Connect

Wireless

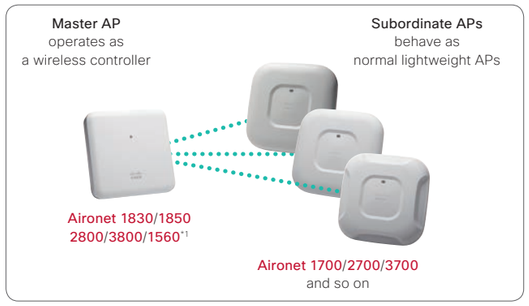
Cisco Mobility Express Solution

The **Cisco Mobility Express Solution** is specifically designed to help small and medium-sized networks easily and cost-effectively deliver enterprise-class wireless access to employees and customers. Cisco Mobility Express Solution is an on-premise, managed Wi-Fi solution that offers:

- The virtual **wireless controller** function supported on **Cisco Aironet 1830/1850/2800/3800/1560 Series**
- Management and control over **Cisco Aironet Access Points** including existing models such as Cisco Aironet 1600/1700/2600/2700/3600/3700 Series
- Easy, over-the-air interface for deployment in under **10 minutes**
- Small and medium-sized deployments of up to **25 access points** and **500 clients**

3-step over-the-air wireless network configuration

In the Cisco Mobility Express Solution, one access point (AP), running the Cisco Mobility Express wireless controller, is designated as the **master AP**. Other access points, referred to as **subordinate APs**, associate to this master AP. The master AP operates as a **wireless controller**, to manage and control the subordinate APs, and also operates as an access point to serve clients. The subordinate APs behave as normal lightweight access points to serve clients.

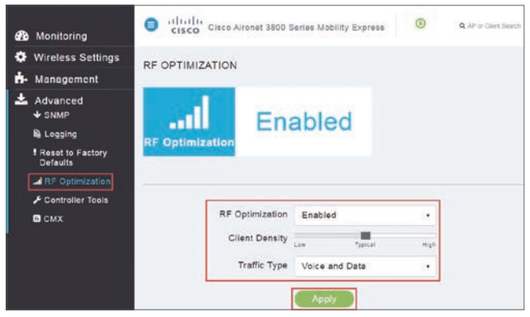


Cisco Mobility Express Software for Cisco Wireless Release 8.3

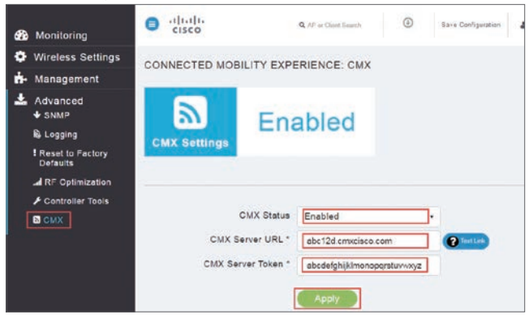
In the **Cisco Wireless Release 8.3**, the following new features and functionalities have been introduced to the Cisco Mobility Express Software:

- **Cisco CMX Cloud**: Enjoy CMX Connect for guest access & Presence Analytics with Cisco Mobility Express by the simple configuration both on Cisco Mobility Express Web UI and CMX in the cloud.
- **Automatic Redirect to the Initial Configuration Wizard**: No need to type 192.168.1.1 IP in the browser to access and set up Cisco Mobility Express.
- **Internal DHCP Server**: No external DHCP server required.
- **NTP Server Pools & OpenDNS**: Three NTP server pools are automatically configured and resolved using OpenDNS.
- **RF Optimization in the Web User Interface**: RF Optimization added on Web UI and parameters can be modified if RF characteristics change.
- **SNMP v3 in the Web UI**: SNMP v2c/v3 are supported in Web UI, also configurable from CLI including v1.
- **Online Software Update**: software download directly from cisco.com to APs. No need to download locally and unzipped, or to configure TFTP parameters.
- **Automatic Addition of APs to Mobility Express Network**: AP will automatically download code from cisco.com and join the network. No manual intervention is needed.
- **Force Mobility Express Failover**: In the Web UI, "Make me Controller" starts the controller function on the selected subordinate AP.
- **Enhanced Resiliency with Standalone Mode on 11ac Wave 2 APs**: Standalone mode will be supported on 11ac Wave 2 APs as well as 11ac Wave 1 APs. Even if master AP went offline, clients connected to these APs will stay connected and will continue to switch data locally.
- **Customized Guest Portal**: Custom Portal and Social login is supported by CMX Connect.

■ RF Optimization in the Web User Interface



■ CMX Settings in the Web User Interface

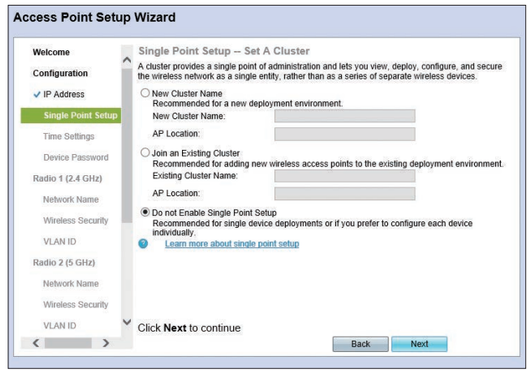


Single Point Setup

The **Single Point Setup (SPS)** is a multi-access point deployment technology supported on the **Cisco WAP Access Points**. It provides a unique centralized method to administer and control wireless services across multiple access points without controllers.
Via one access point on the LAN, you have a single view of the whole wireless LAN to replicate configuration, security, and management across all access points. With SPS, the wireless LAN can scale up to **4**, **8**, or **16** WAPs to provide broader coverage and support additional users as business needs change.

- **100 Series WAP** supports **4** WAPs in a SPS cluster (except WAP 131)
- **300 Series WAP** supports **8** WAPs in a SPS cluster.
- **500 Series WAP** supports **16** WAPs in a SPS cluster.

You can easily create a SPS cluster of WAPs or add a new WAP to an existing SPS cluster, by the simple setup wizard or web-based configuration utility.



Cisco High Density Experience (HDX) Technology

With the introduction of IEEE 802.11ac (11ac) technology, networks are only going to get more crowded. We have enhanced **Cisco High Density Experience (HDX)** suite of solutions, which automatically manages the airwaves and improves Wi-Fi performance. Available on the **Cisco Aironet 2700/2800/3700/3800 Series** Indoor Access Points and the **Cisco Aironet 1560/1570 Series** Outdoor Access Point, HDX is regularly updated with new features that alleviate high-density network strain and improve user experiences as 11ac and other trends load the airwaves with more traffic.

- **Flexible Radio Assignment & Dual 5-GHz**[*1]: Allows the access points to intelligently determine the operating mode of serving radios based on the RF environment. The Dual 5-GHz mode enables both radios to operate in 5-GHz client serving mode, allowing an industry-leading **5.2 Gbps** (2 x 2.6 Gbps) over-the-air speed while increasing client capacity.
- **Turbo performance**: Dedicates CPU & RAM to each radio, allows access points to scale to 60 clients or more, with each client running media-rich video or interactive traffic, without any performance degradation.
- **Cisco ClientLink for 11ac**: improves downlink performance to all mobile devices, including one-, two-, and three-spatial-stream devices on 11a/b/g/n/ac while improving battery life on mobile devices such as smartphones and tablets.
- **Cisco CleanAir for 11ac**: enhanced with 80-, and 160-MHz channel support, provides proactive, high-speed spectrum intelligence to combat performance problems due to wireless interference.
- **Optimized Roaming**: Helps ensure that client devices associate with the access point in their coverage range that offers the fastest data rate available.
- **Dynamic Bandwidth Selection**: Automatically selects the optimal channel width for each radio. For example: If radar is detected on part, but not all, of the frequency, the access point can narrow the serving channel rather than moving entirely to a new frequency, enhancing spectrum efficiency.
- **Zero Impact AVC**[*1]: Uses dedicated hardware acceleration to improve the performance of line-speed applications such as Cisco Application Visibility and Control (AVC).

