Cisco Aironet 600 Series OfficeExtend Access Points

Performance with Investment Protection

- Dual-band, 802.11n access point avoids congestion from cordless phones, baby monitors, wireless game consoles, and microwave ovens
- Six times faster than 802.11a/g networks
- Backward-compatible with 802.11a/b/g clients

Remote Connectivity to Corporate Resources

- Supports up to three corporate service set identifiers (SSIDs) and 15 wireless clients
- Four Ethernet ports: Up to 2 for corporate access and remaining for personal use
- Supports voice-over-Wi-Fi with dual-mode phones, soft phones, or Cisco Unified Wireless IP Phones

Easy Installation

- Sleek design ideal for desktop placement

Secure Interoperability

- Intel Connect with Centrino Certified
- Allows spouses, partners, and children to access Internet without introducing additional security risks to corporate policy

Simplified Network Management

- Minimal set up and maintenance requirements (zero-touch deployment)
- Controller-based deployment options
- Similar management to that of the corporate WLAN using the same infrastructure and devices

Secure Connections

- Supports secure corporate wireless connectivity to employee homes

Powerful 802.11n Dual-Radio Performance

The Cisco® Aironet® 600 Series OfficeExtend Access Point provides secure enterprise wireless coverage to the home. This dual-band, 802.11n access point extends the corporate network to the home teleworker and mobile contractors. 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. The dual-band, simultaneous support for 2.4-GHz and 5-GHz radio frequencies assures that corporate devices are not impacted by congestion caused by common household devices that use the 2.4 GHz band. The Cisco Aironet 600 Series OfficeExtend Access Point is purposely designed for the teleworker by supporting both secure corporate data access and maintaining connectivity for personal home devices with segmented home-traffic support.

How It Works

The same services that are available on the wireless network at the corporate office are securely accessed through the Cisco Aironet 600 Series from a remote location. Data, voice, and video as well as applications such as Cisco Unified MeetingPlace® conferencing, Cisco WebEx® technology, and dual-mode phones are all supported by the Cisco Aironet 600 Series.

For the initial setup at a home office, the remote worker plugs the access point into their home router connected to or integrated with their broadband modem. The Cisco Aironet 600 Series access point is provisioned in advance and will automatically set up a secure tunnel to the corporate headquarters with a Cisco Wireless Controller. A preregistered corporate IP phone can also automatically connect with the Cisco Unified Communications Manager to access the corporate phone number, voicemail, and user settings.

How the Remote Workforce Benefits

The Cisco Aironet 600 Series improves workforce productivity, business resiliency, and work schedule flexibility while reducing travel costs and carbon emissions. It is targeted toward commercial, enterprise, and service provider networks across all industries. The Cisco Aironet 600 Series is appropriate for employees who need reliable and consistent access to networked business services at home or at work, as well as telecommuters who require the same wireless connectivity as at the corporate site. Voice costs are reduced since users can use Wi-Fi instead of cellular coverage for voice calls.

Table 1 lists the features and benefits for Cisco Aironet 600 Series OfficeExtend Access Points.

Table 1. Features and Benefits for Cisco Aironet 600 Series OfficeExtend Access Points

Feature	Benefits
Performance	• Dual-band, 802.11n access point for the home that provides at least six times the throughput of existing 802.11a/g networks, with industry-leading performance and reliability. • Supports both the 2.4-GHz and 5-GHz radio frequency band, simultaneously allowing users to avoid congestion from home devices.
Simplified Operations and Management	• Extends real-time services such as voice, wireless, video, and data to remote locations that have no IT staff. • Similar management to that of the corporate wireless LAN using the same infrastructure and devices (Cisco Wireless Controllers, Cisco Wireless Control System (WCS), and access points). • Cisco Unified Wireless IP Phones may be preconfigured or added in the future.
Robust Security	• The Cisco Aironet 600 Series establishes a secure Datagram Transport Layer Security (DTLS) connection between the access point and the controller to offer remote WLAN connectivity using the same profile as at the corporate office. • Secure tunneling mitigates risks of viruses and attacks on the corporate network found in split-tunneling scenarios. • Segmentation of home and corporate traffic maintains home device connectivity without introducing security risks to corporate policy.
End-to-end Voice Services	• Supports Unified Communications for improved collaboration through messaging, presence, and conferencing. • Supports all Cisco Unified Wireless IP Phones for cost-effective, real-time voice services.
Environmentally Responsible	• Enables best practices for green initiatives by reducing commuting hours and emissions.

Product Specifications

Table 2 lists the product specifications for Cisco Aironet 600 Series OfficeExtend Access Points.

