The New Generation of Cisco Aironet Access Points

Second-Generation Access Points

There is a high rate of change in the mobility industry, making it difficult for yesterday’s networks to adapt. With the growth of bandwidth-intensive applications such as high-definition video and bring-your-own-device (BYOD) trends, for example, the IT manager’s job has suddenly grown more complicated and requires advanced wireless solutions.

In order to address these emerging trends, Cisco offers a new-generation of access points, the Cisco® Aironet 3700, 3600, 2700, and 1700 for 802.11ac deployments Series, and the 3600, 2600, and 1600 Series. These access points extend spectrum intelligence, antenna density, and client acceleration to new price points in the mainstream. The product line also offers options that support the latest IEEE Wi-Fi standard, 802.11ac.

The second generation Cisco Aironet Access Point portfolio addresses a broad range of requirements for enterprise-class wireless services and provides industry-leading performance for secure and reliable radio-frequency (RF) connections. Whether you require entry-level wireless connectivity for a small enterprise, mission-critical coverage at thousands of locations, or best-in-class performance with investment protection for high-density environments, you can rely on Cisco’s broad access point portfolio.

Cisco Aironet 3700 Series: High-Density Experience and 802.11ac

The Cisco Aironet 3700 Series (Figure 1) is designed for high-density network environments that use mission-critical, high-performance applications. The Aironet 3700 Series incorporates the Cisco High-Density Experience (HDX) by using an innovative chipset with the best-in-class RF architecture. The Aironet 3700 Series provides three times the performance of current 802.11n equipment at a greater distance.

The industry’s first access point with an integrated 802.11ac Wave 1 radio supporting 4x4 multiple input, multiple output (MIMO) with three spatial streams offers:

- Three times the performance of current 802.11n-based Wi-Fi at a greater distance
- Optimized access point roaming: Faster attach and release
- Cisco CleanAir® with enhanced support for 80-GHz channel support
- Updated ClientLink 3.0 with support for 802.11a/b/g/n/ac
- Device battery life savings
- Cross access point noise reduction*
- Enhanced location accuracy*
- Modular design that supports other modules, such as Wireless Security, Cisco 3G Small Cell, or future technology such as an 802.11ac Wave 2 module
- Integrated antennas for typical office deployments with the 3700i model

The 3700e model is for challenging indoor RF environments and requires external dual-band antennas. (For more information about antennas, visit: Antenna Product Portfolio for Cisco Aironet 802.11n Access Points).

Cisco Aironet 2700 Series: High Density Experience and 802.11ac

The Cisco Aironet 2700 Series (Figure 2) is a dual-band, 802.11ac supported Wi-Fi Access Point optimized for adding capacity and coverage to dense Wi-Fi networks. It also serves the performance needs of the latest BYOD clients now shipping with 802.11ac connections.
Delivering high performance for any small, medium-sized, and large enterprise network, the Aironet 2700 Series uses a purpose-built chipset with best-in-class RF architecture. It has been created specifically to take advantage of all the new speed and function of the latest Wi-Fi technology standard but at a price point that lets you ease into 802.11ac networking.

The Cisco Aironet 2700 Series Access Point:

- Delivers the most advanced features in its class
- Includes an integrated 802.11ac radio that supports 3x4 MIMO with three spatial streams. The fourth receive antenna provides a performance advantage over all competing 802.11ac solutions on the market today.
- Supports true beamforming for clients that support one, two or three spatial streams
- Offers Cisco HDX support. HDX includes Cisco CleanAir within 80MHz channel widths, ClientLink 3.0, and RF Turbo Performance for better performance of all clients in a dense environment.
- Offers a 2700e model for harsh/challenging indoor environments. This model requires external dual-band antennas.

Cisco Aironet 1700 Series: Enterprise Class (802.11ac)

The Cisco Aironet 1700 Series Access Points are entry-level, enterprise-class 802.11ac-based access points designed to address the wireless connectivity needs of small and midsize enterprise networks. This enterprise-class access point delivers Cisco’s RF features such as Cisco CleanAir® Express and Optimized Roaming for any small, medium-sized, and large enterprise network.

