Ordering Guide

Cisco Aironet 1200 Series Access Point

The Cisco Aironet® 1200 Series Access Point (AP) provides the following physical interface connections:

Description	Qty	Connection Type
2.4 GHz radio	1	Mini-PCI
5 GHz radio	1	CardBus
2.4 GHz antennas	2	Reverse Polarity-Threaded Naval Connector (RP-TNC)
Ethernet	1	RJ-45
Console	1	RJ-45
Local Power	1	Barrel connector

The mini-PCI interface supports either an 802.11b or 802.11g radio operating in the 2.4 GHz frequency band.The CardBus interface supports an 802.11a radio operating in the 5 GHz frequency band. At least one radio must be installed for the AP to operate in a Wireless LAN, and at most two radios (one of each form factor) can be installed.

The Cisco Aironet 1200 Series may be ordered as follows:

- Configurable: identify the AP platform and then select which radio(s) to be installed, or
- Preconfigured bundles: AP platform with 802.11a, 802.11b or 802.11g radio module predetermined by the part number or stock-keeping unit (SKU).

Configurable part numbers for the Cisco Aironet 1200 are only available on the Global Price List. The configurable option is best for those who are ordering the product for a specific single customer or project. When choosing the “configurable” option, the AP platform and radio module(s) must be selected. Although the AP platform and radio module(s) are ordered separately through the configuration tool, they will arrive fully assembled as a completely functional end product.

Preconfigured bundles are available on both the Global and Wholesale Price Lists. Preconfigured bundles associate a unique SKU to a predefined product configuration for AP platform and radio module. As with the configurable product, a preconfigured bundle will arrive fully assembled.

For both configurable products and preconfigured bundles, selection of a country power cord is required, and options for in-line power injector and console cable are available through the configuration tool. For those configurable and preconfigured bundles based on Cisco IOS, an additional option is available for selecting the software image version.

2.4 GHz antennas are not included with the 802.11b or 802.11g radio modules in either version; they must be identified under a separate order line item and purchased separately. Note, the 802.11a radio module is designed with its antenna integrated to the radio module, and therefore no antenna selection is required or available.

Configuration Options

The following table identifies the Cisco Aironet 1200 configuration options. The choices for power cord and IOS software image (for the AP1210 platform) are not listed in this table.

Platform	Mini-PCI Radio Module[1]	CardBus Radio Module[1]	Power Injector	Console Cable
AIR-AP1200[2] (VxWorks)	AIR-MP20B-A-K9 AIR-MP20B-E-K9 AIR-MP20B-I-K9 AIR-MP20B-J-K9	AIR-RM20A-A-K9 AIR-RM20A-J-K9 AIR-RM20A-S-K9 AIR-RM20A-T-K9	AIR-PWRINJ3 AIR-PWRINJ-FIB	AIR-CONCAB1200
AIR-AP1210 (Cisco IOS)	AIR-MP20B-A-K9 AIR-MP20B-E-K9 AIR-MP20B-I-K9 AIR-MP20B-J-K9 AIR-MP21G-A-K9 AIR-MP21G-E-K9 AIR-MP21G-I-K9 AIR-MP21G-J-K9	AIR-RM20A-A-K9 AIR-RM20A-J-K9 AIR-RM20A-S-K9 AIR-RM20A-T-K9	AIR-PWRINJ3 AIR-PWRINJ-FIB	AIR-CONCAB1200

1. See section on Regulatory Domains below.
2. Note: The VxWorks operating system does not support 802.11g. Cisco Aironet 1200 Series access points using the VxWorks OS must be upgraded to Cisco IOS to support the 802.11g radio module.

Preconfigured Bundles

The following table identifies the available preconfigured bundles and its platform and radio module components. Note that not all possible combinations of platforms and radio modules have been preconfigured. Only those regulatory domains identified are available in a preconfigured bundle.

