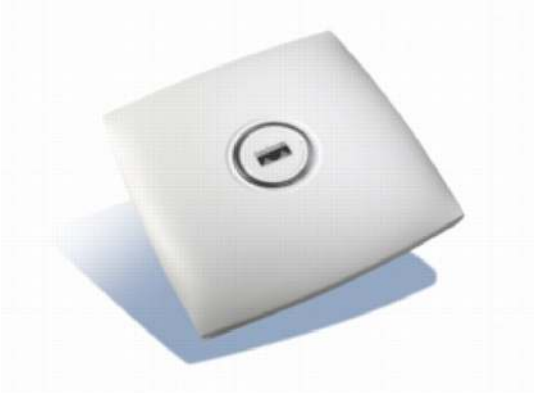
Cisco Aironet 1130G Series IEEE 802.11g Access Point

Low-profile business-class access point with integrated antennas for easy deployment in offices and similar RF environments



Product Overview

The Cisco® Aironet® 1130G Series Access Point is a single-band 802.11g access point that features business-class management, security, and scalability. This low-profile access point offers high-performance wireless connectivity in offices and similar environments.

The Cisco Aironet 1130G Series is available in two versions: unified or autonomous. Unified access points operate with the Lightweight Access Point Protocol (LWAPP) and work in conjunction with Cisco wireless LAN controllers and the Cisco Wireless Control System (WCS). When configured with LWAPP, the Cisco Aironet 1130G Series can automatically detect the best-available Cisco wireless LAN controller and download appropriate policies and configuration information with no manual intervention. Autonomous access points are based on Cisco IOS® Software and can optionally operate with the CiscoWorks Wireless LAN Solution Engine (WLSE). Autonomous access points, along with the CiscoWorks WLSE, deliver a core set of features and can be field-upgraded to take full advantage of the benefits of the Cisco Unified Wireless Network as requirements evolve.

The Cisco Aironet 1130G Series delivers optimal value for offices and similar environments. Built-in antennas provide omnidirectional coverage specifically designed for today's open workspaces. A multipurpose mounting bracket easily secures Cisco Aironet 1130G Series Access Points to ceilings and walls. With an unobtrusive design, Cisco Aironet 1130G Series Access Points are aesthetically pleasing and blend into their environments. For maximum concealment, the access point can be placed above ceilings or suspended ceilings. The UL 2043 rating of the Cisco Aironet 1130G Series allows for placement of the access point above ceilings in plenum areas regulated by municipal fire codes. Offered at a competitive price and optimized for easy installation and operation, the Cisco Aironet 1130G Series helps organizations attain a lower total cost of ownership.

Applications

In offices and similarly open environments, Cisco Aironet 1130G Series Access Points can be installed on the ceiling to provide users with continuous coverage as they roam throughout a facility. In school buildings and similar facilities, the access points can be installed on the ceiling of each room and hallway to provide users with full coverage and high network availability. In areas where a ceiling installation may not be practical, such as retail

hotspots or similar small facilities, the access points can be mounted simply and securely on walls for complete coverage with minimal installation cost.

Features and Benefits

Table 1 lists features and benefits of Cisco Aironet 1130G Series Access Points.

Table 1. Features and Benefits of Cisco Aironet 1130G Series Access Points

Feature	Benefit
802.11g radio	• The access point provides 54 Mbps of capacity and backward compatibility with older 802.11b clients.
Industry-leading radio design	• The access point provides robust signals to long distances. • It mitigates the effects of multipath signal propagation for more consistent coverage.
Variable transmit power settings	• The access point allows access point coverage to be tuned for differing requirements. • A low-dBm setting supports closer spacing of access points in high-density deployments.
Integrated antennas	• The complete system is deployable out of the box without external antennas. • The access point is specifically designed to provide omnidirectional coverage for offices and similar RF environments.
Hardware-assisted Advanced Encryption Standard (AES) encryption	• The access point provides high security without performance degradation.
IEEE 802.11i-compliant; Wi-Fi Protected Access 2 (WPA2) and WPA certified	• These compliances help to ensure interoperable security with wireless LAN client devices from other manufacturers.
Low-profile design	• The unobtrusive design blends into the environment. • "Quiet" LED does not draw attention to it when operating normally, and no action is required.
Multipurpose and lockable mounting bracket	• The access point installs easily to walls, ceilings, and suspended ceiling railways. • The access point accommodates a standard padlock to prevent theft.
Inline power support (IEEE 802.3af and Cisco Inline Power)	• The access point provides an interoperable alternative to AC power. • The access point simplifies deployment by allowing power to be supplied over the Ethernet cable. • The access point is compatible with 802.3af-compliant power sources.

