

# Cisco Aironet 1250 Series Ordering Guide

The Cisco<sup>®</sup> Aironet<sup>®</sup> 1250 Series is an enterprise-class 802.11n access point designed for challenging RF environments. A dual-band rugged indoor access point, the 1250 Series provides reliable and predictable WLAN coverage with data rates of up to 600 Mbps. With a choice of 2.4-GHz and 5-GHz radio modules, the 1250 Series may be ordered as follows:

- Access point platform with pre-installed radio modules: Includes the 1250 Access Point platform with pre-installed 2.4- and 5-GHz radio modules, or only a 2.4-GHz radio module. The combination of radio modules is determined by the part number.
- Individual components: The access point platform (no radio modules) and radio modules are separately orderable as spares.

## **Pre-installed Radio Modules**

Table 1 lists the part numbers for the Cisco Aironet 1250 Series access point platform with pre-installed radio modules. Each part number corresponds to a specific combination of the Cisco Aironet 1250 Series access point platform and one or two radio modules. Access points ordered in this manner arrive with the radio modules installed in the access point platform. 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 <a href="http://www.cisco.com/go/aironet/compliance">http://www.cisco.com/go/aironet/compliance</a>.

Table 1.	Cisco Aironet 1250 Series with Pre-installed Radio Modules

Part Number	Description	Access Point Platform	Radio Modules	Regulatory Domain
AIR-AP1252AG-x-K9 AIR-LAP1252AG-x-K9	802.11a/g/n- 2.4/5-GHz Mod Auto AP; 6 RP-TNC 802.11a/g/n- 2.4/5-GHz Unified AP; 6 RP-TNC)	AIR-AP1250	AIR-RM1252A-x-K9 and AIR-RM1252G-A-K9	x=  • A = FCC  • C = China  • E = ETSI  • I = Middle East  • K = Korea  • N = Non-FCC  • P = Japan2  • S = Singapore  • T = Taiwan
AIR-AP1252G-x-K9 AIR-LAP1252G-x-K9	802.11g/n- 2.4 GHz Autonomous AP; 3 RP-TNC 802.11g/n- 2.4 GHz Unified AP; 3 RP-TNC	AIR-AP1250	AIR-RM1252G-A-K9	x=

Cisco Aironet 1250 Series access point platforms with pre-installed radio modules ship with the following:

- Cisco Aironet 1250 Series access point and radio module(s)
- Mounting hardware kit
  - One mounting plate, two 4 x 40 x 3/16 in screws, and a mounting plate latch (all attached to the access point)
  - Two suspended ceiling T-rail clips, spacers (accommodates standard and recessed T-rails), and nuts
  - Four 8 x 18 x 3/4 in pan head Phillips sheet metal screws

- Four #8 plastic wall anchors
- One 10 x 24 nut (for ground stud on the mounting plate)
- Two cable tie wraps
- · Product quick start guide
- Translated safety warning document for the product
- · Cisco product registration card

An external AC power supply and power cord does not ship standard with Cisco Aironet 1250 Series Access Point. An optional external AC power supply is available, but is required only if AC power will be used to power the access point. The external AC power supply is not needed if the AIR-PWRINJ4 power injector is used to power the access point; the injector has its own integrated AC power supply. Refer to the section "Power Options" for additional details.

In addition to the standard contents listed above, there are several options available in the Cisco Configuration Tool that may be ordered in conjunction with the access point. These options are show in Table 2 below.

