

# Cisco Aironet Access Point



## Provide Fast, Reliable Connectivity

Cisco® Aironet® [access point](#) provides industry-leading performance for secure and reliable wireless connections. Whether you need entry-level wireless for a small enterprise or mission-critical coverage at thousands of locations, Cisco offers a broad portfolio of access points targeted to the specific needs of all industries, business types, and topologies.

Most access points can be purchased in a standalone or controller-based model to support unique requirements for scale and mobility services. Controllers reduce overall operational expenses by simplifying network deployment, operations, and management. They allow network administrators to remotely configure and monitor several access points to thousands of access points in a simple and efficient way. A controller is required to support voice, location services, guest access, and advanced security. Controller-based access points also support [OfficeExtend](#) for secure mobile teleworking and [Enterprise Wireless Mesh](#) which allows access points to dynamically establish wireless connections in hard-to-connect locations.

A wireless network with standalone access points offers a low-cost, entry-level solution that does not require a controller. It is ideal for small-scale networks with less than 20 access points, and offers base-level wireless functionality with the flexibility to scale and add services over time by adding a controller.

Cisco offers three categories of access points: mission critical, interactive multimedia, and business ready.

- Mission critical: Cisco CleanAir technology delivers the highest level of 802.11n performance, coverage, and security for medium-sized to large organizations that require anytime access to network resources and interactive multimedia applications. This award-winning and industry leading technology provides a self-healing and self-optimizing wireless network that mitigates the impact of wireless interference, providing the most reliable wireless coverage.
- Interactive multimedia: This category of Cisco Aironet access points offers enhanced 802.11n performance and is ideal for medium-sized to large enterprises using mobility services such as voice, video, advanced security, and location tracking.
- Business ready: This category of access points provides entry-level 802.11n for wireless data and video in small to mid-sized enterprises and branch offices.

## Mission-Critical Access Points

In today's business world, the wireless network is more than just a convenience; it's mission critical. Wireless networks operate in a shared spectrum with a variety of applications and devices competing for bandwidth in enterprise environments. More than ever, IT managers need to have visibility into their wireless spectrum to manage radio frequency (RF) interference and prevent unexpected downtime.

Cisco's CleanAir technology can detect, classify, locate, and mitigate RF interference automatically and instantaneously. CleanAir gives you access to real-time and historic information about devices and assets located anywhere in the wireless network. Now you can enforce policies and improve network performance based on intelligent information.

With CleanAir technology retailers can help ensure secure credit card transactions, hospitals can improve efficiency with wireless patient care and the secure transfer of confidential medical records, and colleges can use Wi-Fi voice services to improve campus security. Cisco Aironet access points in the mission critical category provide the highest performance and scalability to support business communications today and in the future.

## Cisco Aironet 3600 Series



- Highest 802.11n performance with CleanAir technology for a self-healing, self-optimizing wireless network
- Industries first 4x4 MIMO, 3 spatial streams access point
- ClientLink 2.0 optimizes performance for tablets, smartphones and laptops and all 802.11n 1, 2 and 3 spatial stream devices, as well as legacy 802.11a/g clients
- Standard 802.3af Power over Ethernet
- 3600i model has integrated antennas for typical office deployments



- 3600e model is for RF challenging indoor environments and requires external dual band antennas
- [Antenna Product Portfolio for Cisco Aironet 802.11n Access Points](#)

### Cisco Aironet 3500 Series



- 802.11n performance with CleanAir technology for a self-healing, self-optimizing wireless network
- ClientLink 1.0 for optimized performance for tablets and legacy devices
- Standard 802.3af Power over Ethernet
- 3500i model has integrated antennas for typical office deployments
- 3500e model is for rugged environments and requires external antennas
- 3500p model with specialized, directional external antennas for stadium and arena environments
- [Antenna Product Portfolio for Cisco Aironet 802.11n Access Points](#)

