User Guide, Japanese, printed Japan (Distributor-specific configuration)	4013704
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • No USB port • 100-120 VAC/50-60 Hz, 12 VDC/1 A desktop style linear-switching power supply • Ethernet cable, 2 meters • User Guides, Japanese, printed Japan (Distributor-specific configuration)	4019913
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • No USB port • 100-120 VAC/50-60 Hz, 12 VDC/1 A desktop style linear-switching power supply • Extension power cord, 40 cm • Ethernet cable not included • User Guide, Japanese, printed Japan (Customer- and Distributor-specific configuration)	4021099
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • Modem PCB only, no USB port, no LEDs, PCB pins replace connectors for Ethernet and DC powering Japan (Customer-specific OEM configuration)	4013705
DPC2100 DOCSIS 2.0 Cable Modem. Includes: <ul style="list-style-type: none"> • 100/10 Ethernet port • USB 1.1 port • 220 VAC/50 Hz, 12 VDC/ 1 A desktop style linear power supply for Korea • Ethernet cable • USB cable • CD-ROM with User Guides and USB drivers Korea	4013728

Replacement Components

Table 5. Replacement Components

Description	Part Number
AC Power Supplies	
<i>Class 2 Linear Switching</i>	
220 VAC / 50-60 Hz, 12 VDC / 1 A desktop style linear switching power supply, Argentina	4025790
100-120 VAC / 50-60 Hz, 12 VDC / 1 A desktop style linear witching power supply, North America	4018777
100-120 VAC / 50-60 Hz, 12 VDC / 1 A desktop style linear witching power supply, Japan	4026135
100-120 VAC / 50-60 Hz, 12 VDC / 1 A desktop style linear witching power supply, Taiwan	4015452
220 VAC / 50-60 Hz, 12 VDC / 1 A desktop style linear switching power supply, Korea	4004222
230 VAC / 50-60 Hz, 12 VDC / 1 A desktop style linear switching power supply, Europe	4015453
Power Cords	
Power cord, 2 conductors, NEMA, 1-15P to C7P, 6 foot, polarized, North America	186750
Power cord, 2 conductors, CEE7/16 to C7, 6 foot, non-polarized, Europe	503414
Data Cables	
Ethernet cable, 1.2 meters	740580
Ethernet cable, 2.0 meters	4018790
USB cable, 1.0 meter	740579
CD-ROM	
CD-ROM with user guides and USB drivers	4029638



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