Cisco ClientLink for 11ac

In a mixed environment with low-speed clients (e.g. 11a/g clients) and high-speed clients (e.g. 11n/ac clients), the communication performance of the entire wireless LAN network will be dragged down by the slower clients. The **Cisco ClientLink** technology implemented on Cisco Aironet Access Points uses the signal processing expansion function, which is embedded in the chipset, to analyze the uplink communication signals from the client and strengthen/optimize the downlink communication signals to enhance the communication performance of low-speed clients. **Cisco ClientLink 3.0/4.0** implemented on the **Cisco Aironet 1560/1570/2700/2800/3700/3800 Series** use the third or fourth antenna of the access points to also enhance the communication performance of 11n/ac-compatible clients supporting up to three data streams, including the iPhone, iPad and latest laptops.

Boost overall throughput
in mixed-client wireless networks

Does NOT require any special capabilities in the client device to work

Cisco CleanAir for 11ac

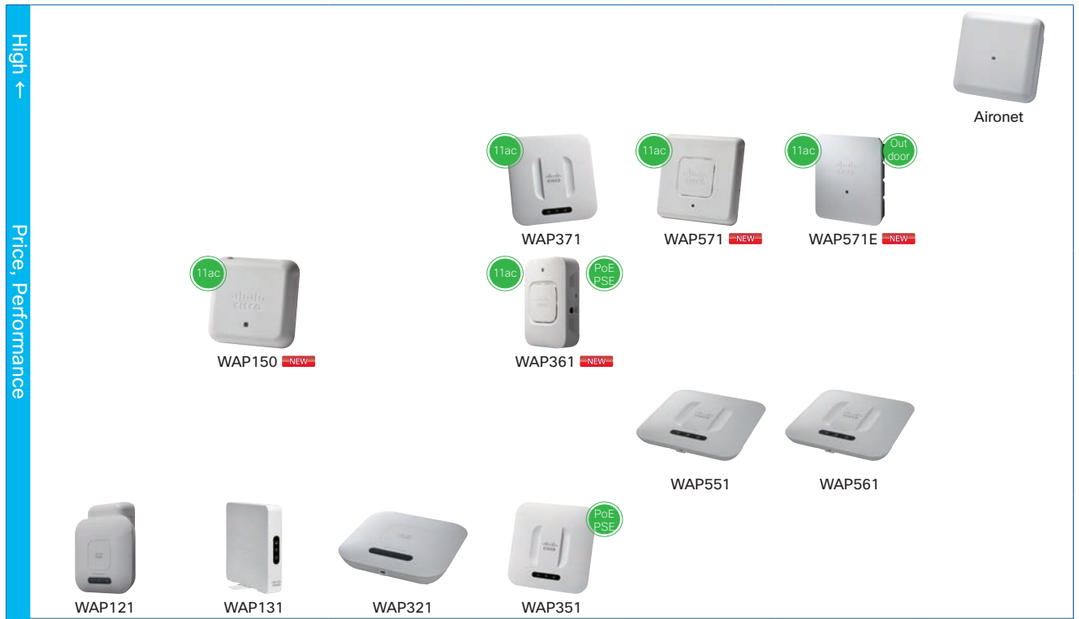
The **Cisco CleanAir** is an innovative technology for the Controller-based Wireless Solution that enables construction of self-recovering, self-optimizing wireless LAN environments.
In conventional technologies, the network administrators were required to move around carrying a sensor-equipped laptop in order to identify the source of radio interference. In Cisco CleanAir, the Cisco Aironet Access Points with built-in ASIC (a dedicated custom chip) serve the roles of a measuring instrument and an analyzer for the wireless environment; and the data obtained from Cisco Aironet Access Points are presented in a visualized manner. This enables network administrators to identify the cause of a problem and fix it promptly and efficiently. This technology also offers the wireless resource management function which alleviates problems by automatically optimizing the frequency band after detecting a radio interference.
Cisco Aironet 1570/2700/3700 Series support the 80 MHz channel bandwidth of 11ac Wave 1, and **Cisco Aironet 1560/2800/3800 Series** support the 160 MHz channel bandwidth of 11ac Wave 2.

*1 Cisco Aironet 2800/3800 Series only.

Cisco WAP Access Points

Cisco WAP Access Points combine business-class features with the reliability and performance needed for small business networks. The Single Point Set-up(SPS) feature makes deployment of multiple access point easy and cost effective.

- **Cisco 100 Series Wireless Access Points**
  Sleek and simple to configure, our 100 Series delivers the performance you need at an affordable price.
- **Cisco 300 Series Wireless Access Points**
  Get Gigabit speed for your mobile devices. Use our simple controller-less management to manage multiple access points.
- **Cisco 500 Series Wireless Access Points**
  Get exceptional performance and coverage for mobile devices and next-generation applications. Use our simple, controller-less management to expand your wireless network.



■ Cisco 100 Series Wireless Access Points

New SKU	Existing SKU	Wireless Data Rate	Active Users per Radio	IEEE 802					2.4 GHz	5 GHz	Con current Radios	Ports		PoE Ports		AC Power
				11a	11b	11g	11n	11ac				FE	GE	Input	Output	
WAP121-x-K9-xx	n/a	300 Mbps	16	-	●	●	●	-	●	-	-	1	-	1*1	-	External
WAP131-x-K9-xx	WAP4410N-xx	300 Mbps	16	●	●	●	●	-	●	●	●	-	1	1*1	-	External
WAP150-x-K9-xx NEW	n/a	867 Mbps	16	●	●	●	●	●	●	●	●	-	1	1*1	-	External

■ Cisco 300 Series Wireless Access Points

New SKU	Existing SKU	Wireless Data Rate	Active Users per Radio	IEEE 802					2.4 GHz	5 GHz	Con current Radios	Ports		PoE Ports		AC Power
				11a	11b	11g	11n	11ac				FE	GE	Input	Output	
WAP321-x-K9	n/a	300 Mbps	32	●	●	●	●	-	●	●	-	-	1	1*2	-	External
WAP351-x-K9	n/a	300 Mbps	32	●	●	●	●	-	●	●	●	-	5	1*2	1	External
WAP361-x-K9 NEW	n/a	867 Mbps	32	●	●	●	●	●	●	●	●	-	5	1*2	1	External
WAP371-x-K9	n/a	1299 Mbps	32	●	●	●	●	●	●	●	●	-	1	1*2	-	External

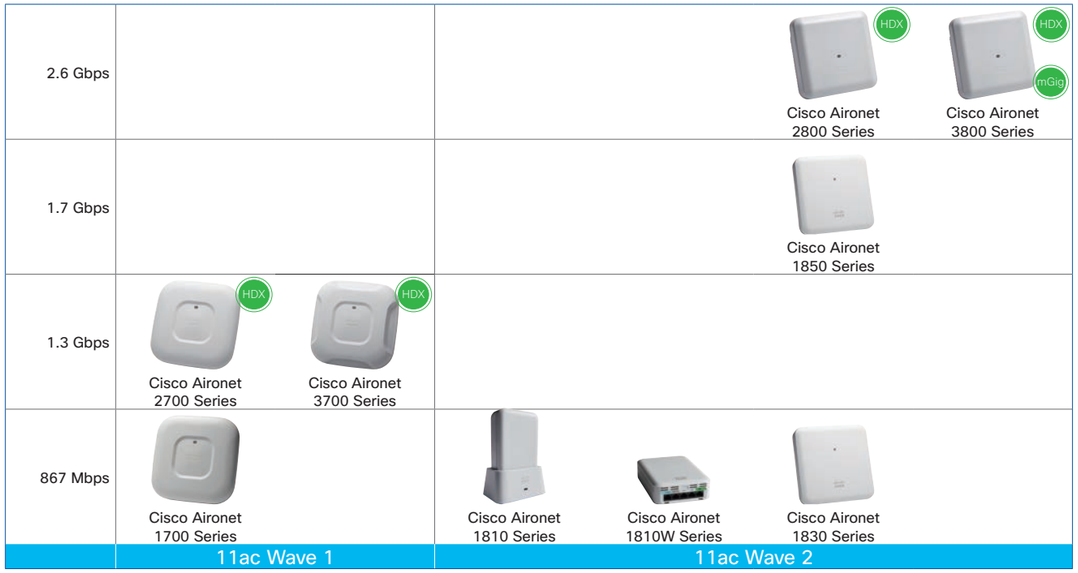
■ Cisco 500 Series Wireless Access Points

New SKU	Existing SKU	Wireless Data Rate	Active Users per Radio	IEEE 802					2.4 GHz	5 GHz	Con current Radios	Ports		PoE Ports		AC Power
				11a	11b	11g	11n	11ac				FE	GE	Input	Output	
WAP551-x-K9	n/a	450 Mbps	32	●	●	●	●	-	●	●	-	-	1	1*2	-	-
WAP561-x-K9	n/a	450 Mbps	32	●	●	●	●	-	●	●	●	-	1	1*2	-	-
WAP571-x-K9 NEW	n/a	1299 Mbps	32	●	●	●	●	●	●	●	●	-	2	2*2	-	-
WAP571E-x-K9 NEW	n/a	1299 Mbps	32	●	●	●	●	●	●	●	●	-	2	2*2	-	-

*1 Power Adapter (included) or Power Injector is required when not using PoE receiving. *2 Power Adapter or Power Injector is required when not using PoE receiving.

