Cisco Aironet 1560 Series Outdoor Access Points

Ordering Guide

February 2017

Contents

1. Introduction

1.1 Purpose, Audience, and Scope

This document describes the pricing and packaging structure and ordering for Cisco Aironet® 1560 Series Outdoor Access Points. It also describes the various packaging structures and configurations available for different models. In this document, you'll find part numbers and other information necessary to help you choose and order products.

Audience: This guide is for Cisco® sales and Cisco specialized channel partners.

Scope: This ordering guide describes the pricing and ordering for the Aironet 1560 models, shown in Table 1.

Table 1.   Cisco Aironet 1560 Series Models

Model	Description
AP1562I	I: Internal Antenna
AP1562E	E: External Antenna
AP1562D	D: Directional Antenna

For more detailed information on Cisco Aironet 1560 Series Outdoor Access Points products, visit: http://www.cisco.com/go/ap1560.

1.2 Ordering and Quoting Tools

Solution Expert assists Cisco sales and Cisco Aironet 1560 Series Outdoor Access Points specialized channel partners in designing and quoting solutions using the Cisco Unified Communications bundles or the traditional design model.

The Cisco Commerce Experience provides a Deals & Quotes application that can enable specialized channel partners to build a system quote with:

- Products, required modules, and software.
- Auto-derived services based on products and install site location.
- Customized leasing options from Cisco Capital®, where available.
- Design documentation.

For additional information about the Cisco Commerce Experience, visit: https://apps.cisco.com/Commerce/home.

The Cisco Commerce Experience includes several helpful tools to estimate, configure, and order solutions, so you can configure products and view lead times and prices for each selection. It also allows you to view lead time and price changes under a variety of price lists and service contract terms. You can also track your order.

Cisco Service Contract Center is an integrated solution that makes it easy for Cisco service sales teams and partners to manage and grow their service business, profitably. It will:

- Quote and book your service orders and manage your service contracts and renewals, in one easy-to-use solution.
- Help you spend less time solving administrative problems, searching for opportunities, and creating quotes.
- Allow you to spend more time growing your business using data you can trust; you don't need to spend time fixing or verifying data.
- Help partners to create and proactively manage their contracts.

Access the Cisco Service Contract Center at: http://wwwin.cisco.com/CustAdv/globalops/wwsso/service.shtml.

2. Cisco Aironet 1560 Series Outdoor Access Points

Aironet 1560 Series Outdoor Access Points are ideal for both enterprise and service provider network operators. They are currently the industry's highest-performing outdoor access points and support the latest Wi-Fi standard, 802.11ac Wave 2. The 1560 Series provides high throughput over a large area with pervasive coverage. A fully operational system contains:

1. Access point
2. Software
3. External antennas (1562E model only)
4. Mounting brackets
5. Power source
6. Small Form-Factor Pluggable (SFP; optional)
7. Accessories (optional)

Table 2 lists the part numbers for 1560 Series Access Points in a variety of configurations.

Table 2.   Cisco Aironet 1560 Series Outdoor Access Points

Product Number	Description	
AIR-AP1562I-x-K9	I: Internal Antenna	
AIR-AP1562E-x-K9	E: External Antenna	
AIR-AP1562D-x-K9	D: Directional Antenna	

Note 1: "x" is a placeholder for the regulatory domain designator. Visit http://www.cisco.com/go/aironet/compliance (outdoor access points) to determine which regulatory domain is used in your country. Note that the regulatory domain used in your country may differ depending on access point model, and that some models are not available for all countries.

Note 2: For the United States only, you must use regulatory domain - B instead of the traditional - A. This is due to recent FCC rule changes that opened up the - GHz UNII-1 band for outdoor usage.

Use Table 2 and the remainder of this guide to identify the items that you need for your deployment. Note that some components are available as a "configurable" option or as a "spare."

- A "configurable" option ships in the same main box as the access point. For example, AIR-ACC1530-PMK1 is a "configurable" option and, if so ordered, is shipped with the access point in the same box.
- A "spare" option is denoted with an equals (=) sign at the end of the part number. For example, AIR-ACCPMK1560-1= is a "spare" and, if so ordered, is shipped in separate packaging.

If making a return or trade-in, you might need to remove any option you installed before returning your access point to Cisco. Consult your Cisco representative for additional assistance in ordering mesh and other networking equipment.

