

Cisco BWX 210 Desktop Modem

Product Overview

Customer premises equipment (CPE) such as WiMAX modems represents a significant investment for WiMAX service providers. The Cisco BWX 210 Desktop Modem takes advantage of Cisco's advanced RF performance to reduce the cost of delivering service to subscribers, without compromising performance.

Features and Benefits

The Cisco BWX 210 Desktop Modem (Figure 1) offers service providers the following benefits:

- Provides connection to Cisco standards-compliant Mobile WiMAX networks
- Zero-touch, plug-and-play installation greatly reduces operating expenses (OpEx) by eliminating the need for truck rolls
- Supports adaptive beamforming to increase coverage and capacity
- As a component of the Cisco Broadband Wireless network architecture, the Cisco BWX 210 is part of a tested, integrated end-to-end system
- Operates with Cisco BWX diagnostic tools for extensive reporting and troubleshooting capabilities

Figure 1. Cisco BWX 210 Desktop Modem

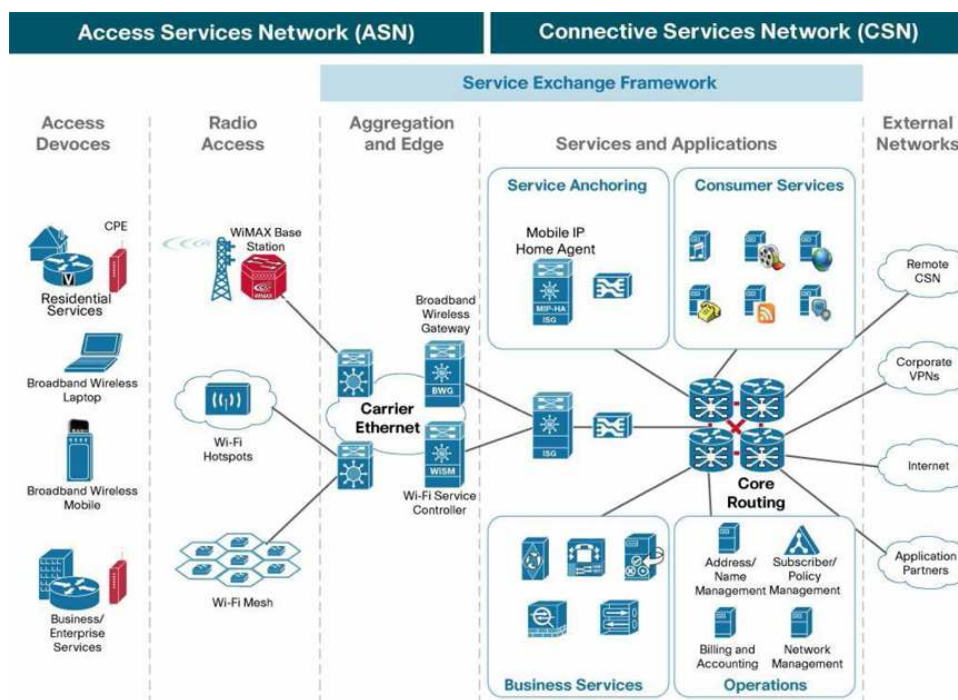


Product Architecture

The Cisco BWX 210 Desktop Modem supports adaptive beamforming, which reduces downlink and uplink power requirements. As a result, the Cisco BWX 210 is smaller, lighter, and costs less than competing subscriber equipment, while performing better and in locations that typically defeat other modems. The Cisco BWX 210 supports Ethernet direct connections to a PC or a Linksys® router.

The Cisco BWX 210 is a key element of the Cisco Broadband Wireless Solution (Figure 2) featuring leading Mobile WiMAX radio access technologies and tight integration with Cisco's proven IP Next-Generation Network transport and service-delivery infrastructures. This open-standards solution is compliant with the Mobile WiMAX specification and the Profile C Network Reference Model and includes a full suite of base stations, antenna systems, access service network gateways, management systems, and CPE devices.