- The Cisco Aironet 1700 Series Access Points offers the advantage of 802.11ac enterprise-class performance with 3 x 3 multiple-input, multiple-output (MIMO) technology and support for two spatial streams.
- Provides efficient wireless coverage through Cisco Clean Air Express by effectively detecting RF interference and then make automatic adjustments to optimize wireless coverage.

Cisco Aironet 3600 Series: Best in Class (802.11n)

The Cisco Aironet 3600 Series Access Point (Figure 3) delivers the highest level of 802.11n performance. It is the industry’s first and only 802.11n 4 x 4 MIMO access point with three spatial streams. It offers an expansion capability for emerging technologies such as 802.11ac or advanced services such as a Wireless Security Module or Cisco’s 3G Small Cell Module. The 3600 Series offers better 802.11n coverage and security in dense-client networks that support applications such as HD video streaming.

- The Cisco Aironet 3600 Series Access Point also supports Cisco ClientLink 2.0, which optimizes performance for tablets, smartphones, and laptops. Supports standard 802.3af Power over Ethernet (PoE) switches the 3600i model features integrated antennas for typical office deployments.
- The 3600e model is for challenging indoor RF environments and supports external dual-band antennas. (For more information about antennas, visit: Antenna Product Portfolio for Cisco Aironet 802.11n Access Points).
Cisco Aironet 2600 Series: Mission-Critical (802.11n)

The Cisco Aironet 2600 Series Access Point (Figure 4) is BYOD-optimized for connectivity to any client device. Second only to the Cisco Aironet 3600 Series in performance and features, the Cisco Aironet 2600 Series sets the new standard for enterprise wireless technology. This mission-critical access point delivers Cisco’s RF excellence features such as Cisco CleanAir and ClientLink 2.0 technology for any small, medium-sized, and large enterprise network.

- Delivers the most advanced features in its class, with great performance, functionality, and reliability at a great price
- Includes 802.11n-based 3 x 4 MIMO with three spatial streams
- Includes Cisco CleanAir, ClientLink 2.0, and VideoStream technologies to help ensure an interference-free, high-speed wireless application experience
- Supports standard 802.3af PoE
- The 2600i model has integrated antennas for typical office deployments
- The 2600e model is for RF-challenging indoor environments and requires external dual-band antennas. (For more information about antennas, visit: Antenna Product Portfolio for Cisco Aironet 802.11n Access Points).

Cisco Aironet 1600 Series: Enterprise Class (802.11n)

The Cisco Aironet 1600 Series is an entry-level, enterprise-class 802.11n-based access point designed to address the wireless connectivity needs of small and midsize enterprise networks. This Enterprise Class access point delivers Cisco’s RF excellence features such as Cisco CleanAir Express and ClientLink 2.0 technology for any small, medium-sized, and large enterprise network.

- With at least six times the throughput of existing 802.11a/g networks, the 1600 Series offers the advantage of 802.11n enterprise-class performance with 3 x 3 MIMO technology and support for two spatial streams.
- Provides efficient wireless coverage through Clean Air Express* client acceleration for entry-level networks that have a mixed legacy and non-legacy client base
- Supports standard 802.3af PoE power infrastructure.
- The 1600i model has integrated antennas for typical office deployments.
- The 1600e model is for RF-challenging indoor environments and requires external dual-band antennas. (For more information about antennas, visit: Antenna Product Portfolio for Cisco Aironet 802.11n Access Points).
Cisco Aironet 600 Series OfficeExtend Access Point (802.11n)

Figure 7.  Cisco Aironet 600 Series OfficeExtend Access Point

Designed specifically for the teleworking environment, Cisco Aironet 600 Series OfficeExtend Access Points (Figure 6) 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.

- 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

The Cisco Advantage

Cisco has enterprise-class RF technology designed to maximize 802.11ac and 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 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 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, visit: www.cisco.com/go/wireless