Q&A

Cisco Aironet 1300 Series Outdoor Access Point or Bridge

Q. What is the Cisco® Aironet® 1300 Series Outdoor Access Point or Bridge?

A. The Cisco Aironet 1300 Series is a flexible, feature-rich outdoor 802.11g access point or bridge platform that provides high-speed, cost-effective wireless connectivity in the 2.4 GHz band between multiple fixed or mobile networks and clients. Designed specifically for harsh outdoor environments, the Cisco Aironet 1300 Series provides industry-leading performance with 100 milliwatts of transmit power and outstanding receive sensitivity, installation tools to assist in bridge placement, and a choice of integrated or connectorized SKUs. Data rates of up to 54 Mbps can be enabled for point-to-point links up to 1.5 miles in length, with throughput in excess of 22 Mbps.

The Cisco Aironet 1300 Series can be deployed as an autonomous access point or bridge, providing intelligent network services as a standalone device. Alternatively, the Cisco Aironet 1300 Series can be deployed as an access point as part of the Cisco Unified Wireless Network, managed centrally by a Cisco wireless LAN controller.

Q. How does the Cisco Aironet 1300 Series compare to the Cisco Aironet 350 Series Wireless Bridge?

A. The Cisco Aironet 1300 Series is an upgrade or replacement for the Cisco Aironet 350 Series Wireless Bridge. The Cisco Aironet 1300 Series is an 802.11g bridge supporting data rates of up to 54 Mbps and operating with Cisco IOS® Software. The entire unit was designed for outdoor deployment, with an extended operating temperature range and the ability to withstand humidity and extreme weather conditions. Like the Cisco Aironet 350 Series Wireless Bridge, the Cisco Aironet 1300 Series Outdoor Access Point or Bridge supports root bridge, non-root bridge without client association, and root access point roles in the radio network. In addition, it provides support for the workgroup bridge radio role.

Q. How does the Cisco Aironet 1300 Series Outdoor Access Point or Bridge compare to the Cisco Aironet 1400 Series Wireless Bridge?

A. The Cisco Aironet 1400 Series Wireless Bridge is a 5.8 GHz UNII3 bridge, while the Cisco Aironet 1300 Series Outdoor Access Point or Bridge is a 2.4 GHz bridge. The Cisco Aironet 1400 Series Wireless Bridge supports only root and non-root bridge roles, unlike the Cisco Aironet 1300 Series, which also provides access point and workgroup bridge roles. The Cisco Aironet 1400 Series Wireless Bridge generally provides longer-range links when compared to the Cisco Aironet 1300 Series. For example, the range for a Cisco Aironet 1400 Series Wireless Bridge in a point-to-point link is 8.5 miles at a data rate of 54 Mbps, versus 1.5 miles at 54 Mbps for the Cisco Aironet 1300 Series (typical range with integrated antennas).

Q. How does the Cisco Aironet 1300 Series Outdoor Access Point or Bridge compare to Cisco Aironet 1100 and 1200 Series Access Points?

A. The Cisco Aironet 1300 Series Outdoor Access Point or Bridge is an outdoor access point and does not require an ingress protection or a National Electrical Manufacturers Association (NEMA)-rated enclosure. It provides a much more economical, safe, and easy-to-deploy solution for outdoor Wi-Fi coverage. It also supports higher gain antennas.

Q. Is the Cisco Aironet 1300 Series Outdoor Access Point or Bridge compatible with any existing Cisco Aironet wireless bridges or access points?

A. Yes. There is over-the-air compatibility with the Cisco Aironet 350 Series Wireless Bridge and with Cisco Aironet 2.4 GHz autonomous access points. For investment protection, existing Cisco Aironet 350 Series bridge deployments may be upgraded

to Cisco Aironet 1300 Series bridges. Because the Cisco Aironet 1300 Series uses the same 2.4 GHz frequency band as the Cisco Aironet 350 Series, existing antenna and cable installations can be reused.

Q. Is the Cisco Aironet 1300 Series Outdoor Access Point or Bridge compatible with wireless products from other vendors?

A. The Cisco Aironet 1300 Series Outdoor Access Point or Bridge is Wi-Fi-certified when functioning as an access point, and is compatible with all Wi-Fi-certified client adaptors. In addition, it is compatible with all approved Cisco Compatible WLAN client devices from participating companies that support the unique Cisco Aironet innovations. However, when functioning as a bridge, the Cisco Aironet 1300 Series is only compatible with Cisco Aironet products (while in bridge mode, the Cisco Aironet 1300 Series is still able to accept client associations from Wi-Fi certified, Cisco, and Cisco Compatible Extensions client devices).

