Cisco Aironet 702W Series Access Point

Key Features
Performance with Investment Protection • Six times faster than 802.11a/g networks • Dual-radio, simultaneous 2.4-GHz and 5-GHz support • Backward-compatible with 802.11a/b/g clients
Wired Access Support • 4 x 10/100/1000BASE-T local Ethernet ports for wired device connectivity • 1 Power-over-Ethernet (PoE) out port
Easy Installation and Power Efficient • 802.11n performance with existing PoE switches • Can be installed with a single Ethernet cable powering the unit with PoE to save on additional cabling expenses • Sleek, compact design blends into a variety of indoor environments
Secure Interoperability • 802.11n compliant
Simplified Network Management • Controller-based deployment options
Secure Connections • Supports rogue access point detection and protection against denial-of-service attacks
Greater Network Capacity • Dynamic frequency selection 2 (DFS-2) compliant • U-NII-2 and U-NII-2 extended band support
Easy-to-Install, Multipurpose Mounting Bracket • Small, compact form factor designed for easy installations in indoor locations • Lock options for theft protection

The Cisco® Aironet® 702W Series is a compact, wall-mountable access point for hospitality- and education-focused customers looking to modernize their networks to handle today's increasingly complex wireless access demands.

With 802.11n dual-radio 2 x 2 multiple-input multiple-output (MIMO) technology providing at least six times the throughput of existing 802.11a/g networks, the Cisco Aironet 702W Series offers the performance advantage of 802.11n at a competitive price.

As part of the Cisco Unified Wireless Network, the Aironet 702W Series access point provides low total cost of ownership and investment protection by integrating seamlessly with the existing network.

RF Excellence

Building on the Cisco Aironet heritage of RF excellence, the Aironet 702W Series access point delivers highly secure, reliable wireless connections with:

- Simultaneous dual band and dual radio with support for 2.4 GHz and 5 GHz in a compact form factor
- Optimized antenna and radio designs: Consistent network transmit and receive for optimized rate versus range
- Radio resource management (RRM): Automated self-healing optimizes the unpredictability of RF to reduce dead spots and help ensure high-availability client connections
- Cisco BandSelect improves 5-GHz client connections in mixed-client environments
- Advanced security features include rogue detection, wireless intrusion prevention system (wIPS), and ContextAware

Product Specifications

Table 1 lists the product specifications for the Cisco Aironet 702W Series Access Points.

Table 1. Product Specifications for Cisco Aironet 702W Series Access Points

Item	Specification			
Part numbers	**Cisco Aironet 702W Series Access Point: Indoor environments, with internal antennas** • AIR-CAP702W-E-K9: Dual-band, wall plate, controller-based, 802.11a/g/n • AIR-CAP702W-EK910: Eco-pack (dual-band, wall plate, controller-based, 802.11a/g/n) 10 quantity access points			
Capabilities	• Management via Telnet and Secure Shell Protocol (SSH) • Plug-and-play operation with Cisco wireless LAN controllers (both physical and virtual) • Supported in Cisco Prime™ Infrastructure • Supports up to 100 associated clients per radio • Up to 16 Service Set Identifications (SSIDs) per radio • IPv4 and IPv6 support for clients • 802.11h • 802.11e/Wi-Fi Multimedia (WMM)			
Authentication and security	• Temporal Key Integrity Protocol (TKIP) for Wi-Fi Protected Access (WPA), Advanced Encryption Standard (AES) for WPA2 • 802.1X, Radius, AAA (authentication, authorization, accounting) • 802.11i			
Deployment modes	• Controller-based, Cisco FlexConnect™, Monitor mode, Autonomous			
802.11n	• 2 x 2 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), A-MSDU (/Rx) • 802.11 dynamic frequency selection (DFS) • Cyclic shift diversity (CSD) support • Antenna Diversity			
Data rates supported	**802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps**			
	802.11bg: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps			
	802.11n data rates (2.4 GHz[1] and 5 GHz):			
	MCS Index[2]	**GI[3] = 800 ns**		**GI = 400 ns**
		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

[1] 2.4 GHz does not support 40 MHz.
[2] MCS Index: The Modulation and Coding Scheme (MCS) index determines the number of spatial streams, the modulation, the coding rate, and data rate values.
[3] GI: A Guard Interval (GI) between symbols helps receivers overcome the effects of multipath delays.