Figure 2. Cisco Broadband Wireless Solution



The integration of IP technologies throughout this end-to-end Broadband Wireless architecture allows service providers to take advantage of the enormous body of innovation that exists for IP transport, service control, and application delivery – from the core, through the access networks, and to the subscriber devices. Building on more than 20 years of Internet technology innovation, Cisco uses Mobile WiMAX to extend broadband beyond the reach of wired networks.

Product Specifications

Table 1 lists specifications for the Cisco BWX 210 Desktop Modem.

Table 1. Cisco BWX 210 Desktop Modem Specifications

Item	2.3 GHz	2.5/2.6 GHz	3.4/3.5 GHz
Model	BWX 210-239	BWX 210-252	BWX 210-343
Access Scheme	OFDMA	OFDMA	OFDMA

Antennas	3 1x Dipole, 2x Patch	3 1x Dipole, 2x Patch	3 1x Dipole, 2x Patch
Antenna Gain (minimum peak)	1x 3dBi, 2x 6dBi	1x 3dBi, 2x 6dBi	1x 3 dBi, 2x 6 dBi
Tx RF Power - ETSI (conducted up to 5MHz)	24 dBm (full BW) 26 dBm (half BW)	24 dBm (full BW) 26 dBm (half BW)	23 dBm (full BW) 26 dBm (half BW)
Tx RF Power - FCC (conducted up to 5MHz)	21 dBm ¹ (full BW) 22 dBm (half BW)	24 dBm (full BW) 26 dBm (half BW)	N/A
Noise Figure (@ min. Rx signal)	6 dB	6 dB	7 dB
Input Power	5 VDC, 1.5A average	5 VDC, 1.5A average	5 VDC, 1.5A average
Interface	Ethernet	Ethernet	Ethernet
Display	1 LED	1 LED	1 LED
Operation Temperature	5 to 40°C (41 to 104°F)	5 to 40°C (41 to 104°F)	5 to 40°C (41 to 104°F)
Mechanical Dimension	113 x 50 x 160 mm	113 x 50 x 160 mm	113 x 50 x 160 mm
Weight	258 g	258 g	258 g
Regulatory (available/pending)	CFR 47 FCC Part 2 and Part 27, Subpart C, ETSI EN 302 326-2, EN 301 489-4, EN 60950-1, UL 60950-1, <i>IDA</i>	CFR 47 FCC Part 2 and Part 27, Subparts C and M, ETSI EN 301 326-2, EN 301 489-4, EN 60950-1, UL 60950-1	ETSI: EN 302 326-2, EN 301 489-4, EN 60950-1, UL 60950-1, <i>C-Tick</i>
Frequencies Approved²	ETSI: 2300-2390 MHz FCC: 2305-2315 or 2350-2360 MHz	ETSI: 2520-2670 MHz FCC: 2496-2690 MHz	ETSI: 3400-3700 MHz FCC: N/A
Status Monitoring Software (NavDiag)	Win2000, WinXP, Vista-32bit, Mac OSX and Linux ³	Win2000, WinXP, Vista-32bit, Mac OSX and Linux ³	Win2000, WinXP, Vista-32bit, Mac OSX and Linux kernel ³
Software Upgrades	Over the air	Over the air	Over the air

- The Cisco BWX 210 modem is not intended for Mobile WiMAX certification.
- The assumptions used to calculate the above performance values may not represent actual deployment conditions.
- Performance values are subject to change without notice. Contact Cisco for the latest product specifications.

Service and Support

Cisco offers a wide range of service programs to accelerate customer success. These innovative programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco services help you protect your network investment, optimize network operations, and prepare your network for new applications to extend network intelligence and the power of your business. For more information about Cisco services, visit [Cisco Technical Support Services](#) or [Cisco Advanced Services](#).

Additional Information

For more information about the Cisco BWX 210 Desktop Modem, or to place an order, contact your local account representative or visit: <http://www.cisco.com/go/bwx>.

¹ The Cisco BWX 210-239 will be FCC WCS (2.3 GHz) certified in A and B bands only (no C and D due to the DARS requirements). Operation in the 2360–2390 MHz range is subject to qualification due to potential interference from the 2.4 GHz/ISM band.

² Operator cannot legally operate outside these frequencies.

³ Mac10.4.5 and Linux kernel 2.4 (Red Hat Open Source).



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