Preconfigured Bundle	Platform	Radio Module	Regulatory Domains[1]
• AIR-AP1220A-x-K9	AIR-AP1200	AIR-RM20A-x-K9	x = Either A, J, or S
• AIR-AP1220B-x-K9	AIR-AP1200	AIR-MP20B-x-K9	x = Either A, E, or J
• AIR-AP1230A-x-K9	AIR-AP1210	AIR-RM20A-x-K9	x = Either A, J, S, or T
• AIR-AP1230B-x-K9	AIR-AP1210	AIR-MP20B-x-K9	x = Either A, E, I, or J
• AIR-AP1231G-x-K9	AIR-AP1210	AIR-MP21G-x-K9	x = Either A, E, I, or J

1. See section on Regulatory Domains below.

Product Description

The following table describes each of the parts identified previously.

Cisco Aironet 1200 Series Access Point Platform	
The Cisco Aironet 1200 Series access point platform is the basic electronic chassis of the AP. When populated with at least one radio module, the platform then provides the infrastructure for a Wireless LAN. The platform supports: • Simultaneous, dual-band operations with interfaces for mini-PCI and CardBus radios • Dual RP-TNC connectors for external 2.4 GHz antennas (antennas are sold separately) • 10/100 Auto-Sensing Ethernet uplink • Powering from Cisco in-line power over Ethernet (CDP) or local power supply • Console access The platform ships with a 110-220 VDC local power supply. It is available with either the VxWorks or Cisco IOS operating systems.	
AIR-AP1200 (refer to Note below)	VxWorks Operating System
AIR-AP1210	Cisco IOS Operating System
Note: The VxWorks operating system does not support 802.11g. Cisco Aironet 1200 Series Access Points using the VxWorks OS must be upgraded to Cisco IOS to support the 802.11g radio module.	
Radio Modules	
The radio module provides the radio frequency interface required for a wireless connectivity.	
802.11a Radio Modules	
IEEE 802.11a compliant CardBus form factor 5 GHz operation Up to 54 Mbps Integrated diversity antennas	
AIR-RM20A-A-K9	FCC (Americas) Configuration
AIR-RM20A-J-K9	TELEC (Japan) Configuration
AIR-RM20A-S-K9	Singapore Configuration
AIR-RM20A-T-K9	Taiwan Configuration
802.11b Radio Modules	
IEEE 802.11b compliant Mini-PCI form factor 2.4 GHz operation Up to 11 Mbps Dual RP-TNC connectors for externally attached antennas (not included)	
AIR-MP20B-A-K9	FCC (Americas) Configuration
AIR-MP20B-E-K9	ETSI (Europe) Configuration
AIR-MP20B-I-K9	Israel Configuration
AIR-MP20B-J-K9	TELEC (Japan) Configuration

802.11g Radio Modules	
IEEE 802.11g compliant Mini-PCI form factor 2.4 GHz operations Up to 54 Mbps Dual RP-TNC connectors for externally attached antennas (not included) Requires IOS image version 12.2(13)JA or later	
AIR-MP21G-A-K9	FCC (Americas) Configuration
AIR-MP21G-E-K9	ETSI (Europe) Configuration
AIR-MP21G-I-K9	Israel Configuration
AIR-MP21G-J-K9	TELEC (Japan) Configuration
Power Injectors	
The Cisco Aironet 1200 Series Access Point may be powered with the local power supply included with the access point or by using powering equipment capable of providing Cisco in-line power over Ethernet, such as Cisco Aironet Power Injectors or Cisco in-line powered switches and routers. The powering equipment must be able to support the power requirements of the access point, which depend on the product configuration as follows:	
802.11a (single radio)	8 watts
802.11b (single radio)	6 watts
802.11g (single radio)	6 watts
802.11a/b/g (dual radio)	11 watts
The Cisco Aironet Power Injectors listed below provide sufficient power for each possible configuration of the access point. The power injectors are used in combination with the 110-220 VDC power supply that is shipped with the Cisco Aironet 1200 Series access point platform and preconfigured bundles.	
AIR-PWRINJ3	Cisco Aironet Power Injector for the 1100 and 1200 Series access points RJ-45 Ethernet LAN connection
AIR-PWRINJ-FIB	Cisco Aironet Power Injector Media Converter MT-RJ (multimode fiber) LAN connection
Console Cable	
This optional cable may be used in the initial installation and set-up of the access point.	
AIR-CONCAB1200	Auxiliary/Console port cable

When ordering the items listed in the above charts separately from the product, order using the spare part number by appending an equal sign "=" to the part number. For example, order AIR-PWRINJ3= if ordering the Power Injector under a separate order line item.