Cisco Aironet Access Points

Indoor Access Points



■ Cisco Aironet Indoor Access Points

All models of the Cisco Aironet Indoor Access Points are compatible with the IEEE 802.11n standard; and some models are also compatible with IEEE 802.11ac delivering high-speed and stable wireless LAN environments with a theoretical maximum throughput of between 300 Mbps and 2.6 Gbps. A broad selection of models is available for various installation environments and network requirements.

- **Built-in antenna model**: These models feature a streamlined body and an integrated LAN/power cable using PoE (Power over Ethernet) for a stylish installation that blends into the office environment.
- **External antenna model**: These models feature a rigid metal chassis and support a wide range of operating temperatures for use in factories, warehouses and stores where environmental requirements are very strict. A wide selection of antennas are available for these models to suit different installation environments.

There are two types of models for Cisco Aironet Indoor Access Points: Stand-alone or Mobility Express models, and Controller-based models. The Controller-based models are designed to operate in linkage with the **Cisco Wireless Controllers**.

■ Highlights

- IEEE 802.11n-compatible (All models)
- IEEE 802.11ac Wave 1-compatible (**Cisco Aironet 1700/2700/3700 Series**)
- **IEEE 802.11ac Wave 2**-compatible (**Cisco Aironet 1810/1810W/1830/1850/2800/3800 Series**)
- 2.4 GHz/5 GHz dual-band (All models)
- Cisco CleanAir Express (Controller-based models of the **Cisco Aironet 1700 Series**)
- Cisco CleanAir (Controller-based models of the **Cisco Aironet 2700/2800/3700/3800 Series**)
- Cisco OfficeExtend (Controller-based models, excluding some models)
- Cisco ClientLink (excluding some models)
- Cisco BandSelect (Controller-based models, excluding some models)

For details on Cisco Aironet Indoor Access Points, visit the following Web site:

http://www.cisco.com/go/ap

Cisco Aironet Access Points Transition Guide

■ Cisco Aironet Indoor Access Points

11n	11ac Wave 1	11ac Wave 2
Cisco Aironet 600 Series OfficeExtend	-	Cisco Aironet 1810 Series OfficeExtend
Cisco Aironet 700 Series	-	Cisco Aironet 1830 Series
Cisco Aironet 700W Series	-	Cisco Aironet 1810W Series
Cisco Aironet 1040 Series Cisco Aironet 1600 Series	Cisco Aironet 1700 Series	Cisco Aironet 1850 Series
Cisco Aironet 1140 Series Cisco Aironet 1250 Series Cisco Aironet 1260 Series Cisco Aironet 2600 Series	Cisco Aironet 2700 Series	Cisco Aironet 2800 Series
Cisco Aironet 3500 Series Cisco Aironet 3600 Series	Cisco Aironet 3700 Series	Cisco Aironet 3800 Series

*1 Cisco Aironet 3600/3700 Series are planned to support 11ac Wave 2 via addition of a module.

Cisco Aironet 700 Series

Dimensions (Height x Width x Depth): 5.08 x 17.78 x 17.78 cm Weight: 0.48 kg

SKU	Stand alone	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-SAP702I-x-K9	●	–*3	–	–	–	●	●	–	1	–	●	–	Built-in
AIR-CAP702I-x-K9	–*2	●	–	–	–	●	●	–	1	–	●	–	Built-in

Cisco Aironet 700W Series

Dimensions (Height x Width x Depth): 4.06 x 15.24 x 10.16 cm Weight: 0.39 kg

SKU	Stand alone	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-CAP702W-x-K9	–*2	●	–	–	–	●	●	–	5*4*5	–	●	–	Built-in

Cisco Aironet 1700 Series

Dimensions (Height x Width x Depth): 5.05 x 22.07 x 22.07 cm Weight: 1.00 kg

SKU	Stand alone	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-CAP1702I-x-K9	–*2	●	●*6	●	–	●	●	●	2*7	–	●	–	Built-in

Cisco Aironet 1810 Series OfficeExtend

Dimensions (Height x Width x Depth): 4.06 x 16.51 x 11.43 cm Weight: 0.54 kg

SKU	Stand alone	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-OEAP1810-x-K9	–	●	–	●	–	–	●	●	4*4*5	–	●*8	●	Built-in

Cisco Aironet 1810W Series

Dimensions (Height x Width x Depth): 4.06 x 16.51 x 11.43 cm Weight: 0.54 kg

SKU	Stand alone	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-AP1810W-x-K9	–	●	–	–	–	●	●	●	4*5	–	●*8	●	Built-in

Cisco Aironet 1830 Series

Dimensions (Height x Width x Depth): 5.08 x 21.08 x 21.08 cm Weight: 1.42 kg

SKU	ME Master	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-AP1832I-x-K9C	●	–*3	–	–	–	●	●	●	1	–	●*8	●	Built-in
AIR-AP1832I-x-K9	–*9	●	–	–	–	●	●	●	1	–	●*8	●	Built-in

Cisco Aironet 1850 Series

Dimensions (Height x Width x Depth): 5.08 x 21.08 x 21.08 cm Weight: 1.42 kg

SKU	ME Master	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-AP1852I-x-K9C	●	–*3	–	–	–	●	●	●	2*7	–	●*8	●	Built-in
AIR-AP1852E-x-K9C	●	–*3	–	–	–	●	●	●	2*7	–	●*8	●	External
AIR-AP1852I-x-K9	–*9	●	–	–	–	●	●	●	2*7	–	●*8	●	Built-in
AIR-AP1852E-x-K9	–*9	●	–	–	–	●	●	●	2*7	–	●*8	●	External

Cisco Aironet 2700 Series

Dimensions (Height x Width x Depth): 5.05 x 22.07 x 22.07 cm Weight: 1.00 kg

SKU	Stand alone	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-CAP2702I-x-K9	–*2	●	●	●	●	●	●	●	2*7	–	●*8	●	Built-in
AIR-CAP2702E-x-K9	–*2	●	●	●	●	●	●	●	2*7	–	●*8	●	External

Cisco Aironet 2800 Series

Dimensions (Height x Width x Depth): 5.51 x 22.00 x 22.05 cm Weight: 1.60 kg*10

SKU	ME Master	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-AP2802I-x-K9C	●	–*3	●	●	●	●	●	●	2*7	–	–	●	Built-in
AIR-AP2802E-x-K9C	●	–*3	●	●	●	●	●	●	2*7	–	–	●	External
AIR-AP2802I-x-K9	–*9	●	●	●	●	●	●	●	2*7	–	–	●	Built-in
AIR-AP2802E-x-K9	–*9	●	●	●	●	●	●	●	2*7	–	–	●	External

Cisco Aironet 3700 Series

Dimensions (Height x Width x Depth): 5.36 x 22.10 x 22.10 cm Weight: 1.13 kg

SKU	Stand alone	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-CAP3702I-x-K9	–*2	●	●	●	●	●	●	●	1	–	●*8	●	Built-in
AIR-CAP3702E-x-K9	–*2	●	●	●	●	●	●	●	1	–	●*8	●	External
AIR-CAP3702P-x-K9	–*2	●	●	–	●	●	●	●	1	–	●*8	●	External

Cisco Aironet 3800 Series

Dimensions (Height x Width x Depth): 6.25 x 22.00 x 22.05 cm Weight: 2.00 kg*11

SKU	ME Master	Controller based	Clean Air	Office Extend	Client Link	Band Select	IEEE 802		Ports		PoE (PD)*1		Antenna
							11n	11ac	GE	mGig	802.3af	802.3at	
AIR-AP3802I-x-K9C	●	–*3	●	●	●	●	●	●	1	1	–	●	Built-in
AIR-AP3802E-x-K9C	●	–*3	●	●	●	●	●	●	1	1	–	●	External
AIR-AP3802P-x-K9C	●	–*3	●	●	●	●	●	●	1	1	–	●	External
AIR-AP3802I-x-K9	–*9	●	●	●	●	●	●	●	1	1	–	●	Built-in
AIR-AP3802E-x-K9	–*9	●	●	●	●	●	●	●	1	1	–	●	External
AIR-AP3802P-x-K9	–*9	●	●	–	●	●	●	●	1	1	–	●	External

Cisco Hyperlocation Solution for the Cisco Aironet 3700 Series

SKU	Description
AIR-RM3010L-x-K9=	Hyperlocation Module with Advance Security.
AIR-ANT-LOC-01=	Hyperlocation Antenna, Model 1, Attached Omni.