Item	Specification				
	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	**E Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz)				
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: 21 • 802.11n: ◦ 20 MHz: 21 ◦ 40 MHz: 9 (7 for ETSI)		
Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.					
Maximum transmit power	**2.4 GHz** • 802.11b ◦ 17 dBm with one antenna • 802.11g ◦ 20 dBm with two antennas • 802.11n (HT20) ◦ 20 dBm with two antennas		**5 GHz** • 802.11a ◦ 17 dBm with one antenna • 802.11n non-HT duplicate mode ◦ 20 dBm with two antennas • 802.11n (HT20) ◦ 20 dBm with two antennas • 802.11n (HT40) ◦ 20 dBm with two antennas		
Note: The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.					
Available transmit power settings	**2.4 GHz** 20 dBm (100 mW) 17 dBm (50 mW) 14 dBm (25 mW) 11 dBm (12.5 mW) 8 dBm (6.25 mW) 5 dBm (3.13 mW) 2 dBm (1.56 mW)		**5 GHz** 20 dBm (100 mW) 17 dBm (50 mW) 14 dBm (25 mW) 11 dBm (12.5 mW) 8 dBm (6.25 mW) 5 dBm (3.13 mW) 2 dBm (1.56 mW)		
Note: The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.					
Integrated antennas	• 2.4 GHz, gain 3.0 dBi • 5 GHz, gain 4.0 dBi				
Interfaces	• 10/100/1000BASE-T autosensing (RJ-45) • 4x 10/100/1000BASE-T ports (RJ-45) (local Ethernet ports) • 1 PoE out port (when powered by 802.3at Ethernet switch, or Cisco power injector AIR-PWRJ5=, or Cisco Local Power Supply) • Management console port (RJ-45) • DC power connector				
Indicator	• Status LED indicates boot loader status, association status, operating status, boot loader warnings, boot loader errors				
Dimensions (W x L x H)	• Access point (without mounting bracket): 6 x 4 x 1.6 in. (152.4 x 101.6 x 40.6 mm)				

Item	Specification
Environmental	**Cisco Aironet 702W** • Nonoperating (storage) temperature: -22°to 158℉ (- 30°to +70℃) • Nonoperating (storage) altitude test: 25℃, 15,000 ft . • Operating temperature: 32°to 104℉ (0°to 40℃) • Operating humidity: 10% to 90% percent (noncondensing) • Operating altitude test: 40℃, 9843 ft.
System	• 128 MB DRAM • 128 MB flash • 560 MHz system CPU
Input power requirements	• 44 to 57V DC • Optional: Power supply and power injector: 100 to 240V AC; 49 to 60 Hz
Powering options	• 802.3af/at Ethernet switch • Optional: Cisco Power Injectors (AIR-PWRINJ5=, AIR-PWRINJ4=) • Optional: Cisco Local Power Supply
Power draw	• 9.5 to 10.25W (typical range without PoE out) **Note:** When deployed using PoE, the power drawn from the power sourcing equipment will be higher by some amount, depending on the length of the interconnecting cable.
Warranty	Limited Lifetime Hardware Warranty

Limited Lifetime Hardware Warranty

The Cisco Aironet 702W Series Access Point comes with a Limited Lifetime Warranty that provides full warranty coverage of the hardware for as long as the original end user continues to own or use the product. The warranty includes 10-day advance hardware replacement and ensures that software media is defect-free for 90 days. For more details, visit http://www.cisco.com/go/warranty.

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