Regulatory Domains

Regulatory domains are used to distinguish groups of countries that adhere to the same or similar regulations for radio usage with regards to available channels and transmit power. Cisco Aironet radio products are set at the factory to allow a particular channel set and maximum transmit power and are reflected in the part number as the single character following the model number (for example, in AIR-AP1231G-A-K9, the regulatory domain is represented by "-A-". Customers must select the correct regulatory domain that corresponds to their particular country when choosing a radio module for use in their access point or when choosing a preconfigured bundle.

The Cisco Aironet 1200 Series access point is certified for use in many countries around the world, but has not been approved for use in all countries. Please refer to the following URL for current worldwide approval status of the Cisco Aironet 1200: http://www.cisco.com/go/aironet/compliance

The following table identifies the regulatory domains choices available for the radio modules:

	5 GHz 802.11a AIR-RM20A	2.4 GHz 802.11b AIR-MP20B	2.4 GHz 802.11g AIR-MP21G
A – FCC (Americas)	X	X	X
E – ETSI (Europe)		X	X
I – Israel		X	X
J – TELEC (Japan)	X	X	X
S – Singapore	X	X[1]	X[1]
T – Taiwan	X	X[1]	X[1]

1. That the absence of these regulatory domain designators does not necessarily mean that the product is not certified for use in the listed country. Instead a different regulatory domain applies for the country. Please check your country compliance and the applicable regulatory domain designator at http://www.cisco.com/go/aironet/compliance.

Antennas

The 2.4 GHz radios for 802.11b and 802.11g support a flexible set of Cisco Aironet omnidirectional and directional antennas that can be mounted on walls, ceilings or on masts. The 2.4 GHz radio does not come with antennas; the antennas must be ordered separately. Note that the Cisco Aironet 1200 Series access point is certified for operation only with Cisco Aironet antennas. To ensure regulatory compliance, select Cisco Aironet antennas for use with the 1200 Series access point.

The 5 GHz radio for the 802.11a is designed with an integrated diversity antenna system. Auxiliary 5 GHz antennas are not required and are not available. A complete *Antenna Reference Guide* is available to assist users in selecting the proper antenna for specific deployment requirements:

http://www.cisco.com/warp/public/cc/pd/witc/ao350ap/prodlit/agder_rg.htm

Client Adapters

The Cisco Aironet 1200 Series access point will interoperate with all IEEE 802.11a/b/g (Wi-Fi) WLAN client adapters. To take advantage of the end-to-end features, Cisco innovations and the award-winning Cisco Wireless Security Suite, Cisco recommends that customers use Cisco client adapters or Cisco Compatible clients when possible. For more information, including a complete listing of Cisco Compatible products, refer to the following URL: http://www.cisco.com/en/US/partners/pr46/pr147/partners_pgm_partners_0900aecd800a7907.html

Product Number	Description	Frequency Band	Standard	Regulatory Domains
AIR-PCM352	PCMCIA card with integrated diversity antennas	2.4 GHz	802.11b	Country Option[1]
AIR-PCI352	PCI adapter with 2.2 dBi dipole antenna RP-TNC connector	2.4 GHz	802.11b	Country Option7
AIR-LMC352	PCMCIA card with dual MMCX connectors	2.4 GHz	802.11b	Country Option7
AIR-WGB352C	Workgroup Bridge with captured antenna	2.4 GHz	802.11b	Country Option7
AIR-WGB352R	Workgroup Bridge with dual RP-TNC connectors	2.4 GHz	802.11b	Country Option7
AIR-CB20A-x-K9	CardBus client adapter	5 GHz	802.11a	x = Either A, J, S, or T
AIR-CB21AG-x-K9	CardBus client adapter	2.4 and 5 GHz	802.11a/b/g	x = Either A, E, J, or W
AIR-PC21AG-x-K9	Low-profile PCI adapter	2.4 and 5 GHz	802.11a/b/g	x = Either A, E, J, or W

1. The regulatory domains for these client adapters are not built into the SKU numbering structure. Instead, the appropriate regulatory domain is selected under the Country Option for the SKU. The available options are A (Americas), E (ETSI), I (Israel), J (Japan), W (Rest of World).

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ETMG 203179—JS 10/03