*1 The Cisco Aironet Power Supply option is required when not using PoE receiving. *2 Migration to the standalone mode is supported. *3 Migration to the controller-based mode is supported.
*4 A dedicated WAN port is included. *5 PoE power supplying GE x 1 is included. *6 Cisco CleanAir Express is supported in Cisco AireOS 8.0 or higher. *7 AUX x 1 is included.
*8 Some features are disabled when powered via PoE (see datasheet). *9 Migration to the Mobility Express model is supported.
*10 Aironet 2802E - Dimensions (Height x Width x Depth): 6.35 x 22.00 x 22.28 cm, Weight: 2.10 kg
*11 Aironet 3802E and 3802P - Dimensions (Height x Width x Depth): 6.65 x 22.00 x 22.05 cm, Weight: 2.10 kg.

Outdoor Access Points

Cisco Aironet Outdoor Access Points

The Cisco Aironet Outdoor Access Points deliver high-speed and stable wireless LAN environments in various locations such as in a massive city-size area, inside a company building, a factory ground, or a mining field.
Featuring a chassis with IEC IP67 waterproof and NEMA Type 4X certified outdoor dust/rust resistance, a wide lineup of outdoor models is available to meet the diversifying customer needs in the harshest of environments.

- **Built-in antenna models**: **Cisco Aironet 1532I**, **Cisco Aironet 1562I/D**, and **Cisco Aironet 1572IC** have a polished exterior design that blends into the surrounding environment.
- **External antenna models**: A wide selection of antennas are available for **Cisco Aironet 1532E**, **Cisco Aironet 1562E/PS**, and **Cisco Aironet 1572EAC/EC** to suit different installation environments.
- **Built-in cable modem models**: **Cisco Aironet 1572IC/EC** incorporate a cable modem that is compatible with DOCSIS 3.0 (24x8), an international standard for communication services via coaxial cables used for cable television, etc.

Cisco Aironet 1532I
Cisco Aironet 1562I/D
NEW

Cisco Aironet 1532E
Cisco Aironet 1562E/PS
NEW

Cisco Aironet 1572EAC/EC

Cisco Aironet 1572IC

Highlights

- IEC IP67 waterproof (All models)
- NEMA Type 4X certified outdoor dust/rust resistance (All models)
- Designed for harsh outdoor environments (All models)
- Built-in SFP module slot (**Cisco Aironet 1560/1570 Series**)
- GPS (**Cisco Aironet 1570 Series**) *1
- IEEE 802.11n compatible (All models)
- IEEE 802.11ac Wave 1-compatible (**Cisco Aironet 1570 Series**)
- **IEEE 802.11ac Wave 2**-compatible (**Cisco Aironet 1560 Series**)
- 2.4 GHz/5 GHz dual-band (All models)
- 4.9-GHz public safety band (**Cisco Aironet 1562PS**)
- Cisco CleanAir (**Cisco Aironet 1560/1570 Series**)
- ClientLink (**Cisco Aironet 1560/1570 Series**)
- Cisco BandSelect (All models)
- Cisco High Density Experience (HDX) (**Cisco Aironet 1560/1570 Series**)

Model Name	Dimensions (Height x Width x Depth)	Maximum Weight
Cisco Aironet 1532I	22.86 x 17.78 x 10.16 cm	2.27 kg
Cisco Aironet 1532E	25.40 x 17.78 x 10.16 cm	2.49 kg
Cisco Aironet 1562I NEW	22.86 x 17.27 x 9.90 cm	2.54 kg
Cisco Aironet 1562E NEW	22.86 x 17.27 x 9.90 cm	2.54 kg
Cisco Aironet 1562D NEW	22.86 x 17.27 x 10.92 cm	2.59 kg
Cisco Aironet 1562PS NEW	22.86 x 17.27 x 9.90 cm	2.54 kg
Cisco Aironet 1572IC	29.97 x 20.07 x 20.07 cm	5.22 kg
Cisco Aironet 1572EAC	29.97 x 20.07 x 16.00 cm	6.12 kg
Cisco Aironet 1572EC	29.97 x 20.07 x 16.00 cm	6.12 kg

Cisco Aironet 1530 Series

SKU	Clean Air	Client Link	Band Select	Ports			Power Supply Options						Antennas			
				GE	SFP	Cable	AC	DC	PoE (PSE)	PoE+ (PD)	UPOE (PD)	PoC (PD)	Built-in Omnidirectional	Built-in Directional	External Dual-band	External Single-band
AIR-CAP1532I-x-K9	–	–	●	2	–	–	–	●	–	–	●	–	3	–	–	–
AIR-CAP1532E-x-K9	–	–	●	2	–	–	–	●	–	●	–	–	–	–	2	2 + 2

Cisco Aironet 1560 Series NEW

SKU	Clean Air	Client Link	Band Select	Ports			Power Supply Options						Antennas			
				GE	SFP	Cable	AC	DC	PoE (PSE)	PoE+ (PD)	UPOE (PD)	PoC (PD)	Built-in Omnidirectional	Built-in Directional	External Dual-band	External Single-band
AIR-AP1562I-x-K9	●	●	●	1	1	–	–	●	–	–	●	–	3	–	–	–
AIR-AP1562E-x-K9	●	●	●	1	1	–	–	●	–	●	–	–	–	–	2	2 + 2
AIR-AP1562D-x-K9	●	●	●	1	1	–	–	●	–	●	–	–	–	2	–	–
AIR-AP1562PS-x-K9	●	●	●	1	1	–	–	●	–	●	–	–	–	–	2	2 + 2

Cisco Aironet 1570 Series

SKU	Clean Air	Client Link	Band Select	Ports			Power Supply Options						Antennas			
				GE	SFP	Cable	AC	DC	PoE (PSE)	PoE+ (PD)	UPOE (PD)	PoC (PD)	Built-in Omnidirectional	Built-in Directional	External Dual-band	External Single-band
AIR-AP1572ICn-x-K9*3	●	●	●	2	1	1	–	●	–	–	–	●	4	–	–	–
AIR-AP1572EAC-x-K9	●	●	●	2	1	–	●	●	●*4	–	●	–	–	–	4	2 + 2
AIR-AP1572ECn-x-K9*3	●	●	●	2	1	1	–	●	–	–	–	●	–	–	4	2 + 2

*1 GPS Antenna (AIR-ANT-GPS-1) is required. *2 2.4 GHz: 3 Tx / 3 Rx Antennas with 3 streams. 5 GHz: 2 Tx / 3 Rx Antennas with 2 streams.
*3 If "n" is "1", Diplex Filter split of: 5-42/88-1000 MHz. If "n" is "2", Diplex Filter split of: 5-85/108-1002 MHz. If "n" is "3", Diplex Filter split of: 5-65/108-1002 MHz. *4 PoE+ is supported.