Product Specifications

Table 2 lists the product specifications for Cisco Aironet 1130G Access Points.

Table 2. Product Specifications for Cisco Aironet 1130G Access Points

Item	Specification
Part number	• AIR-AP1131G-x-K9 (Cisco IOS Software) • AIR-LAP1131G-x-K9 (Cisco Unified Wireless Network Software) Note: The Cisco Aironet 1130G Series can be ordered with Cisco IOS Software to operate as an autonomous access point with Cisco Unified Wireless Network Software using LWAPP. When the access point is operating as a lightweight access point, a WLAN controller is required. • Regulatory domains: (x = Regulatory domain) • A = FCC • E = ETSI • P = Japan2 Customers are responsible for verifying approval for use in their individual countries. To verify approval and to identify the regulatory domain that corresponds to a particular country, please visit: http://www.cisco.com/go/aironet/compliance. Not all regulatory domains have been approved. As they are approved, the part numbers will be available on the Global Price List.
Data rates supported	802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps
Network standard	IEEE 802.11b and 802.11g
Uplink	Autosensing 802.3 10 and 100BASE-T Ethernet

Item	Specification	
Frequency band and operating channels	**Americas (FCC)** • 2.412 to 2.462 GHz; 11 channels • ETSI • 2.412 to 2.472 GHz; 13 channels **Japan (TELEC)** • 2.412 to 2.472 GHz; 13 channels Orthogonal Frequency Division Multiplexing (OFDM) • 2.412 to 2.484 GHz; 14 channels Complementary Code Keying (CCK) • 5.15 to 5.25 GHz; 4 channels **Japan-P (TELEC 2 (Japan2) Cnfg)** • 2.412 to 2.472 GHz; 13 channels Orthogonal Frequency Division Multiplexing (OFDM) • 2.412 to 2.484 GHz; 14 channels Complementary Code Keying (CCK) • 5.15 to 5.35 GHz, 8 channels **Japan-Q** • 2.412 to 2.472 GHz; 13 channels Orthogonal Frequency Division Multiplexing (OFDM) • 2.412 to 2.484 GHz; 14 channels Complementary Code Keying (CCK) • 5.15 to 5.35 GHz; 8 channels • 5.470 to 5.725 GHz; 11 channels	
Nonoverlapping channels	802.11b/g: 3	
Receive sensitivity (typical)	**802.11g:** • 1 Mbps: –93 dBm • 2 Mbps: –91 dBm • 5.5 Mbps: –88 dBm • 6 Mbps: –86 dBm • 9 Mbps: –85 dBm • 11 Mbps: –85 dBm • 12 Mbps: –84 dBm • 18 Mbps: –83 dBm • 24 Mbps: –79 dBm • 36 Mbps: –77 dBm • 48 Mbps: –72 dBm • 54 Mbps: –70 dBm	
Available transmit power settings (maximum power setting varies by channel and according to individual country regulations)	**802.11b:** CCK: • 20 dBm (100 mW) • 17 dBm (50 mW) • 14 dBm (25 mW) • 11 dBm (12 mW) • 8 dBm (6 mW) • 5 dBm (3 mW) • 2 dBm (2 mW) • –1 dBm (1 mW)	**802.11g:** OFDM: • 17 dBm (50 mW) • 14 dBm (25 mW) • 11 dBm (12 mW) • 8 dBm (6 mW) • 5 dBm (3 mW) • 2 dBm (2 mW) • –1 dBm (1 mW)
Range	**Indoor (distance across open office environment):**	**Outdoor:**
	802.11g: • 100 ft (30m) @ 54 Mbps • 175 ft (53m) @ 48 Mbps • 250 ft (76m) @ 36 Mbps • 275 ft (84m) @ 24 Mbps • 325 ft (100m) @ 18 Mbps • 350 ft (107m) @ 12 Mbps • 360 ft (110m) @ 11 Mbps • 375 ft (114m) @ 9 Mbps • 400 ft (122m) @ 6 Mbps • 420 ft (128m) @ 5.5 Mbps • 440 ft (134m) @ 2 Mbps • 450 ft (137m) @ 1 Mbps	**802.11g:** • 120 ft (37m) @ 54 Mbps • 350 ft (107m) @ 48 Mbps • 550 ft (168m) @ 36 Mbps • 650 ft (198m) @ 24 Mbps • 750 ft (229m) @ 18 Mbps • 800 ft (244m) @ 12 Mbps • 820 ft (250m) @ 11 Mbps • 875 ft (267m) @ 9 Mbps • 900 ft (274m) @ 6 Mbps • 910 ft (277m) @ 5.5 Mbps • 940 ft (287m) @ 2 Mbps • 950 ft (290m) @ 1 Mbps
	Ranges and actual throughput vary based upon numerous environmental factors, so individual performance may differ.	