### Cisco Aironet 1550 Series

- 802.11n performance with CleanAir technology for a self-healing, self-optimizing wireless network
- Flexible deployment options: Access or mesh network, extension of an Ethernet network, and Ethernet, fiber, wireless, or cable backhaul
- Service provider support: Wi-Fi for next-generation mobile data offload and personalized mobile services
- 1552I model with internal antennas for low-profile and energy efficient operations
- 1552E model has external antennas for highly flexible deployment options with extended coverage
- 1552C model with cable backhaul, for service providers who require 3G/4G Wi-Fi offload and public Wireless access

- 1552H model for use in hazardous environments such as oil and gas refineries, chemical plants, and manufacturing facilities

### Interactive Multimedia Access Points

Cisco Aironet 1140 Series and 1260 Series Access Points provide high performance, enhanced 802.11n performance and coverage for latency sensitive applications like voice and video, enabling medium and large-sized business, educational environments, healthcare and manufacturing to meeting the growing demands placed on wireless networks.

They are built with enterprise-class chips and optimized radios that improve wireless coverage and increase system capacity and performance. Cisco Aironet access points for interactive multimedia do not support CleanAir technology; however they do deliver RF excellence to support a robust mobility experience and include the following special features:

- Cisco [ClientLink](#) technology improves reliability and coverage for legacy clients.
- Cisco [BandSelect](#) technology improves 5-GHz client connections in mixed-client environments.
- Cisco [VideoStream](#) technology improves performance of multicast multimedia applications.

### Cisco Aironet 1140 Series Access Point



- 802.11n access point designed for enterprise offices
- RF excellence for high-quality interactive multimedia and robust mobility services
- Standard 802.3af Power over Ethernet
- Available in controller-based and standalone versions



## Cisco Aironet 1260 Series Access Point



- 802.11n rugged indoor access point designed for challenging RF environments
- RF excellence for high-quality interactive multimedia and robust mobility services
- Standard 802.3af Power over Ethernet
- Available in controller-based and standalone versions
- Requires external antennas (sold separately)
- [Antenna Product Portfolio for Cisco Aironet 802.11n Access Points](#)

## Business-Ready Access Points

Small to medium-sized enterprises and branch offices require standard wireless at an entry-level price. Business-ready access points are ideal for improved mobility with laptops, providing guest access for vendors or customers, or offering limited hotspot coverage. They provide the security and performance you expect from Cisco at a price that matches your business size. With business-ready access points like the Cisco Aironet 1040 Series, you can enhance the productivity of your growing mobile workforce and have confidence that you can scale.

## Cisco Aironet 1040 Series Access Points

- 802.11n access points at an attractive entry-level price
- Enterprise-class performance and security
- RF excellence for reliable data and video
- BandSelect technology improves 5-GHz client connections in mixed-client environments
- Available in controller-based and standalone versions

## The Cisco Advantage

The [802.11n](#) standard provides the bandwidth and reliability to support interactive multimedia applications with up to nine times the performance of 802.11a/g networks. In addition, Cisco has true enterprise-class RF technology designed to maximize 802.11n performance. Cisco technologies such as [CleanAir](#), [ClientLink](#), and [VideoStream](#), plus optimized access point radios and antennas, improve performance regardless of where client devices are located. All Cisco Aironet 802.11n access points support:

- A limited lifetime hardware warranty.
- 5 or 10-unit Eco-Pack bundles with a single, easy-to-open carton that streamlines the staging and installation process and reduces packaging waste by 50 percent.
- Mounting brackets that can be easily retrofitted to existing Cisco legacy access points to minimize migration cost and time.

The benefits of deploying Cisco Aironet 802.11n [access points](#) with a Cisco Unified Wireless Network extend from investment protection and future-proofing to better scalability and reliability of the enterprise network. For more details, please visit: [www.cisco.com/go/wireless](http://www.cisco.com/go/wireless).

## Cisco OfficeExtend

Purposely designed for the teleworking environment, the Cisco Aironet 600 Series OfficeExtend Access Points deliver always-on secure access to networked business services from the remote home office. The access point connects to the home's broadband Internet access and establishes a secure tunnel to the corporate network so that remote employees can access data, voice, video, and cloud services for a mobility experience consistent with that at the corporate office.