Q. What are common uses for the Cisco Aironet 1300 Series Outdoor Access Point or Bridge?

A. Common uses for the Cisco Aironet 1300 Series include:

- Connecting networks within a campus area for enterprise, education, or healthcare deployments
- Providing an outdoor infrastructure for mobile networks and users for transportation, public safety, or government deployments
- Extending public access coverage to outdoor or wider areas than existing hotspots
- Creating a temporary network infrastructure that is rugged, flexible, and portable for a remote or military operation

Q. What security features are available on the Cisco Aironet 1300 Series?

A. The Cisco Aironet 1300 Series supports Wi-Fi Protected Access (WPA) 802.1X mutual authentication with Cisco Extensible Authentication Protocol (LEAP), strong encryption with Temporal Key Integrity Protocol (TKIP), Message Integrity Check (MIC), and Advance Encryption Service (AES) support.

Q. How is the Cisco Aironet 1300 Series managed?

A. The Cisco Aironet 1300 Series can be managed though a command-line interface (CLI) or Web-based GUI. In autonomous mode, the Cisco Aironet 1300 Series can also be managed by the CiscoWorks Wireless LAN Solution Engine (WLSE) for bulk firmware updates or mass configuration.

As part of the Cisco Unified Wireless Network, operating in Lightweight Access Point Protocol (LWAPP) mode, the Cisco Aironet 1300 Series can be managed by Cisco wireless LAN controllers and the Cisco Wireless Control System (WCS). The wireless LAN controller provides a network-level view of the wireless LAN, enabling centralized management of devices and policies, providing automatic and dynamic configuration of RF parameters, and enabling advanced services such seamless Layer 2 and Layer 3 mobility, quality of service (QoS), RF firewalling, and location tracking. The Cisco Wireless Control System centralizes many important functions for wireless LAN planning and design, RF management, location tracking, the Cisco Intrusion Prevention System (IPS), and wireless LAN systems configuration, monitoring, and management.

Q. What is included with the Cisco Aironet 1300 Series?

A. The Cisco Aironet 1300 Series is shipped with:

- Captured or remote unit
- Power supply
- Power injector
- 1-foot power injector cables
- Power cord

The captured unit has a radio with a 13-dBi integrated antenna. The connectorized version of the bridge provides installers with RP TNC type connectors. Installers will need to purchase antennas, sold separately, after consideration of the environment and the application needs. Both versions include convenient LEDs on the unit for alignment feedback and diagnostics. A quick-hang

mounting bracket allows for an easy installation process. Mounting hardware is not shipped with the unit and must be ordered separately.

Q. What optional accessories are available for the Cisco Aironet 1300 Series?

A. Additional accessories that can be ordered separately are:

- Roof Mount Kit (AIR-ACCRMK1300=)
  - Roof-mount mast (pole and mounting mast)
  - Multifunction mount (allows mounting to roof-mount mast)
  - Mounting hardware
  - 20-foot dual RG-6 cable assembly with F-Type connectors
  - 50-foot dual RG-6 cable assembly with F-Type connectors
  - Coaxial sealant
  - One grounding block
  - Anticorrosion gel
  - U-bolts
- Wall Mount Kit (AIR-ACCWAMK1300=)
  - Two 1-foot RG-59 power injector cables
  - Wall-mount bracket

The Roof Mount Kit is available for use with the Cisco Aironet 1300 Series Wireless Bridge (integrated antenna and connectorized versions). The Wall Mount Kit is available for use with the Cisco Aironet 1300 Series Wireless Bridge with RP-TNC type connector. The Wall Mount Kit is for indoor use only.

For more information on accessories and ordering options, please consult the Cisco Aironet 1300 Series Ordering Guide at http://www.cisco.com/en/US/prod/collateral/wireless/ps5679/ps5861/product_data_sheet09186a008022198b.html.

Q. What antenna options are available for the connectorized Cisco Aironet 1300 Series?

A. The following antennas can be used with the Cisco Aironet 1300 Series:

- AIR-ANT2506—5.2-dBi omnidirectional mast mount antenna
- AIR-ANT24120—12-dBi omnidirectional mast mount antenna
- AIR-ANT1949—13.5-dBi Yagi antenna
- AIR-ANT2410Y-R—10-dBi Yagi antenna
- AIR-ANT3338—21-dBi dish antenna
- AIR-ANT2414S-R—14-dBi sector antenna
- AIR-ANT1729—6-dBi patch antenna

Q. Does the Cisco Aironet 1300 Series support inline power?

A. Power is provided inline to the wireless bridge from the power injector, which must always be used. However, the system does not draw power over the Ethernet cable from power-enabled switches or power panels.

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Printed in USA C67-349832-00 06/06