

Cisco WAP2000 Wireless-G Access Point: PoE Cisco Small Business Access Points

RangeBooster Wireless Access Point Extends Network Connectivity

Highlights

- RangeBooster technology increases wireless throughput and range and reduces “dead spots” in the wireless coverage area
- Connects to Power over Ethernet devices, simplifying installation and eliminating the need for and cost of installing external power supplies
- Advanced wireless security protects network traffic to help keep business assets safe
- Easy-to-use web interface simplifies installation and configuration

Figure 1. Cisco WAP2000 Wireless-G Access Point: PoE



Product Overview

The Cisco® WAP2000 Wireless-G Access Point (Figure 1) is ideal for small businesses that want to expand their existing wired networks or create new wireless networks for their workforce or guests. It features RangeBooster technology that is comparable to standard 802.11g but with nearly twice the range and with throughput that is up to 35 percent faster. Unlike ordinary wireless technologies that are hampered by wireless signals that reflect off walls, ceilings, and other objects, RangeBooster uses these multiple signals with two smart receivers at each end (router or access point and client adapter) to boost range and throughput speeds. As a result, a RangeBooster solution reduces or eliminates wireless signal dead spots in offices and other buildings so users can connect to the network in more areas. The Cisco WAP2000 comes with two 3-dBi for increased power, also helping to extend the range of the access point.

Advanced security features such as Wi-Fi Protected Access™ (WPA2) make this solution ideal for your business. Integrated quality of service (QoS) features provide consistent voice and video quality on both the wired and wireless networks, enabling your workforce to communicate or view video content without disruptions and delay.

The Cisco WAP2000 can be powered from the included AC adapter or from a Power over Ethernet (PoE) switch via Ethernet cabling, enabling it to be mounted in ceilings or high on walls where power outlets may not be available.

Additional features like multiple basic service set identifiers (BSSIDs), wireless roaming, and auto-channel selection give your business added flexibility to keep employees and guests connected. The Cisco WAP2000 also features dual firmware images, so it remains functional if a firmware upgrade process is disrupted.

Features

- 10BASE-T/100 BASE-TX Ethernet port, auto-sensing half/full duplex, and automatic medium dependent interface (MDI) and MDI crossover (MDI-X) detection
- Full backward compatibility with 802.11b
- Easy installation and configuration via a web Interface
- Dual images for resilient firmware upgrades
- Supports Wired Equivalent Privacy (WEP), WPA Pre-Shared Key (WPA-PSK), WPA2-PSK, WPA-ENT, and WPA2-ENT authentication (802.11i ready)
- SMA detachable dipole antennae with 1x2 multiple-input, multiple-output (MIMO) to increase coverage
- Supports PoE or external DC power
- Supports 4 BSSIDs and 802.1Q VLAN to service set identifier (SSID) mapping
- Supports Simple Network Management Protocol (SNMP) and uses an intuitive web-based interface
- Wi-Fi Multimedia (WMM) wireless QoS support, upgradable to 802.11e
- Supports wireless roaming based on 802.11F (Inter-Access Point Protocol [IAPP])
- Supports access point mode, bridge mode, and repeater mode
- Supports wireless client isolation
- Metal casing

Specifications

Table 1 lists the specifications, package contents, and minimum requirements for the Cisco WAP2000 Wireless-G Access Point.

Table 1. Specifications for the Cisco WAP2000 Wireless-G Access Point: PoE

Specifications	
Standards	IEEE 802.11g, IEEE 802.11b, IEEE 802.3, IEEE 802.3u, IEEE 802.3af (PoE), 802.1p (QoS priority), 802.1Q (VLAN), 802.1X (security authentication), 802.11i ready (security WPA2), 802.11e ready (wireless QoS), 802.11F (wireless roaming)
Ports	10BASE-T/100BASE-TX Ethernet, 12V DC power
Buttons	Reset
Cabling type	Unshielded twisted pair (UTP) Category 5
LEDs	Power, PoE, Wireless, Ethernet
Operating system	Linux
Setup/Configuration	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
Management	
SNMP version	SNMP version 1, 2c, 3
Event logging	• Email notification • Remote syslog
Web firmware upgrade	Firmware upgradable through web browser
Diagnostics	Flash, RAM, LAN, WLAN
Dynamic Host Configuration Protocol (DHCP)	DHCP client

Operating Modes	
Access point	Access point mode, point-to-point bridge mode, point-to-multipoint bridge mode, repeater mode
Wireless	
Spec/modulation	Radio and modulation type: 802.11b/DSSS, 802.11g/OFDM
Channels	Operating channels: 11 North America, 13 most of Europe (ETSI and Japan)
Internal antennas	None
External antennas	2 (omnidirectional) 3 dBi SMA detachable
Transmit power	Transmit power (adjustable) @ normal temp range: 802.11b: 18 dBm; 802.11g: 16 dBm
Antenna gain in dBi	3
Receiver sensitivity	802.11g: 54 Mbps @ -72 dBm, 802.11b: 11 Mbps @ -85 dBm
Security	
WEP/WPA/WPA2	WEP 64-bit/128-bit, WPA-PSK, WPA2-PSK, WPA-ENT, WPA2-ENT
Access control	Wireless connection control: MAC-based
SSID broadcast	SSID broadcast enable/disable
802.1X	IEEE 802.1X support
Wireless client isolation	Wireless client devices can be Isolated from each other either within an SSID or between 2 SSIDs
Quality of Service	
QoS	• 4 queues • WMM wireless priority
General	
• Wireless roaming based on IAPP • Auto-channel selection	
Environmental	
Dimensions W x H x D	8.66 x 6.69 x 1.50 in. (220 x 170 x 38 mm)
Weight	1.69 lb (0.765 kg)
Power	12V 1A DC input, and IEEE 802.3af compliant PoE max power draw: 3.48W
Certification	FCC, ICES 003, CE
Operating temperature	14° to 131°F (-10° to 55°C)
Storage temperature	-22° to 158°F (-30° to 70°C)
Operating humidity	10% to 90%, noncondensing
Storage humidity	5% to 95%, noncondensing
Package Contents	
• Cisco WAP2000 Wireless-G Access Point with PoE • 2 SMA detachable dipole antennas (3 dBi) • User guide on CD-ROM • Quick installation guide • Ethernet network cable • Power adapter • Registration card	
Minimum Requirements	
• 802.11b, 802.11g wireless adapter with TCP/IP protocol installed per PC • Switch/router with PoE support or PoE injector when used with PoE • Web-based configuration: Java-enabled web browser	
Product Warranty	
3-year limited hardware warranty with return to factory replacement and 90-day limited software warranty.	

Cisco Limited Warranty for Cisco Small Business Series Products

This Cisco Small Business product comes with a 3-year limited hardware warranty with return to factory replacement and a 90-day limited software warranty. In addition, Cisco offers software application updates for bug fixes and telephone technical support at no charge for the first 12 months following the date of purchase. To download software updates, go to: <http://www.cisco.com/go/smallbiz>.

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