These are standard items that could be included with each specific model:

1. Access point
2. Weatherization sealant tape for the antenna connections
3. Fitting dome/gland: liquid-tight adapter for sealing the cable ingress connection
4. Grounding lug
5. Anti-oxidation compound for the ground connection
6. DC power connector

Software Ordering Options

The 1560 Series requires, at a minimum, access point software release 8.3MR1 or later. Traditionally, additional functions are available for the access point with more recent releases. Read the applicable release notes for more information about features available with the latest software releases. You can specify the access point to be loaded and shipped with the default unified software as either "Unified Mesh," "Unified Local," or "Mobility Express" mode during the ordering process. Note that Unified Mesh will be available in a post-FCS software release. Table 3 lists the product numbers for each of these modes.

Table 3.   Access Point Software Options

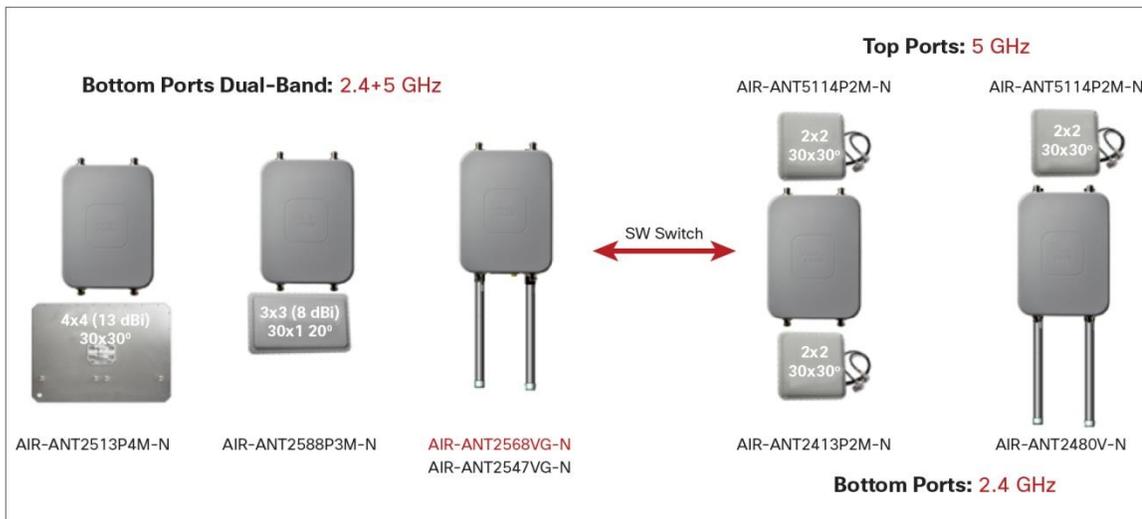| Product Number	Description
SWAP1560-MESH-K9	SW Cisco AP1560: Unified Mesh
SWAP1560-LOCAL-K9	SW Cisco AP1560: Unified Local
SWAP1560-MBEXP-K9	SW Cisco AP1560: Mobility Express

Antennas

The Aironet 1562I Access Point has three internal dual-band (2.4- and 5-GHz) antennas that reside under a sealed radome and cannot be accessed or configured by the user.

The Aironet 1562D Access Point has two internal directional dual-band (2.4- and 5-GHz) antennas that reside under a sealed radome and cannot be accessed or configured by the user.

The Aironet 1562E access points are equipped with four separate N-type female connectors that carry dual-band signals or, through software control, can be configured such that the bottom pair of connectors carry only 2.4-GHz signals and the top pair carry only 5-GHz signals. This gives users multiple configuration options, as shown in Figure 1.

Figure 1. Antenna Configuration Options

[Table 4](#) describes the antennas available for the Aironet 1562E Access Points. The table lists part numbers for the antennas as well as gain and other details.

Table 4. Antennas for the Cisco Aironet 1562E Access Point

Part Number	Frequency Band	Gain	Type	Required Quantity and Note
AIR-ANT2568VG-N	2.4/5 GHz	6/8 dBi	Omnidirectional	2; for maximum omni performance
AIR-ANT2547VG-N	2.4/5 GHz	4/7 dBi	Omnidirectional, gray	2; default recommended
AIR-ANT2547V-N	2.4/5 GHz	4/7 dBi	Omnidirectional, white	2
AIR-ANT2588P3M-N=	2.4/5 GHz	8/8 dBi	Directional	1; 2x cables and lightning arrestors may be needed
AIR-ANT2513P4M-N=	2.4/5 GHz	13/13 dBi	Directional	1; 2x cables and lightning arrestors may be needed
AIR-ANT2450VG-N	2.4 GHz	5 dBi	Omnidirectional, vertical polarization	2
AIR-ANT2450HG-N	2.4 GHz	5 dBi	Omnidirectional, horizontal polarization	2
AIR-ANT2480V-N	2.4 GHz	8 dBi	Omnidirectional	2
AIR-ANT2450V-N	2.4 GHz	5 dBi	Omnidirectional	2
AIR-ANT2413P2M-N=	2.4 GHz	13 dBi	Directional	1; antenna mount kit may be used to attach directly to AP
AIR-ANT5150VG-N	5 GHz	5 dBi	Omnidirectional, vertical polarization	2
AIR-ANT5150HG-N	5 GHz	5 dBi	Omnidirectional, horizontal polarization	2
AIR-ANT5180V-N	5 GHz	8 dBi	Omnidirectional	2
AIR-ANT5114P2M-N=	5 GHz	14 dBi	Directional	1; antenna mount kit may be used to attach directly to AP

[*] All of these antennas are compatible with UNII-1 band operation under FCC rules, except for (AIR-ANT2568VG-N).