What is Meant by a "x" Included in the SKU

Standalone Access Points*1

Country	Australia	Brunei	China	Fiji	Hong Kong	India	Indonesia	Japan	Korea	Macau	Malaysia	Mongolia	New Zealand	Pakistan	Philippines	Singapore	Sri Lanka	Taiwan	Thailand	Vietnam
x	Z	S	C, H	N	N	D, N	C, F	Q	K	C	C, K	E	Z	–	A	S	E	T	E	E

Controller-based Indoor Access Points*1

Country	Australia	Brunei	China	Fiji	Hong Kong	India	Indonesia	Japan	Korea	Macau	Malaysia	Mongolia	New Zealand	Pakistan	Philippines	Singapore	Sri Lanka	Taiwan	Thailand	Vietnam
x	N, Z	S	C, H	N	N, S	D, N	C, F	P, Q	K	S	K	E	N, Z	–	A	S	E	T	E, S	E, S

Controller-based Outdoor Access Points*1

Country	Australia	Brunei	China	Fiji	Hong Kong	India	Indonesia	Japan	Korea	Macau	Malaysia	Mongolia	New Zealand	Pakistan	Philippines	Singapore	Sri Lanka	Taiwan	Thailand	Vietnam
x	N, Z	–	C, H	–	N, S	D, N	C, F	Q	K	–	C, L	–	N, Z	C, G	A	S	–	T	E	E, S

*1 Customers are responsible for verifying approval for use in their individual countries.
To verify approval that corresponds to a particular country, or the regulatory domain used in a specific country, see http://www.cisco.com/go/aironet/compliance.
Not all models available for all regulatory domains. Not all regulatory domains have been approved. As they are approved, the SKU will be available on the Global Price List.

Cisco Aironet Antennas and Accessories

■ Cisco Aironet 2.4 GHz Omni-directional Antenna

SKU	Installation/Dimensions	Gain (dBi)
 AIR-ANT2420V-N	12.70 x 2.54 cm	2.0
 AIR-ANT2450V-N	27.94 x 2.54 cm	5.0
 AIR-ANT2455V-N	31.75 x 2.54 cm	5.5
 AIR-ANT2480V-N	49.53 x 2.22 cm	8.0

■ Cisco Aironet 2.4 GHz Directional Antenna

SKU	Installation/Dimensions/Weight	Gain (dBi)
 AIR-ANT2413P2M-N	Patch 19.81 x 19.81 x 3.05 cm 0.61 kg	13.0

■ Cisco Aironet Dual-band Omni-directional Antenna

SKU	Installation/Dimensions/Weight	Gain (dBi)
 AIR-ANT2524V4C-R	Ceiling mount 18.42 x 18.42 x 2.54 cm 0.59 kg	2.0 (2.4 GHz) 4.0 (5 GHz)
 AIR-ANT2544V4M-R	Wall mount 55.37 x 16.00 cm 0.67 kg	4.0 (2.4 GHz) 4.0 (5 GHz)
 AIR-ANT2547V-N	28.19 x 3.18 cm 170 g	4.0 (2.4 GHz) 7.0 (5 GHz)
 AIR-ANT2547VG-N	28.19 x 3.18 cm 170 g	4.0 (2.4 GHz) 7.0 (5 GHz)
 AIR-ANT2568VG-N	37.59 x 3.81 cm 204 g	6.0 (2.4 GHz) 8.0 (5 GHz)

■ Cisco Aironet 5 GHz Omni-directional Antenna

SKU	Installation/Dimensions	Gain (dBi)
 AIR-ANT5140V-N	12.70 x 2.54 cm	4.0
 AIR-ANT5175V-N	29.59 x 2.54 cm	7.5
 AIR-ANT5180V-N	27.94 x 2.54 cm	8.0

■ Cisco Aironet 5 GHz Directional Antenna

SKU	Installation/Dimensions/Weight	Gain (dBi)
 AIR-ANT5114P2M-N	Patch 19.81 x 19.81 x 3.05 cm 0.61 kg	14.0

■ Cisco Aironet Dual-band Dipole Antenna

SKU	Color/Dimensions/Weight	Gain (dBi)
 AIR-ANT2524DB-R	Black 16.84 x 2.11 cm 36.85 g	2.0 (2.4 GHz) 4.0 (5 GHz)
 AIR-ANT2524DG-R	Grey 16.84 x 2.11 cm 36.85 g	2.0 (2.4 GHz) 4.0 (5 GHz)
 AIR-ANT2524DW-R	White 16.84 x 2.11 cm 36.85 g	2.0 (2.4 GHz) 4.0 (5 GHz)
 AIR-ANT2535SDW-R	White 8.38 x 3.18 cm 48.19 g	3.0 (2.4 GHz) 5.0 (5 GHz)

■ Cisco Aironet Dual-band Directional Antenna

SKU	Installation/Dimensions/Weight	Gain (dBi)
 AIR-ANT2566P4W-R	Patch 16.00 x 27.94 x 3.05 cm 0.64 kg	6.0 (2.4 GHz) 6.0 (5 GHz)
 AIR-ANT2566D4M-R	Patch 25.40 x 25.40 x 4.09 cm 1.36 kg	6.0 (2.4 GHz) 6.0 (5 GHz)
 AIR-ANT2588P3M-N	Patch 30.48 x 17.78 x 2.79 cm 0.45 kg	8.0 (2.4 GHz) 8.0 (5 GHz)
 AIR-ANT2513P4M-N	Patch 30.48 x 17.78 x 2.79 cm 0.45 kg	13.0 (2.4 GHz) 13.0 (5 GHz)

For details on Cisco Aironet Antennas, visit the following Web site:

http://www.cisco.com/go/antenna

■ Cisco Aironet 2.4 GHz Omni-directional Antenna Model Compatibility Comparison

SKU	Gain (dBi)		Compatible Models										
	2.4 GHz	5 GHz	1852E	2702E	2802E	3702E	3702P	3802E	3802P	1532E	1562E	1562PS	1572E
AIR-ANT2420V-N	2.0	–	–	–	–	–	–	–	–	–	–	–	●
AIR-ANT2450V-N	5.0	–	–	–	–	–	–	–	–	●	●	●	●
AIR-ANT2455V-N	5.5	–	–	–	–	–	–	–	–	–	–	–	–
AIR-ANT2480V-N	8.0	–	–	–	–	–	–	–	–	●	●	●	●

■ Cisco Aironet 5 GHz Omni-directional Antenna Model Compatibility Comparison

SKU	Gain (dBi)		Compatible Models										
	2.4 GHz	5 GHz	1852E	2702E	2802E	3702E	3702P	3802E	3802P	1532E	1562E	1562PS	1572E
AIR-ANT5140V-N	–	4.0	–	–	–	–	–	–	–	–	–	–	●
AIR-ANT5175V-N	–	7.5	–	–	–	–	–	–	–	–	–	–	–
AIR-ANT5180V-N	–	8.0	–	–	–	–	–	–	–	●	●	●	●

■ Cisco Aironet 2.4 GHz Directional Antenna Model Compatibility Comparison

SKU	Gain (dBi)		Compatible Models										
	2.4 GHz	5 GHz	1852E	2702E	2802E	3702E	3702P	3802E	3802P	1532E	1562E	1562PS	1572E
AIR-ANT2413P2M-N	13.0	–	–	–	–	–	–	–	–	●	●	●	●

■ Cisco Aironet 5 GHz Directional Antenna Model Compatibility Comparison

SKU	Gain (dBi)		Compatible Models										
	2.4 GHz	5 GHz	1852E	2702E	2802E	3702E	3702P	3802E	3802P	1532E	1562E	1562PS	1572E
AIR-ANT5114P2M-N	–	14.0	–	–	–	–	–	–	–	●	●	●	●

■ Cisco Aironet Dual-band Di-pole Antenna Model Compatibility Comparison

SKU	Gain (dBi)		Compatible Models										
	2.4 GHz	5 GHz	1852E	2702E	2802E	3702E	3702P	3802E	3802P	1532E	1562E	1562PS	1572E
AIR-ANT2524DB-R	2.0	4.0	●	●	●	●	●	●	●	–	–	–	–
AIR-ANT2524DG-R	2.0	4.0	●	●	●	●	●	●	●	–	–	–	–
AIR-ANT2524DW-R	2.0	4.0	●	●	●	●	●	●	●	–	–	–	–
AIR-ANT2535SDW-R	3.0	5.0	●	●	●	●	●	●	●	–	–	–	–

■ Cisco Aironet Dual-band Omni-directional Antenna Model Compatibility Comparison

SKU	Gain (dBi)		Compatible Models										
	2.4 GHz	5 GHz	1852E	2702E	2802E	3702E	3702P	3802E	3802P	1532E	1562E	1562PS	1572E
AIR-ANT2524V4C-R	2.0	4.0	●	●	●	●	●	●	●	–	–	–	–
AIR-ANT2544V4M-R	4.0	4.0	●	●	●	●	●	●	●	–	–	–	–
AIR-ANT2547V-N	4.0	7.0	–	–	–	–	–	–	–	●	●	●	●
AIR-ANT2547VG-N	4.0	7.0	–	–	–	–	–	–	–	●	●	●	●
AIR-ANT2568VG-N	6.0	8.0	–	–	–	–	–	–	–	–	●	●	●