Table 2. Configuration Options for the Cisco Aironet 1250 Series with Pre-installed Radio Modules

Configuration Option	Selections	Description/Notes
2.4-GHz Antenna Options	<ul> <li>None*</li> <li>AIR-ANT2422DG-R</li> <li>AIR-ANT2422DB-R</li> <li>AIR-ANT2422DW-R</li> </ul>	<ul> <li>No 2.4-GHz antenna</li> <li>Three 2.4-GHz 2.2 dBi Gray Straight Dipole Ant RP-TNC</li> <li>Three 2.4-GHz 2.2 dBi Black Dipole Antenna RP-TNC</li> <li>Three 2.4-GHz 2.2 dBi White Dipole Antenna RP-TNC</li> </ul> Note: Additional antennas are available for the AP1250 as separately orderable spares. See the "Antennas" section below.
5-GHz Antenna Options (Only available for part numbers with 5 GHz radios)	<ul> <li>None*</li> <li>AIR-ANT5135DG-R</li> <li>AIR-ANT5135DB-R</li> <li>AIR-ANT5135DW-R</li> </ul>	<ul> <li>No 5-GHz antenna</li> <li>Three 5-GHz 3.5 dBi Gray Straight Dipole Ant RP-TNC</li> <li>Three 5-GHz 3.5 dBi Black Dipole Antenna RP-TNC</li> <li>Three 5-GHz 3.5 dBi White Dipole Antenna RP-TNC</li> <li>Note: Additional antennas are available for the AP1250 as separately orderable spares. See the "Antennas" section below.</li> </ul>
Power Option	AIR-PWRINJ4     AIR-PWR-SPLY1     AIR-NO-PWR-SPPLY	<ul> <li>Power Injector for the Cisco Aironet 1250 Series</li> <li>Power Supply for the Cisco Aironet 1250 Series</li> <li>Do not ship a power supply</li> </ul>

Configuration Option	Selections	Description/Notes
Country Power Cord	None Selected	
Opts	AIR-PWR-CORD-SW	AIR Line Cord Switzerland
	AIR-PWR-CORD-SA	AIR Line Cord South Africa
	AIR-PWR-CORD-IS	AIR Line Cord Israel
	AIR-PWR-CORD-DM	AIR Line Cord Denmark
	AIR-PWR-CORD-CH	AIR Line Cord Main
	AIR-PWR-CORD-AP	AIR Line Cord Asia Pacific
	AIR-PWR-CORD-AR	AIR Line Cord Argentina/Uruguay
	AIR-PWR-CORD-AU	AIR Line Cord Australia
	AIR-PWR-CORD-CE	AIR Line Cord Central Europe
	AIR-PWR-CORD-IT	AIR Line Cord Italy
	AIR-PWR-CORD-JP	AIR Line Cord Japan
	AIR-PWR-CORD-NA**	AIR Line Cord North America
	AIR-PWR-CORD-UK	AIR Line Cord United Kingdom
AIR Software Option for	Autonomous	The software version number will vary over time as new software versions
AP1250	Unified (LWAPP)	are released.
Console Cable Option	None Selected*	No console cable
	AIR-CONCAB1200	Console Cable for 1130AG, 1200, 1230AG, 1240AG, 1250 Series

<sup>\*</sup> Default selection

Configurable options will ship in the same box as the access point. Additional AP1250 Series antennas and accessories are also available and may be ordered separately as spares.

## Cisco Aironet 1250 Series Eco-Pack

Cisco Aironet 1250 Series Eco-Packs ship with 5 access points and are designed to reduce product packaging and preserve the environment (Table 3). Note that power supplies and power cords are not included with the eco-pack. For customers who require local power, power supplies and power cords need to be ordered as separate line items.

 Table 3.
 Cisco Aironet 1250 Series Eco-Pack SKUs and Regulatory Domains

Part Number	Product Description
AIR-LAP1252-A-K9-5	802.11a/g/n 2.4/5 GHz Unified AP, FCC, 5 APs
AIR-LAP1252-E-K9-5	802.11a/g/n 2.4/5 GHz Unified AP, ETSI, 5 APs
AIR-LAP1252-N-K9-5	802.11a/g/n 2.4/5 GHz Unified AP, Non-FCC, 5 APs
AIR-AP1252-N-K9-5	802.11a/g/n 2.4/5 GHz Autonomous AP, Non-FCC, 5 APs

# **Individual Components**

Table 4 lists the available spare part numbers for the Cisco Aironet 1250 Series access point platform and individual radio modules. Spares are not configurable.