For additional antenna specifications, see the [Cisco Aironet Antenna and Accessories Reference Guide](#).

The access points are provided with a sealant tape to protect the antenna connector from weather. Consult the 1560 Hardware Installation Guide for proper installation.

Mounting Brackets

Table 5 describes the mounting brackets available for the Aironet 1560 Series Access Points. The table lists part numbers for the brackets as well as use case and other details.

Table 5.   Mounting Brackets for the Cisco Aironet 1560 Series Access Points

Part Number	Description	Use Case
AIR-ACC1530-PMK1	Standard Pole/Wall Mount Kit for AP1530/1560 Series	Standard vertical wall or pole mounting
AIR-ACC1530-PMK2=	Pole Mount Kit for AP1530/1560 Series with tilt adjustment	Pole or wall mounting where tilting the AP is required
AIR-ACC1560-PMK1=	Pole Mount Kit with Power Adapter mount	Extended bracket to support mounting the AC to DC power adapter, AIR-PWRADPT-RGD1, along with the AP

Powering Options

The 1560 Series can be powered by multiple sources: AC, DC, or Power over Ethernet (PoE). For AC powering, an external AC-to-DC power adapter is required. For DC powering, a 2-pin DC connector is included with every access point. The access point can also be powered by Cisco Universal Power over Ethernet (UPOE) or PoE+(802.3at) directly from a switch or power injector. Table 6 lists part numbers for powering options.

Table 6.   Power Options for Cisco Aironet 1560 Series Access Points

Part Number	Description	Use Case
AIR-PWRINJ-60RGD1=	Power Injector, 60W, outdoor, North America plug	Outdoor-rated 60W power injector with North American AC plug
AIR-PWRINJ-60RGD2=	Power Injector, 60W, outdoor, un-connectorized	Outdoor-rated 60W power injector, unterminated AC cable for international use
AIR-PWRINJ-60-PMK=	Pole Mount kit for AIR-PWRINJ-60	Required for pole mounting for AIR-PWRINJ-60RGD1= or AIR-PWRINJ-60RGD2=
AIR-PWRINJ6=	Power Injector, 802.3at, indoor	Indoor-rated, 802.3at-compliant power injector
AIR-PWRADPT-RGD1=	Power Adapter for AP1530/1560 Series, no AC connector	90-277 VAC input, outdoor-rated power adapter

SFP Options

All Aironet 1560 Series outdoor access points support fiber backhaul. The SFP port is built into the access point, but the mechanical interface is external to the access point. A special SFP adaptor/gland kit is needed to interface the fiber cable to the access point. Table 7 lists the SFPs and the adaptor/gland accessory kit.

Table 7.   SFP Options for Aironet 1560 Series Access Points

Part Number	Description	Use Case
AIR-ACC15-SFP-GLD=	Accessory, SFP external Gland/Adaptor, bag of 5 units	Required for use of SFP port
GLC-LX-SM-RGD	1000BaseLX single-mode rugged SFP	Long-distance fiber backhaul on single-mode fiber
GLC-SX-MM-RGD	1000BaseSX multi-mode rugged SFP	Shorter-distance fiber backhaul on multimode fiber
GLC-T-RGD	1000Base-T SFP, industrial temp	GE electrical interface for bridging wired clients like video camera or switches

Accessories

A number of additional accessories are available for the Cisco Aironet 1560 Series to facilitate the completeness of certain applications and installation. Table 8 lists the optional accessories.