■ Cisco Aironet Dual-band Directional Antenna Model Compatibility Comparison

SKU	Gain (dBi)		Compatible Models										
	2.4 GHz	5 GHz	1852E	2702E	2802E	3702E	3702P	3802E	3802P	1532E	1562E	1562PS	1572E
AIR-ANT2566P4W-R	6.0	6.0	●	●	●	●	●	●	●	–	–	–	–
AIR-ANT2566D4M-R	6.0	6.0	●	●	●	●	●	●	●	–	–	–	–
AIR-ANT2588P3M-N	8.0	8.0	–	–	–	–	–	–	–	●	●	●	●
AIR-ANT2513P4M-N	13.0	13.0	–	–	–	–	●	–	●	–	●	●	●

■ Cisco Aironet Power Supply Options

SKU	Description	Compatible Models													
		700	700W	1810	1810W	1830	1850	1700	2700	2800	3700	3800	1530	1560	1570
AIR-PWRINJ4=	Power Injector	●	●	–	–	●	●	●	●	–	●	–	–	–	–
AIR-PWRINJ5=	Power Injector	●	●	●	●	●*1	●*1	●	●*2	–	–	–	–	–	–
AIR-PWRINJ6=	Power Injector	●	●	●	●	●	●	●	●	●	●	●	●	●*3	–
AIR-PWRINJ-30=	Power Injector	–	–	–	–	–	–	–	–	–	–	–	●	–	–
AIR-PWRINJ1500-2=	Power Injector	–	–	–	–	–	–	–	–	–	–	–	●	–	●*4
AIR-PWRINJ-60RGD1= NEW	Power Injector	–	–	–	–	–	–	–	–	–	–	–	–	●	●
AIR-PWRINJ-60RGD2= NEW	Power Injector	–	–	–	–	–	–	–	–	–	–	–	–	●	●
AIR-PWR-B=	Power Supply Module	●	–	–	–	–	–	●	●	–	●	–	–	–	–
AIR-PWR-C=	Power Supply Module	–	●	–	–	●	●	–	–	–	–	–	–	–	–
AIR-PWR-D=	Power Supply Module	●	●	●	●	●	●	–	–	–	–	–	–	–	–
AIR-PWR-50=	Power Supply Module	–	–	–	–	–	–	–	–	–	–	●	–	–	–
AIR-PWRADPT-1530=	Power Supply Module	–	–	–	–	–	–	–	–	–	–	–	●	–	–
AIR-PWRADPT-RGD1= NEW	Power Supply Module	–	–	–	–	–	–	–	–	–	–	–	●	●	–

*1 Full features are supported when powered via PoE+, AIR-PWRINJ4= or AIR-PWR-C= (The AIR-PWRINJ5 supports PoE receiving only).
*2 Full features are supported when powered via PoE+, AIR-PWRINJ4= or AIR-PWR-B= (The AIR-PWRINJ5 supports PoE receiving only).
*3 Cisco Aironet 1562I: Full features are supported when powered via UPOE, AIR-PWRINJ-60RGD1/2= or AIR-PWRADPT-RGD1= (The AIR-PWRINJ6 supports PoE+ receiving only).
*4 Cisco Aironet 1572ICn is not supported.

Cisco Wireless Controllers

Appliance/ Virtual Machine	 2500 Series Wireless Controller	 Virtual Wireless Controller	 5500 Series Wireless Controller	 8500 Series Wireless Controller	
Switch	 Catalyst 3650 Series	 Catalyst 3850 Series			
Access Point (Mobility Express)	 Aironet 1830/1850/2800/ 3800/1560 Series				
Number of Managed Access Points → More					

Cisco Wireless Controllers is a platform that enables controller-based management of multiple Cisco Aironet Access Points including remote bases. An extensive lineup of products includes software products for VMware ESX/ESXi and Linux Kernel-based Virtual Machine (KVM), and dedicated hardware appliances. A flexible licensing system is adopted for the number of managed access points, making it one of the most cost-effective solutions in the industry. The required number of managed access points can be selected based on the network requirements at the time of deployment; and the number of managed access points can be expanded flexibly based on the post-deployment network requirements.

■ Cisco Aironet 1830/1850/2800/3800/1560 Series Access Points

	OS	Managed Access Points		Clients	RF tags	Throughput	Office Extend	Wireless Mesh	Ports*1			Rack mount
		Default	Maximum						GE	SFP	SFP +	
Mobility Express	-	25	25	500	-	1 Gbps	-	-	-	-	-	-

■ Cisco Catalyst 3650/3850 Series Switches

Model	OS	Managed Access Points		Clients	RF tags	Throughput	Office Extend	Wireless Mesh	Ports*1			Rack mount
		Default	Maximum						GE	SFP	SFP +	
Catalyst 3650	IOS XE	0	25	1,000	1,000	20 - 40 Gbps	-	-	-	-	-	1 RU
Catalyst 3850	IOS XE	0	50	2,000	1,000	20 - 40 Gbps	-	-	-	-	-	1 RU

■ Cisco 2500 Series Wireless Controller　Dimensions (Height x Width x Depth): 4.39 x 20.32 x 17.15 cm　Maximum Weight: 1.59 kg

SKU	OS	Managed Access Points		Clients	RF tags	Throughput	Office Extend	Wireless Mesh	Ports			Rack mount
		Default	Maximum						GE	SFP	SFP +	
AIR-CT2504-5-K9	AireOS	5	75	1,000	500	1 Gbps	●	●	4	-	-	-*2
AIR-CT2504-15-K9	AireOS	15	75	1,000	500	1 Gbps	●	●	4	-	-	-*2
AIR-CT2504-25-K9	AireOS	25	75	1,000	500	1 Gbps	●	●	4	-	-	-*2
AIR-CT2504-50-K9	AireOS	50	75	1,000	500	1 Gbps	●	●	4	-	-	-*2

■ Cisco Virtual Wireless Controller

SKU	OS	Managed Access Points		Clients	RF tags	Throughput	Office Extend	Wireless Mesh	Ports			Rack mount
		Default	Maximum						GE	SFP	SFP +	
L-AIR-CTVM-5-K9	AireOS	5	3,000	32,000	3,000	500 Mbps	●	-	-	-	-	-

■ Cisco 5500 Series Wireless Controller (5508/5520)

SKU	OS	Managed Access Points		Clients	RF tags	Throughput	Office Extend	Wireless Mesh	Ports			Rack mount
		Default	Maximum						GE	SFP	SFP +	
AIR-CT5508-12-K9	AireOS	12	500	7,000	5,000	8 Gbps	●	●	-	8	-	1 RU
AIR-CT5508-25-K9	AireOS	25	500	7,000	5,000	8 Gbps	●	●	-	8	-	1 RU
AIR-CT5508-50-K9	AireOS	50	500	7,000	5,000	8 Gbps	●	●	-	8	-	1 RU
AIR-CT5520-K9	AireOS	0	1,500	20,000	25,000	20 Gbps	●	●	-	-	2	1 RU
AIR-CT5520-50-K9	AireOS	50	1,500	20,000	25,000	20 Gbps	●	●	-	-	2	1 RU

■ Cisco 8500 Series Wireless Controller (8510/8540)

SKU	OS	Managed Access Points		Clients	RF tags	Throughput	Office Extend	Wireless Mesh	Ports			Rack mount
		Default	Maximum						GE	SFP	SFP +	
AIR-CT8510-300-K9	AireOS	300	6,000	64,000	50,000	10 Gbps	●	●	-	-	2	1 RU
AIR-CT8510-500-K9	AireOS	500	6,000	64,000	50,000	10 Gbps	●	●	-	-	2	1 RU
AIR-CT8510-1K-K9	AireOS	1,000	6,000	64,000	50,000	10 Gbps	●	●	-	-	2	1 RU
AIR-CT8510-3K-K9	AireOS	3,000	6,000	64,000	50,000	10 Gbps	●	●	-	-	2	1 RU
AIR-CT8510-6K-K9	AireOS	6,000	6,000	64,000	50,000	10 Gbps	●	●	-	-	2	1 RU
AIR-CT8540-K9	AireOS	0	6,000	64,000	50,000	40 Gbps	●	●	-	-	4	2 RU
AIR-CT8540-1K-K9	AireOS	1,000	6,000	64,000	50,000	40 Gbps	●	●	-	-	4	2 RU

*1　Depends on models.　*2　Rack Mounting Brackets (AIR-CT2504-RMNT) is required.