 Table 4.
 Cisco Aironet 1250 Series Part Numbers for Spares

Part Number	Description	Regulatory Domain
AIR-AP1250=	Autonomous AP Platform (no radio modules); Spare	Not applicable
AIR-LAP1250=	Unified AP Platform (no radio modules); Spare	Not applicable
AIR-AP1250MNTGKIT=	1250 Series Ceiling, Wall Mount Bracket kit; Spare	Not applicable

<sup>\*\*</sup> Default selection for all AP1250 products in the -A regulatory domain

Part Number	Description	Regulatory Domain
AIR-RM1252A-x-K9=	802.11a/n 5-GHz Radio Module; 3 RP-TNC; Spare	<ul> <li>X=</li> <li>A = FCC</li> <li>C = China</li> <li>E = ETSI</li> <li>I = Middle East</li> <li>K = Korea</li> <li>N = Non-FCC</li> <li>P = Japan2</li> <li>S = Singapore</li> <li>T = Taiwan</li> </ul>
AIR-RM1252G-A-K9=	802.11g/n 2.4-GHz Radio Module; 3 RP-TNC; Spare	<ul> <li>X=</li> <li>A = FCC</li> <li>E = ETSI</li> <li>P = Japan2</li> </ul>

# **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; this is reflected in the part number as the single character following the model number (for example, in AIR-LAP1252AG-A-K9, the regulatory domain is represented by "-A"). Customers must select the regulatory domain that corresponds to their particular country when ordering an Aironet 1250 with pre-installed radio modules or spare radio modules.

Cisco Aironet 1250 Series access points are certified for use in many countries around the world, but have not been approved for use in all countries. For current worldwide approval status of Cisco Aironet 1250 Series access points, visit <a href="http://www.cisco.com/application/pdf/en/us/guest/products/ps5861/c1650/cdccont\_0900aecd80537b6a.pdf">http://www.cisco.com/application/pdf/en/us/guest/products/ps5861/c1650/cdccont\_0900aecd80537b6a.pdf</a>. Note that because regulatory requirements change frequently, the version applicable for your country may have changed from previous-generation Cisco Aironet products.

#### **Antennas**

Each radio module for the Cisco Aironet 1250 Series requires external antennas, which must be ordered as a configurable option or separately as spares. The number of antennas each access point or radio module supports is included in the Global Price List description (for example, 3 RP-TNC).

Table 5 contains a list of the antennas that may be used with the Cisco Aironet 1250 Series. Additional antennas are also available as described in the Cisco Aironet 2.4-GHz and 5-GHz Antennas and Accessories Data Sheet or the Antenna Product Portfolio for Cisco Aironet 1250 Series Access Points At-A-Glance. Note that Cisco Aironet 1250 Series Access Points are certified for operation only with Cisco Aironet antennas; to ensure regulatory compliance, select Cisco Aironet antennas for use with Cisco 1250 Series Access Points.

Table 5. Cisco Aironet 1250 Series Antenna Part Numbers for Spares

Frequency	Part Number	Antenna Type	Antenna Gain (dBi)
2.4GHz	AIR-ANT5959	Diversity Ceiling Omni	2
	AIR-ANT2422DG-R	Grey Non-Articulating Dipole	2.2
	AIR-ANT4941	Black Articulating Dipole	2.2
	AIR-ANT2430V-R	Three Element Omni Antenna	3
	AIR-ANT1728	Ceiling Mount Omni	5.2
	AIR-ANT2506	Mast Mount Omni	5.2
	AIR-ANT2452V-R	Diversity Pillar Omni	5.2
	AIR-ANT2460P-R	Patch	6