Table 2. Product Specifications for Cisco Aironet 600 Series OfficeExtend Access Points

Item	Specification
Part Numbers	**Cisco Aironet 600 OfficeExtend Series Access Point** • AIR-OEAP602I-x-K9: Dual-band Controller-based 802.11a/g/n • AIR-OEAP602I-xK910: Eco-pack (dual-band 802.11a/g/n) 10 quantity controller-based access points **Regulatory domains: (x = regulatory domain)** 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: http://www.cisco.com/go/aironet/compliance.
Software	• Cisco Unified Wireless Network Software Release 7.0 MR1 or later
Controllers Supported	• Cisco 2500, 5500, 7500 Series Wireless Controllers and Cisco Wireless Services Module 2 (WiSM2)
802.11n	• Multiple-input multiple-output (MIMO) with two spatial streams • Maximal ratio combining (MRC) • 20- and 40-MHz channels • PHY data rates up to 300 Mbps • Packet aggregation: A-MPDU (Tx/Rx) • Cyclic shift diversity (CSD) support

Item	Specification				
Data Rates Supported	**802.11a:** 6, 9, 12, 18, 24, 36, 48, and 54 Mbps				
	802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps				
	802.11n data rates (2.4 GHz and 5 GHz):				
	MCS Index[1]	**GI[2] = 800ns**		**GI = 400ns**	
		20-MHz Rate (Mbps)	**40-MHz Rate (Mbps)**	**20-MHz Rate (Mbps)**	**40-MHz Rate (Mbps)**
	0	6.5	13.5	7.2	15
	1	13	27	14.4	30
	2	19.5	40.5	21.7	45
	3	26	54	28.9	60
	4	39	81	43.3	90
	5	52	108	57.8	120
	6	58.5	121.5	65	135
	7	65	135	72.2	150
	8	13	27	14.4	30
	9	26	54	28.9	60
	10	39	81	43.3	90
	11	52	108	57.8	120
	12	78	162	86.7	180
	13	104	216	115.6	240
	14	117	243	130	270
	15	130	270	144.4	300
Frequency Band and 20-MHz Operating Channels	**A Regulatory Domain:** • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.240 GHz; 4 channels • 5.745 to 5.825 GHz; 5 channels **C Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.745 to 5.825 GHz; 5 channels **E Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.240 GHz; 4 channels **I Regulatory Domain:** • 2.412 to 2.472 GHz, 13 channels • 5.180 to 5.240 GHz; 4 channels **K Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.240 GHz; 4 channels • 5.745 to 5.805 GHz; 4 channels		**N Regulatory Domain:** • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.240 GHz; 4 channels • 5.745 to 5.825 GHz; 5 channels **P Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.240 GHz; 4 channels **R Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.240 GHz; 4 channels • 5.745 to 5.805 GHz; 4 channels **S Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.240 GHz; 4 channels • 5.745 to 5.825 GHz; 5 channels **T Regulatory Domain:** • 2.412 to 2.462 GHz; 11 channels • 5.745 to 5.825 GHz; 5 channels			
	Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.				
Maximum Number of Nonoverlapping Channels	**2.4 GHz** • 802.11b/g: 20 MHz: 3 • 802.11n: 20 MHz: 3		**5 GHz** • 802.11a: 20 MHz: 9 • 802.11n: 20 MHz: 9, 40 MHz: 4		
	Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.				

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[1] MCS Index: The Modulation and Coding Scheme (MCS) index determines the number of spatial streams, the modulation, the coding rate, and data rate values.
[2] GI: A Guard Interval (GI) between symbols helps receivers overcome the effects of multipath delays.