Table 8. Optional Accessories for Aironet 1560 Series Access Points

Part Number	Description	Use Case
AIR-ACC245LA-N=	Accessory, 2.4 and 5 GHz lightning arrestor, N connector	Recommended on each RF antenna port connected to extended cable
AIR-ACC15-DC-PLGS=	Accessory, DC-power terminal plug/connector, bag of 10 units	Spare DC power connectors
AIR-ACC15-N-CAP=	Accessory, cover cap for N-connector, bag of 10 units	Spare RF connector caps for AP1562E/PS
AIR-ACCAMK-2=	1560 directional antenna mount kit	Allows direction mounting of AIR-ANT2413P2M-N= or AIR-ANT5114P2M-N= antennas directly to the AP1562E access point
AIR-ACC1560-CVR=	Cover and solar shield for AP1560 Series	Paintable cover to change appearance of AP
AIR-ACC1530-KIT1=	Spare accessory kit for AP1530/1560 Series	Spare cable glands, ground lugs, port covers for AP1530 and AP1560

Example Solution Configurations

Tables 9 and 10 list sample configurations for two 1560 Series models. Pricing is US Global List Price. Please refer to your Cisco sales team or Partner for specific pricing.

Table 9. 1562I Access Point Example Configuration

Product Number	Description	Qty
AIR-AP1562I-B-K9	802.11ac W2 Low-Profile Outdoor AP, Internal Ant, B Reg Dom	1
SWAP1560-MESH-K9	Cisco 1560 Series Unified Mesh Mode Software	1
AIR-ACC1560-PMK1=	Pole Mount Kit with Power Adapter mount	1
AIR-PWRADPT-RGD1=	Power Adapter for AP1530/1560 Series, no AC connector	1

Table 10. 1532E Access Point Example Configuration

Product Number	Description	Qty
AIR-AP1562E-E-K9	802.11ac W2 Low-Profile Outdoor AP, Internal Ant, E Reg Dom	1
SWAP1560-MESH-K9	Cisco 1560 Series Unified Mesh Mode Software	1
AIR-ACC1530-PMK1=	Standard Pole/Wall Mount Kit for AP1530 Series	1
AIR-ANT2547VG-N	2.4 GHz 4dBi/5 GHz 7dBi Dual Band Omni Antenna, Gray, N conn	2

3. Cisco Services

Cisco Technical Services

Table 11 lists Cisco Technical Services for Aironet 1560 Series Outdoor Access Points.

Table 11.   Cisco Technical Services for Aironet 1560 Series Outdoor Access Points

Part Number	Description
Cisco SMARTnet® Service	• Next-business-day, 8 x 5 x 4, 24 x 7 x 4, and 24 x 7 x 2 advance hardware replacement[1] and onsite parts replacement and installation available • Global access to the Cisco Technical Assistance Center (TAC) 24 hours a day • Unrestricted access to extensive Cisco.com resources, communities, and tools • Ongoing operating system software updates[2] within a software-licensed feature set, if any • Proactive diagnostics and real-time alerts on Smart Call Home-enabled devices
Cisco Smart Foundation Service	• Next-business-day advance hardware replacement as available • Business-hours access to the small business (SMB) Cisco TAC (access levels vary by region) • Access to Cisco.com SMB knowledge base • Online technical resources through the Smart Foundation Portal • Operating system software bug fixes and patches, if applicable

[1] Advance hardware replacement is available in various service-level combinations. For example, 8 x 5 x next business day (NBD) indicates that shipment will be initiated during the standard 8-hour business day, 5 days a week (the generally accepted business days within the relevant region), with NBD delivery. Where NBD is not available, same-day shipment is provided. Restrictions apply; review the appropriate SMARTnet service descriptions for details.

[2] Cisco operating system updates include maintenance releases, minor updates, and major updates within the licensed feature set, if applicable.

For more information about Cisco Technical Services, visit http://www.cisco.com/go/ts.

Cisco Tools for Quoting and Ordering

To place an order, visit the Cisco ordering website at http://www.cisco.com/en/US/ordering/index.shtml.

4. Cisco Capital Financing

The significant benefits offered by Cisco Aironet 1560 Series Outdoor Access Points make it the natural choice proving high capacity outdoor wireless coverage. As with any technology investment, the question is the affordability of the new system. The answer is financing from Cisco Capital. Whether through flexible repayments to match expenditure to benefit and help mitigate cash flow issues, or an operating lease to help negate capital expenditure, we can give customers the financing solution that works best for them.

Cisco Capital can help remove or reduce the barriers preventing organizations from obtaining the technology they need. Total solution financing programs help customers and partners:

- Achieve business objectives
- Accelerate growth
- Acquire technology to match current strategies and future needs
- Remain competitive

Cisco Capital also helps your customers achieve financial goals such as optimizing investment dollars, turning CapEx into OpEx, and managing cash flow. And there's just one predictable payment. Cisco Capital operates in more than 100 countries so regardless of location, customers and partners have access to a trusted means to highly secure Cisco products and services. [Learn more](#).

For more information about Cisco Capital financing, visit:

- For Channel Partners: http://www.ciscocapital.com.
- For Cisco Field: http://wwwin.cisco.com/FinAdm/csc/.

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