Frequency	Part Number	Antenna Type	Antenna Gain (dBi)
	AIR-ANT2465P-R	Diversity Patch	6.5
	AIR-ANT2485P-R	Patch	6
	AIR-ANT2410Y-R	Yagi	10
5GHz	AIR-ANT5135DG-R	Grey Non-Articulating Dipole	3.5
	AIR-ANT5135D-R	Black Articulating Dipole	3.5
	AIR-ANT5140V-R	Three Element Omni Antenna	4
	AIR-ANT5145V-R	Diversity Omni-Directional	4.5
	AIR-ANT5160V-R	Omni-Directional	6

For more information on antenna options, visit <a href="http://www.cisco.com/en/US/products/hw/wireless/ps469/index.html">http://www.cisco.com/en/US/products/hw/wireless/ps469/index.html</a>.

# **Power Options**

The Cisco Aironet 1250 Series Access Point may be powered by a Cisco Ethernet switch, a power injector, or a local power supply.

**Caution:** The Aironet 1250 Series Access Point with **two** RM1252 radio modules installed requires greater than the 12.95W allowed for by the 802.3af standard. Certain Cisco Ethernet switches are capable of providing this greater amount of power and can fully power the Aironet 1250 Series Access Point with two RM1252 radio modules installed. Refer to the Aironet 1250 Series Access Point data sheet for further details.

**Caution:** An external AC power supply and power cord does not ship with the Cisco Aironet 1250 Series. If one is required, it can be configured when the access point is ordered, or ordered as a spare.

If an Ethernet switch with Power over Ethernet is not being used, the power injector or power supply must be ordered either as a configurable option or as a spare. If ordered as a configurable option, the power injector or power supply will ship in the same box as the access point. Power options may also be ordered separately as spares as shown in Table 6.

 Table 6.
 Cisco Aironet 1250 Series Power Option Part Numbers for Spares

Part number	Product Description
AIR-PWRINJ4=	Power Injector—1250 Series; Spare
AIR-PWR-SPLY1=	Power Supply—1250 Series; Spare

The following powering options are not supported by the Aironet 1250 Series Access Point:

- Cisco PoE (6W)
- Cisco PoE (13W)
- · Cisco mid-span
- AIR-PWR-A
- PWRINJ-FIB
- PWRINJ3
- AIR-PWRINJ1500

## Software

The Cisco Aironet 1250 Series can be ordered with Cisco IOS<sup>®</sup> Software to operate as a standalone (autonomous) access point or with the Lightweight Access Point Protocol (LWAPP) software to operate as part of the Cisco Unified Wireless Network. To gain the full breadth of mobility services, the Cisco Aironet 1250 Series should be deployed with LWAPP, requiring a connection to a WLAN controller.

#### **Console Cable**

The Cisco Aironet 1250 Series can be configured and monitored using the console port. A console cable does not ship by default with the access point. When you order the access point with pre-installed radio modules, the console cable is available as a configurable option. If ordered as a configurable option, the console cable will ship in the same box as the access point. The console cable may also be ordered separately as a spare (Table 7).

Table 7. Cisco Aironet 1250 Series Console Cable Part Number

Part Number	Product Description
AIR-CONCAB1200=	Cisco Aironet 1130AG, 1200, 1230, 1240 and 1250 Series Console Cable

# **Mounting Kit**

The Cisco Aironet 1250 Series Access Point ships standard with a mounting bracket and hardware. A spare mounting kit may be purchased separately (Table 8).

Table 8. Cisco Aironet 1250 Series Mounting Bracket Part Number

Part Number	Product Description
AIR-AP1250MNTGKIT=	AP1250 Access Point Ceiling/Wall Mount Bracket Kit, spare



Americas Headquarters Cisco Systems, Inc. San Jose, CA Asia Pacific Headquarters Cisco Systoms (USA) Pite Ltd. Singacore Europe Headquarters Cixco Systoma Internetional BV Arnsterdam, 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.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Clack and any other company. (09087)

Printed in USA

C07-423376-03 09/09