Cisco 1240AG Series

Q. What are the Cisco Aironet 1240AG Series access points?

A. Cisco® Aironet® 1240AG Series access points are preconfigured dual-band access points. The Cisco Aironet 1240AG Series features a rugged metal case and operating temperature range of -4 to 131℉ (-20 to 55℃), making it ideal for harsh environments.

It features dual-embedded modules-a 2.4-GHz 802.11g module and a 5-GHz 802.11a module. Both radio modules feature dual RP-TNC connectors to allow users to select from numerous 2.4-GHz and 5-GHz diversity and nondiversity remote antennas.

The Cisco Aironet 1240AG Series is available to support either the Cisco IOS® Software or the Lightweight Access Point Protocol (LWAPP).

As with all Cisco Aironet 1200 Series platforms, Cisco Aironet 1240AG Series IEEE 802.11a/b/g access points deliver the versatility, high capacity, security, and enterprise-class features required in more challenging RF environments like factories, warehouses, and retailers, and when installing above suspended ceilings. Dual-antenna connectors allow customers to choose from several high-gain and directional antennas to extend range and shape coverage areas. The Cisco Aironet 1240AG Series combines antenna versatility with industry-leading transmit power, receive sensitivity, and delay spread for high multipath environments to provide reliable performance and throughput in even the most challenging installations.

Q. What are the Cisco Aironet 1240G Series access points?

A. Cisco® Aironet® 1240G Series Access Points provide all the same hardware and software functionality as the 1240AG Series with the exception of the radios. The 1240G series offers a single 802.11g radio and is designed for use in regulatory domains that do not allow 802.11a/5 GHz operation.

Q. Which IEEE 802.11 wireless LAN standards does the Cisco Aironet 1240AG Series support?

A. The Cisco Aironet 1240AG Series supports the IEEE 802.11a, 802.11b, 802.11g, and 802.11i Wi-Fi Protected Access 2 (WPA2) standards.

For more information, please visit: http://www.wi-fi.org

Q. Does the Cisco Aironet 1240Ag Series support bridging and backhaul functions, in addition to its access point function?

A. Yes. The Cisco Aironet 1240AG Series link role flexibility provides both access point and bridge functions through configuration of each radio as an access point, repeater, root bridge, non-root bridge, or workgroup bridge. This array of configuration flexibility enables the Cisco Aironet 1240AG Series to address applications including basic wireless LAN coverage, wireless LAN coverage with wireless backhaul, and more traditional bridging applications.

Radio 1 (802.11g or 802.11a)	Radio 2 (802.11g or 802.11a)	RJ45 State
Root Bridge	Root bridge, non-root bridge, access point, or workgroup bridge	Uplink
Non-root Bridge	Root bridge, non-root bridge, access point, or workgroup bridge	Uplink
Workgroup Bridge	Root bridge, non-root bridge, or access point	Uplink
Access Point	Root bridge, non-root bridge, access point, or workgroup bridge	Uplink
Repeater	Root bridge, non-root bridge, or access point	Downlink

Note: Only one 802.11g radio and one 802.11a radio are supported in the Cisco Aironet 1240AG Series

Q. Is the Cisco Aironet 1240AG Series WPA2-compliant?

A. Yes. The Cisco Aironet 1240AG Series is WPA2-compliant. WPA2 is the second generation of WPA specified by the Wi-Fi Alliance industry organization, and is based on the IEEE 802.11i standard for wireless LAN security. The Cisco Aironet 1240AG Series is backward-compatible with clients certified for the first-generation WPA (which provided security enhancements to the Wired Equivalent Privacy [WEP] algorithm), as well as with clients certified for the original WEP security.

For more information on WPA2, please visit: http://www.wi-fi.org

Q. How does the Cisco Aironet 1240AG Series compare to the Cisco Aironet 1230AG Series when configured as a dual-band access point?

A. The key differences between the two series is that the Cisco Aironet 1240AG Series is a non-modular dual-band 802.11a/b/g access point, whereas the Cisco Aironet 1230AG Series is a modular platform providing 802.11g-only, 802.11a-only, or dual-band 802.11a/g configuration. Of course, the non-modular dual-band Cisco Aironet 1240AG Series can be configured to operate as either single-band or dual-band access point.

Additionally, the Cisco Aironet 1240AG Series supports IEEE 802.3af Power over Ethernet (PoE), in addition to the power sources supported on the Cisco Aironet 1230AG Series, including Cisco inline power switches, Cisco single-port power injectors, and local power.

Q. How does the Cisco Aironet 1240AG Series compare to the Cisco Aironet 1130AG Series?

A. Both series offer dual-band access points designed for the enterprise, both support interoperable 802.11i/WPA2-enhanced wireless LAN security.

The Cisco Aironet 1240AG Series is designed for greater flexibility. Dual antenna connectors for both the 2.4- and 5-GHz bands support a range of antenna gains and coverage patterns. The Cisco Aironet 1240AG Series is designed for more challenging RF environments, with a die-cast metal enclosure and operability in a wider temperature range than the Cisco Aironet 1130AG Series.

The Cisco Aironet 1130AG Series is designed for indoor office environments, providing rugged diversity antennas with omnidirectional coverage for both the 2.4- and 5-GHz bands. The antennas are integrated into the design, resulting in an unobtrusive form.

Q. How does the Cisco Aironet 1240AG Series compare to Cisco Aironet 1000 Series access points?

A. Both series offer similar features required for enterprise applications, such as dual-band 802.11a/g access and 802.11i/WPA2-enhanced wireless LAN security.

While the Cisco Aironet 1240AG Series is available to support either Cisco IOS Software or the Lightweight Access Point Protocol (LWAPP), the Cisco Aironet 1000 Series only supports LWAPP.