Item	Specification
Compliance	**Standards** Safety • UL 60950-1 • CAN/CSA-C22.2 No. 60950-1 • UL 2043 • IEC 60950-1 • EN 60950-1 • NIST FIPS 140-2 level 2 validation Radio Approvals • FCC Part 15.247 • RSS-210 (Canada) • EN 300.328 (Europe) • ARIB-STD 33 (Japan) • ARIB-STD 66 (Japan) • AS/NZS 4268.2003 (Australia and New Zealand) • EMI and Susceptibility (Class B) • FCC Part 15.107 and 15.109 • ICES-003 (Canada) • VCCI (Japan) • EN 301.489-1 and -17 (Europe) Security • 802.11i, WPA2, WPA • 802.1X • AES, TKIP • FIPS 140-2 Pre-Validation List • Common Criteria (when running Cisco IOS Software) Other • IEEE 802.11g • FCC Bulletin OET-65C • RSS-102
Antennas	• 2.4 GHz • Gain: 3.0 dBi • Horizontal beam width: 360°
Security	**Authentication** Security Standards • WPA • WPA2 (802.11i) • Cisco Temporal Key Integrity Protocol (TKIP) • Cisco Message Integrity Check (MIC) • IEEE 802.11 Wired Equivalent Privacy (WEP) keys of 40 and 128 bits **802.1X EAP types:** • EAP Flexible Authentication via Secure Tunneling (EAP FAST) • Protected EAP Generic Token Card (PEAP GTC) • PEAP Microsoft Challenge Authentication Protocol Version 2 (PEAP MSCHAP) • EAP Transport Layer Security (EAP TLS) • EAP Tunneled TLS (EAP TTLS) • EAP Subscriber Identity Module (EAP SIM) • Cisco LEAP **Encryption** • Advanced Encryption Standard Counter Mode with Cipher Block Chaining Message Authentication Code Protocol (AES CCMP) encryption (WPA2) • TKIP (WPA) • Cisco TKIP • WPA TKIP • IEEE 802.11 WEP keys of 40 and 128 bits

Item	Specification
Status LEDs	**External:** • Status LED indicates operating state, association status, error or warning condition, boot sequence, and maintenance status **Internal:** • Ethernet LED indicates status of activity over the Ethernet • Radio LED indicates status of activity over the radios
Dimensions (H x W x D)	7.5 x 7.5 x 1.3 in. (19.1 x 19.1 x 3.3 cm)
Weight	1.5 lb (0.67 kg)
Environmental	**Operating** • Altitude: 0 to 2500m • 32 to 104°F (0 to 40°C) • 10 to 90% humidity (noncondensing) **Non Operating** • -40 to 158F (-40 to 70C) • Up to 95% humidity (noncondensing)
System memory	• 32 MB RAM • 16 MB flash memory
Input power requirements	• 100–240 VAC; 50–60 Hz (power supply) • 36–57 VDC (device)
Power draw	9.91W maximum
Warranty	90 days
Wi-Fi certification	

System Requirements

Table 3 lists the system requirements for Cisco Aironet 1130G Access Points.

Table 3. System Requirements for Cisco Aironet 1130G Access Points

Access Using	Description
Browser	Using the Web browser management GUI, requires a computer running Internet Explorer Version 6.0 or newer, or Netscape Navigator Version 7.0 or newer
Power over Ethernet (PoE)	Power sourcing equipment (PSE) compliant with Cisco Inline Power or IEEE 802.3af, and providing at least 12.2W at 48 VDC

Service and Support

Cisco offers a wide range of services programs to accelerate customer success. These innovative services 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.

For More Information

For more information about the Cisco Aironet 1130G Series, visit http://www.cisco.com/go/wireless or contact your local Cisco account representative.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Printed in USA C78-401677-02 09/09