■ Additional Access Point License for Cisco 2500 Series Wireless Controller*1

SKU	Additional	Compatible Models
L-LIC-CT2504-1A	1	2504
L-LIC-CT2504-5A	5	2504
L-LIC-CT2504-25A	25	2504

■ Additional Access Point License for Cisco Virtual Wireless Controller*2

SKU	Additional	Compatible Models
L-LIC-CTVM-1A	1	-
L-LIC-CTVM-5A	5	-
L-LIC-CTVM-25A	25	-

■ Additional Access Point License for Cisco 5500 Series Wireless Controller*4

SKU	Additional	Compatible Models
L-LIC-CT5508-1A	1	5508
L-LIC-CT5508-25A	25	5508
L-LIC-CT5508-50A	50	5508
L-LIC-CT5508-100A	100	5508
L-LIC-CT5508-250A	250	5508
LIC-CT5520-1A	1	5520

■ Additional Access Point License for Cisco 8500 Series Wireless Controller*5

SKU	Additional	Compatible Models
L-LIC-CT8500-1A	1	8510
L-LIC-CT8500-100A	100	8510
L-LIC-CT8500-500A	500	8510
L-LIC-CT8500-1000A	1,000	8510
LIC-CT8540-1A	1	8540

*1　L-LIC-CT2504-UPG is required.　*2　L-LIC-CTVM-UPG is required.　*3　L-LIC-WISM2-UPG is required.　*4　L-LIC-CT5508-UPG or L-LIC-CT5540-UPG is required.
*5　L-LIC-CT8500-UPG or L-LIC-CT8540-UPG is required.

Cisco Wireless Controller Software

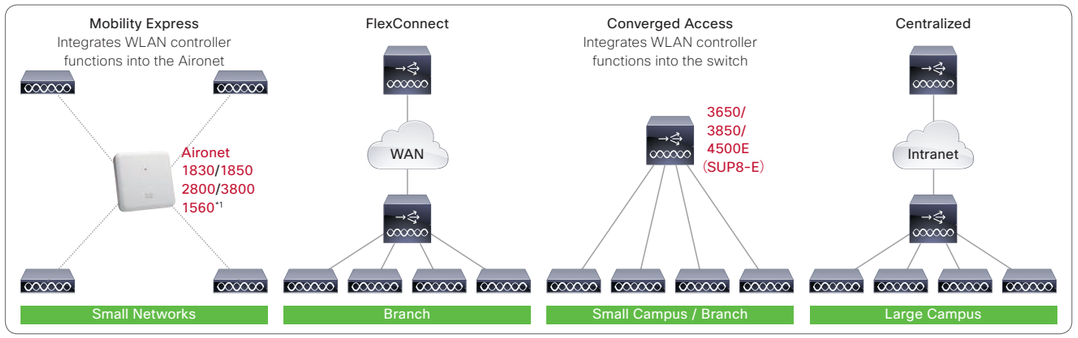
Unlike traditional products, the Cisco Catalyst 3650/3850 Series incorporate the Cisco IOS XE based wireless controller software. Rich features of the Cisco IOS including Flexible NetFlow, advanced QoS and dACL (downloadable Access Control List) can be provided for wireless LAN networks as well.

■ Cisco Wireless Controller Software Specification Comparison

	AirOS	IOS-XE
Resilience	Client SSO, AP SSO, N+1, High-availability option SKU	AP SSO, Multiple LAG, High-availability option SKU
QoS	Alloy QoS	High level of QoS (MQC)
Security	Dynamic ACLs, SGA (SXP)	dACL
Roaming	L2 and L3 FSR, IEEE 802.11r, Neighbor List	L2 and L3 FSR
Service	Bonjour, AVC, Static Netflow	Flexible Netflow, AVC
Command Line Interface	Secure FTP	Cisco IOS CLI, Secure Shell, EEM/TCL/TK

Deployment Modes

Cisco's wireless solutions can be broadly classified into Standalone systems that operate Cisco Aironet Access Points individually and Controller-based systems that centrally manage multiple Cisco Aironet Access Points using a Cisco Wireless Controller. Multiple expansion modes are also supported in Controller-based systems.



The Mesh Mode, FlexConnect + Mesh Mode, OfficeExtend Mode, Monitor Mode, Rogue Detector Mode, and Sniffer Mode are also supported.

■ Cisco Wireless Controller Deployment Mode Compatibility Comparison

Platform	Deployment Modes					
	Mobility Express	FlexConnect	Converged Access	Centralized	Mesh	OfficeExtend
Cisco Aironet 1830/1850/2800/3800/1560 Series Access Points	●	-	-	-	-	-
Cisco Catalyst 3650/3850 Series Switches	-	-	●	●	-	-
Cisco 2500 Series Wireless Controller	-	●	-	●	●	●
Cisco Virtual Wireless Controller	-	●	-	-	-	-
Cisco 5500 Series Wireless Controller	-	●	●*1,2	●	●	●
Cisco 8500 Series Wireless Controller	-	●	-	●	●	●

*1　Cisco Wireless Controller Software release 7.3.112.0 is required.　*2　Cisco AireOS 8.1 and higher are not supported.

Mobility Services & Network Management Tools

Cisco Mobility Services Engine (MSE)

Cisco Mobility Services Engine (MSE) is a platform that provides a wide range of mobility services including Cisco CleanAir, Cisco Base Location Services, Cisco Connected Mobile Experiences (CMX), and Cisco Wireless Intrusion Prevention System (wIPS). This platform is implemented as a software product on VMware ESX/ESXi or as a hardware appliance.

■ Cisco Connected Mobile Experiences (CMX) release 10
Cisco CMX 10 is a platform that enhances the Cisco wireless LAN by:

- Calculating the location of all wireless devices in a venue, including mobile devices, tags, rogue access points, and wireless interferers.
- Generating advanced location analytics (CMX Analytics).
- Providing a visitor wireless onboarding platform (CMX Connect).
- Calculating the location of Bluetooth Low Energy (BLE) beacons.

■ Cisco Connected Mobile Experiences (CMX) release 10 License
- Cisco CMX Base License
  Provides the ability to determine the location of Wi-Fi clients, Bluetooth low energy (BLE) beacons, devices, and RFID tags, CMX Connect, third-party integration using standard REST APIs.
- Cisco CMX Advanced License
  Provides all the CMX Base services and CMX Analytics, CMX Presence Analytics
- Cisco wIPS Monitor Mode License
  Provides wIPS for Cisco Aironet Access Points in monitor mode (will be available in a future release).
- Cisco wIPS Enhanced Local Mode License
  Provides wIPS for Cisco Aironet Access Points in local mode (will be available in a future release).