Item	Specification	
Receive Sensitivity	**2.4 GHz** • 802.11b: -87dBm Typical @ 11Mbps • 802.11g: -77dBm Typical @ 54Mbps • 802.11n 20MHz: -71dBm Typical @ MCS15 • 802.11n 40MHz: -68dBm Typical @ MCS15	**5 GHz** • 802.11a: -74dBm Typical @ 54Mbps • 802.11n 20MHz: -68dBm Typical @ MCS15 • 802.11n 40MHz: -65dBm Typical @ MCS15
Maximum Transmit Power	**2.4 GHz** • 802.11b (CCK): 20 dBm with one antenna • 802.11g: 20 dBm with 2 antennas • 802.11n (HT20): 20 dBm with 2 antennas • 802.11n (HT40): 20 dBm with 2 antennas	**5 GHz** • 802.11a: 20 dBm with 2 antennas • 802.11n (HT20): 20 dBm with 2 antennas • 802.11n (HT40): 20 dBm with 2 antennas
Note: The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.		
Integrated Antenna	• 2.4 GHz, gain 3.5 dBi, horizontal beamwidth 360° • 5 GHz, gain 4.0 dBi, horizontal beamwidth 360°	
Interfaces	• 4x 10/100/1000BASE-T autosensing (RJ-45) • 1x 10/100/1000BASE-T WAN port (RJ-45) • USB: Not available (future release)	
Indicators	• Status LED indicates boot loader status, association status, operating status, boot loader errors, port status. [USB (Future use)]	
Dimensions (W x L x H)	• Access point (without cradle): 7.75 x 7 x 1.6in (195.3 x 176.3 x 39.65mm) • Access point (with cradle): 8.1 x 7.0 x 2.7in (206.15 x 176.3 x 67mm)	
Weight	• 0.99 lbs (0.452 kg) - without cradle • 1.44 lbs (0.653 kg) - with cradle	
Environmental	• Non-operating (storage) temperature: -13°F to +140°F (-25°C to 60°C) • Operating temperature: 32°F to 104°F (0°C to 40°C) • Operating humidity: 10% to 80% RH (non-condensing)	
System Memory	• 64 MB DRAM • 16 MB flash	
Power Options	• Cisco AP600 Local Power Supply: 100 to 240 VAC; 50 to 60 Hz (AIR-PWR-ADTR-cc, where cc is country code as follows: AP=Asia Pacific; AR=Argentina/Uruguay; AU=Australia; BR=Brazil; CE=Central Europe; CH=China; DM=Denmark; IS=Israel; IT=Italy; JP=Japan; NA=North America; SA=South Africa; SW=Switzerland; UK=United Kingdom)	
Power Draw	• Consumption: 12W normal, 15W maximum	
Warranty	Limited Lifetime Hardware Warranty	

Compliance and Safety Standards	• **Safety:**
	  ◦ UL 60950-1, 2nd Edition
	  ◦ CAN/CSA-C22.2 No. 60950-1, 2nd Edition
	  ◦ IEC 60950-1, 2nd Edition
	  ◦ EN 60950-1, 2nd Edition
	• **Radio Approvals:**
	  ◦ FCC Part 15.247, 15.407
	  ◦ RSS-210 (Canada)
	  ◦ EN 300 328, EN 301 893 (Europe)
	  ◦ ARIB-STD 33 (Japan)
	  ◦ ARIB-STD 66 (Japan)
	  ◦ ARIB-STD T71 (Japan)
	  ◦ AS/NZS 4268.2003 (Australia and New Zealand)
	  ◦ EMI and susceptibility (Class B)
	  ◦ FCC Part 15.107 and 15.109
	  ◦ ICES-003 (Canada)
	  ◦ VCCI (Japan)
	  ◦ EN 301 489-1 and -17 (Europe)	

Item	Specification
	• **IEEE Standard:**
	◦ IEEE 802.11a/b/g, IEEE 802.11n, IEEE 802.11h, IEEE 802.11d
	• **Security:**
	◦ 802.11i, Wi-Fi Protected Access 2 (WPA2), WPA
	◦ 802.1X
	◦ Advanced Encryption Standards (AES), Temporal Key Integrity Protocol (TKIP)
	• **EAP Type(s):**
	◦ Extensible Authentication Protocol-Transport Layer Security (EAP-TLS)
	◦ EAP-Tunneled TLS (TTLS) or Microsoft Challenge Handshake Authentication Protocol Version 2 (MSCHAPv2)
	◦ Protected EAP (PEAP) v0 or EAP-MSCHAPv2
	◦ Extensible Authentication Protocol-Flexible Authentication via Secure Tunneling (EAP-FAST)
	◦ PEAPv1 or EAP-Generic Token Card (GTC)
	◦ EAP-Subscriber Identity Module (SIM)
	• **Multimedia:**
	◦ Wi-Fi Multimedia (WMM™)
	• **Other:**
	◦ FCC Bulletin OET-65C
	◦ RSS-102

Service and Support

Realize the full business value of your Cisco Unified Wireless Network more quickly with intelligent, personalized services from Cisco and our partners. Cisco Services offer proven wireless architectures aligned to your business goals and tightly integrated with media-rich, real-time mobility applications. With our breadth and depth of expertise, we support your success every step of the way as you deploy, manage, and scale integrated wireless solutions for optimized performance, security, and management. Sharing knowledge and leading practices, we can help you create a secure, mobile, and interactive business environment to provide a foundation for innovation, agility, and differentiation.

For More Information

For more information about the Cisco Aironet 600 Series OfficeExetnd Access Points, visit http://www.cisco.com/go/wireless or contact your local account representative.

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