## Cisco Aironet 600 Series OfficeExtend Access Points

- 802.11n access points for reliable, secure teleworking
- Zero-touch deployment at the home office speeds setup time
- Dual-band support uses all available spectrum to help avoid congestion caused by home devices
- Supports corporate and personal network activity with traffic segmentation



Table 1. Cisco Aironet 802.11n Access Point Comparison Chart

	OfficeExtend	Outdoor	Standalone		Controller-based			
Cisco 802.11n Access Points	600 Series Access Point	1550 Series Outdoor Access Point	1040 Series Access Point	1140, 1260 Series Access Point	1040 Series Access Point	1140, 1260 Series Access Point	3500 Series Access Point	3600 Series Access Point
Environments	Teleworkers and remote employees	Mid-size to large enterprises and service providers	Small enterprise and branch	Mid-sized to large enterprise	Mid-sized to large enterprise and branch	Mid-sized to large enterprise	Mid-sized to large enterprise	Mid-sized to large enterprise with high client density
Installation*	Home	Outdoor	Carpeted	Carpeted or Rugged	Carpeted	Carpeted or Rugged	Carpeted or Rugged	Carpeted or Rugged
RF Transmit x Recieve: Spatial Stream	2x2:2	2x3:2	2x2:2	2x3:2	2x2:2	2x3:2	2x3:2	4x4:3
Enterprise-class voice/video		▪				▪	▪	▪
Cisco CleanAir technology		▪					▪	▪
Cisco ClientLink		▪				▪	▪	ClientLink 2.0
Cisco VideoStream					▪	▪	▪	▪
Cisco BandSelect					▪	▪	▪	▪
Cisco OfficeExtend	▪				▪	(1140 Only)	▪	▪
Cisco FlexConnect					▪	▪	▪	▪
Cisco Adaptive WIPS					▪	▪	▪	▪
Rogue AP Detection		▪			▪	▪	▪	▪
Radio Resource Management (RRM)		▪			▪	▪	▪	▪
Wireless Mesh		▪			▪	▪	▪	▪

\*Carpeted: 0° to 40°C: 600, 1040, 1140, 3500e; Rugged: 20 to 55°C: 1260, 3500e



Table 2. Cisco Aironet 802.11n Access Point Comparison Chart

Cisco Aironet Access Point	600 Series	1550 Series	1040 Series	1140 Series	1260 Series	3500 Series	3600 Series
Data Uplink (Mbps)	10/100/1000	10/100/1000	10/100/1000	10/100/1000	10/100/1000	10/100/1000	10/100/1000
Power	100 to 240 VAC, 50-60 Hz Local Power Supply	1550i: 100 to 277 VAC 1550e: 100 to 480 VAC 1550c: 40 to 90 VAC 1550h: 100 to 240 VAC PoE: 56 VDC 12 VDC	802.3af	802.3af	802.3af	802.3af	802.3af
Temperature Range in Celsius	0° to 40° C	-40 to 55° C	-40 to 55° C	-40 to 55° C	-40 to 55° C	3500i: 0 to 40° C 3500e: -20 to 55° C 3500p: -20 to 55° C	3600i: 0 to 40° C 3600e: -20 to 55° C
Antennas	Internal	1550i: Internal 1550e: External 1550c: Internal 1550h: External	Internal	Internal	External	3500i: Internal 3500e: External 3500p: External	3600i: Internal 3600e: External
Wi-Fi standards	a/b/g/n	a/b/g/n	a/b/g/n	a/b/g/n	a/b/g/n	a/b/g/n	a/b/g/n
DRAM	64 MB	64 MB	128 MB	128 MB	128 MB	128 MB	256 MB
Flash	16 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB
DFS (pulse detection)	-	.05 μs	.08 μs	.08 μs	.08 μs	.05 μs	.05 μs
Limited Lifetime Warranty	Yes	No	Yes	Yes	Yes	Yes	Yes