■ Cisco Mobility Services Engine (MSE)

SKU	Description	Managed Access Points	
		Location service CMX	wIPS Monitor Mode wIPS Enhanced Local Mode
L-MSE-7.0-K9	Software product	5,000	10,000
AIR-MSE-3365-K9	Hardware appliance	10,000	10,000

■ Cisco CMX Base License

SKU		Supported Access Points
MSE 8.0*1	CMX 10.x*2	
L-LS-1AP	L-LS-1AP-N	1
L-LS-100AP	-	100
L-LS-1000AP	-	1,000

■ Cisco wIPS Monitor Mode License

SKU		Supported Access Points
MSE 8.0*1	CMX 10.x*2	
L-WIPS-MM-1AP	TBD	1
L-WIPS-MM-100AP	TBD	100
L-WIPS-MM-1000AP	TBD	1,000

■ Cisco CMX Advanced License

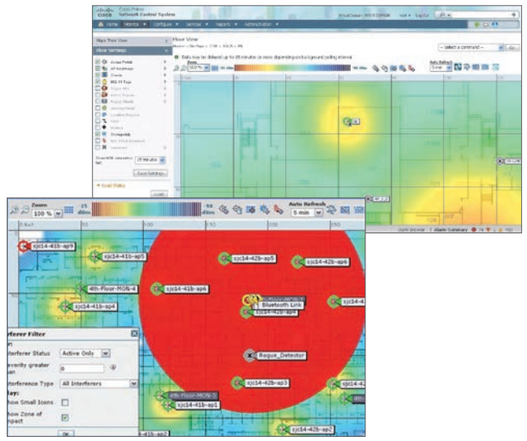
SKU		Supported Access Points
MSE 8.0*1	CMX 10.x*2	
L-AD-LS-1AP	L-AD-LS-1AP-N	1
L-AD-LS-100AP	-	100
L-AD-LS-1000AP	-	1,000
L-UPG-LS-1AP	L-UPG-LS-1AP-N	1

■ Cisco wIPS Enhanced Local Mode License

SKU		Supported Access Points
MSE 8.0*1	CMX 10.x*2	
L-WIPS-ELM-1AP	TBD	1
L-WIPS-ELM-100AP	TBD	100
L-WIPS-ELM-1000AP	TBD	1,000

Cisco Prime Infrastructure

Cisco Prime Infrastructure is an integrated management platform that enables comprehensive management of the entire network including wired/wireless LAN at the headquarters and branches. This platform not only enables devices comprising wired/wireless LAN networks to be managed as physical assets but also enables the networks to be managed from the user service level perspective, based on the rich information collected from the devices.



■ Cisco Prime Infrastructure 3.x Hardware Appliance

SKU	Description
PI-UCS-APL-K9	Generation 2 Hardware Appliance
PI-UCS-APL-U-K9	Upgrade from Generation 1

■ Cisco Prime Infrastructure 3.x Software & Base License*3

SKU	Description
R-PI30-SW-K9	Prime Infrastructure 3.0 Software
L-MGMT3X-PI-BASE	Base License

■ Cisco Prime Infrastructure 3.x High Availability License*3

SKU	Description
L-MGMT3X-HA	High Availability License

■ Cisco Prime Infrastructure 3.x Lifecycle & Assurance License*3

SKU	Managed Devices	QTY
L-MGMT3X-2K-K9	Cisco Catalyst 2000 Series	1
L-MGMT3X-3K-K9	Cisco Catalyst 3000 Series	1
L-MGMT3X-4K-K9	Cisco Catalyst 4000 Series	1
L-MGMT3X-6K-K9	Cisco Catalyst 6000 Series	1
L-MGMT3X-CSR1-K9	Cisco CSR 1000 Series	1
L-MGMT3X-800SR-K9	Cisco ISR 800 Series	1
L-MGMT3X-ISR1-K9	Cisco ISR 1000 Series	1
L-MGMT3X-ISR2-K9	Cisco ISR 2000 Series	1
L-MGMT3X-ISR3-K9	Cisco ISR 3000 Series	1
L-MGMT3X-ISR4-K9	Cisco ISR 4000 Series	1

SKU	Managed Devices	QTY
L-MGMT3X-ASR1K9	Cisco ASR 1000 Series	1
L-MGMT3X-AP-K9	Cisco Aironet Access Point	1
L-MGMT3X-N2K-K9	Cisco Nexus 2000 Series Fabric Extender (FEX)	1
L-MGMT3X-N3K-K9	Cisco Nexus 3000 Series	1
L-MGMT3X-N5K-K9	Cisco Nexus 5000 Series	1
L-MGMT3X-N6K-K9	Cisco Nexus 6000 Series	1
L-MGMT3X-N7K-K9	Cisco Nexus 7000 Series	1
L-MGMT3X-N93XX-K9	Cisco Nexus 9300 Series	1
L-MGMT3X-N9K-K9	Cisco Nexus 9000 Series	1

*1 L-MSE-PAK is required. *2 L-MSE-PAK-N is required. *3 R-MGMT3X-N-K9 is required.

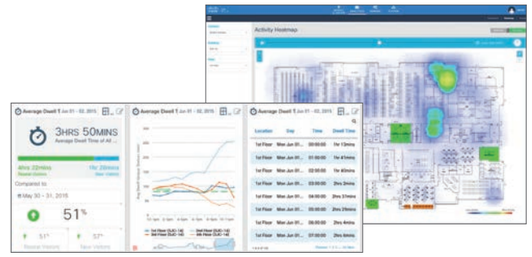
Cisco Connected Mobile Experiences (CMX) Solutions

The Cisco Connected Mobile Experiences (CMX) is a revolutionary solution that collects and analyzes the location of wireless LAN (Wi-Fi) devices such as smartphones and tablets for business utilization. This solution supports the monetization of wireless LAN in a wide range of sectors including retail, services, transportation, healthcare, education, and government offices. This solution already has an excellent deployment track record overseas. And in Asia Pacific, positive results have been obtained in demonstration experiments conducted at events such as Interop Tokyo 2013/2014; and its commercial deployment is already in the pipeline.
Cisco CMX provides the services described below.

For details on Cisco CMX, visit the following Web site:
http://www.cisco.com/go/cmx

■ Location Analysis
This function anonymously detects and traces Wi-Fi device signals to obtain, aggregate and visualize the number of Wi-Fi users and their movement for analysis.
In the Copenhagen Airport case study, for example, this function enabled analysis of the general movement route and staying area/time of travelers (i.e. Wi-Fi users) during their departure and arrival, enabling better understanding of their different behavior patterns. This has enabled optimization of personnel allocation based on crowding and adjustment of the facility layout for improved customer convenience, helping to deliver services that guarantee high levels of customer satisfaction in a cost-effective manner. This function has also facilitated effective attraction of customers through optimization of the advertisement layout, contributing to bursting the earnings of duty free shops and tenant stores.

■ Offering a Variety of Analysis Methods including Traffic Line Information and Residence Time



■ Customer Engagement
The ability to capture new and keep existing customers by delivering more value is essential to continued growth in all industries. Cisco CMX allows customers mobile users to connect through your onsite wireless LAN. It opens a direct channel of communication that lets you better understand and deliver what your guests want. When you more effectively engage your mobile users, you can:

- Increase loyalty of existing customers and attract new customers by providing them with a personalized experience
- Heighten the guest experience by providing wireless access and key information during their journey
- Increase brand exposure through social media check-in and feed streaming
- Increase visitor satisfaction by helping them make decisions more aligned with their needs

■ Venue Efficiency
By helping you better understand how your visitors actually behave while at your site, Cisco CMX helps you make the best use of your floor plan. With this improved insight, you can:

- Determine the most trafficked locations to position advertisements, products or services
- Adjust venue layout to optimize traffic flow in periods of high use
- Staff service locations to accommodate visitor flows and time of day
- Evaluate impact of floor plan adjustments

For your customers and your business, the Cisco CMX solution can deliver the right information at the right time.

■ Cisco CMX for Facebook Wi-Fi
Cisco has also begun a new Cisco CMX service called Cisco CMX for Facebook Wi-Fi in collaboration with Facebook. In hotels and shops that are deploying this service, Wi-Fi users can use free wireless LAN by checking in with the facility using the facility's wireless network.

This solution not only improves user convenience but also offers a variety of business benefits including better customer recognition thanks to the increased number of check-ins and marketing based on the customer information collected anonymously by Facebook.

Cisco CMX Cloud

Cisco CMX Cloud revolutionizes the delivery of wireless guest access and in-venue analytics, integrating seamlessly with Cisco wireless infrastructure.
This cloud-delivered Software-as-a-Service (SaaS) offering is quick to deploy and intuitive to use. The affordable subscription-billing model helps reduce initial investments in equipment (capital expenditures [CapEx]) and IT resources. Ultimately, this solution accelerates how wireless infrastructure can deliver business outcomes by:

- Detecting all Wi-Fi devices (the "devices") in the venue and providing analytics on their presence, including dwell times, new vs. repeat visitors, and peak times
- Providing an easy-to-use guest-access solution for visitors through a custom portal using various authentication methods including social, self-registration, and Short Message Service (SMS)
- Engaging visitors directly on the guest portal page or mobile app with location-based content

■ Cisco Connected Mobile Experiences Cloud

SKU	Description	SKU	Description
AIR-CMX-SVC-CX*1	CMX Cloud Connect.	AIR-CMX-SVC-CPAX*1	CMX Cloud Connect with Presence Analytics.

*1 AIR-CMX-CLOUD is required.