The Cisco Aironet 1240AG Series is designed for more challenging RF environments, with a die-cast metal enclosure and operability in a wider temperature range than the Cisco Aironet 1000 Series. Additionally, while the Cisco Aironet 1000 Series provides good radio frequency performance, the Cisco Aironet 1240AG Series offers industry-leading performance.

While the Cisco Aironet 1240AG Series provides antenna diversity for both 2.4 GHz and 5 GHz, the Cisco Aironet 1000 Series provides antenna diversity for only 2.4 GHz.

The metal mounting bracket for the Cisco Aironet AP1240AG is designed to provide secure mounting, via use of a small padlock (customer supplied), and offers cable management channels, Ethernet and console port security, and resent button protection, whereas the mounting bracket for the Cisco Aironet 1000 Series is comprised of two small plastic mounting brackets without offering any of the benefits afforded by the Cisco Aironet AP1240AG mounting bracket.

Q. Is the Cisco Aironet 1240AG Series part of the Cisco Wireless Security Suite?

A. Yes. The Cisco Aironet 1240AG Series is part of the award-winning Cisco Wireless Security Suite, which supports 802.11i, WPA2, WPA, and numerous Extensible Authentication Protocol (EAP) types. WPA and WPA2 are the Wi-Fi Alliance certifications for interoperable, standards-based WLAN security. These certifications

support IEEE 802.1X for user-based authentication, Temporal Key Integrity Protocol (TKIP) for WPA encryption, and Advanced Encryption Standard (AES) for WPA2 encryption. These certifications help to ensure interoperability between Wi-Fi-certified WLAN devices from different manufacturers.

Q. What accessories are available for the Cisco Aironet 1240AG Series?

A. Additional accessories that can be ordered for the Cisco Aironet 1240AG Series are:

- Cisco Aironet Power Injector (AIR-PWRINJ3)
- Cisco Aironet Power Injector Media Converter (AIR-PWRINJ-FIB)

Cisco Aironet power injectors use the power supply that is available with Cisco Aironet 1240AG Series access points.

Q. What antenna options are available for the Cisco Aironet 1240AG Series?

A. Antennas for both 2.4-GHz and 5-GHz radios are available and must be ordered separately. High-gain omnidirectional, narrow-beam directional, diversity, and nondiversity antennas are available for both operating bands. For more information on antenna options, visit: http://www.cisco.com/en/US/products/hw/wireless/ps469/index.html

Q. Is the Cisco Aironet 1240AG Series available with the 802.11a integrated antenna module (AIR-RM21A-x-K9)?

A. No. The Cisco Aironet 1240AG Series is only available with dual RP-TNC antenna connectors for both 2.4-GHz and 5-GHz antennas.

Q. Will the Cisco Aironet 1240AG Series support the Cisco Wireless IP Phone 7920 and 7921G?

A. Yes. The Cisco Wireless IP Phone are Wi-Fi-compliant and will interoperate with any Wi-Fi-compliant access point, including the Cisco Aironet 1240AG Series.

Q. Is the Cisco Aironet 1240AG Series UL2043 plenum rated?

A. Yes. UL2043 is a standard specified by the Underwriters Laboratories. In the United States, most municipal building codes require certain UL certifications for equipment used in buildings. Municipalities often specify UL2043 certification for equipment used in the plenum air spaces. Municipalities also define what they considered to be plenum air space. In some U.S. municipalities, the plenum air space only includes the area above a suspended ceiling. In others, the area below the suspended ceiling may also be considered the plenum area.

Q. What are the powering options for the Cisco Aironet 1240AG Series? Is the Cisco Aironet 1240AG Series 802.3af-compliant?

A. The Cisco Aironet 1240AG Series supports local power or inline power; supported inline power sources include 802.3af-compliant power sources, newer Cisco inline power-capable switches supporting 13W or greater, and Cisco Aironet power injectors.

Q. If I have Cisco inline power sourcing equipment that is only able to deliver 6.3W to powered devices, can I reduce the power requirement of the access point to below this level by turning off one of the radios?

A. No, Cisco Aironet 1240AG Series access points require about 12.94W, regardless of whether it is configured to operate a single 802.11a or single 802.11g radio, or both. If inline power is required for Cisco Aironet 1240AG Series operation, use an 802.3af-compliant power source, Cisco Aironet Power Injector, or higher-power Cisco switches capable of supporting 13W or greater, such as the Cisco Catalyst® 3750 Series, to provide adequate power to the access point.

Q. What client devices are compatible with the Cisco Aironet 1240AG Series?

A. The Cisco Aironet 1240AG Series is interoperable with any 802.11a, 802.11b, or 802.11g Wi-Fi-certified clients. Cisco clients and third-party Cisco Compatible clients and devices are not only interoperable based on their 802.11 support, but also provide the enhanced wireless security and mobility inherent in a Cisco wireless LAN solution.

Q. In which countries is the Cisco Aironet 1240AG Series available?

A. The Cisco Aironet 1240AG Series operates in both the 2.4- and 5-GHz frequency bands. While the 2.4-GHz band is universally available for unlicensed use for devices such as wireless LANs, not all countries allow operation in the 5-GHz band. Therefore, the Cisco Aironet 1240AG Series is certified for use only in select countries. To determine the availability of the Cisco Aironet 1240AG Series for your country, please visit: http://www.cisco.com/go/aironet/compliance

Q. When will the Cisco Aironet 1240AG Series support the expanded channel set within the FCC regulatory domain?

A. The Cisco Aironet 1240AG Series currently supports 8 channels in the 5150-5250 MHz bands, 8 channels in the 5470-5725 MHz band, and 4 channels in the 5745-5825 MHz band.

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