


Cisco Aironet 700 Series Access Point


Performance with Investment Protection <ul style="list-style-type: none"> • Six times faster than 802.11a/g networks • Dual-radio, simultaneous 2.4GHz and 5GHz support • Backward-compatible with 802.11a/b/g clients
Easy Installation and Power Efficient <ul style="list-style-type: none"> • 802.11n performance with existing Power-over-Ethernet (PoE) switches • Sleek design blends into a variety of indoor environments • UL 2043 plenum-rated for above-ceiling installation options or suspended from drop ceilings
Secure Interoperability <ul style="list-style-type: none"> • 802.11n compliant
Simplified Network Management <ul style="list-style-type: none"> • Controller-based deployment options • Standalone options (future)
Secure Connections <ul style="list-style-type: none"> • Supports rogue access point detection and denial of service attacks
Greater Network Capacity <ul style="list-style-type: none"> • Dynamic frequency selection 2 (DFS-2) compliant
Easy-to-Install, Multipurpose Mounting Bracket <ul style="list-style-type: none"> • Small, compact form factor designed for a variety of mounting options for easy installations for indoor deployments • Lock options for theft protection



The Cisco® Aironet® 700 Series offers a compact access point for value-minded 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 700 Series offers the performance advantage of 802.11n quality at a competitive price.

As part of the Cisco Unified Wireless Network, the 700 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 700 Series Access Point delivers secure and reliable wireless connections with:

- Simultaneous dual band, dual radio with support for 2.4GHz and 5GHz
- 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 including Rogue Detection, WIPS and Context-Aware

Scalability

The Cisco Aironet 700 Series is a component of the Cisco Unified Wireless Network, which can scale to up to 18,000 access points with full Layer 3 mobility across central or remote locations on the enterprise campus, in branch offices, and at remote sites. The Cisco Unified Wireless Network is the industry's most flexible, resilient, and scalable architecture delivering secure access to mobility services and applications, and offering the lowest total cost of ownership and investment protection by integrating seamlessly with the existing wired network.

Product Specifications

Table 1 lists the product specifications for Cisco Aironet 700 Series Access Points.

Table 1. Product Specifications for Cisco Aironet 700 Series Access Points

Item	Specification																			
Part Numbers	<p>The Cisco Aironet 700 Access Point: Indoor environments, with internal antennas</p> <ul style="list-style-type: none"> AIR-CAP702I-x-K9 - Dual-band controller-based 802.11a/g/n AIR-CAP702I-xK910 - Eco-pack (dual-band controller-based 802.11a/g/n) 10 quantity access points AIR-SAP702I-x-K9 - Dual-band stand-alone 802.11a/g/n (Future) AIR-SAP702I-xK9-5 - Eco-pack (dual-band stand-alone 802.11a/g/n) 5 quantity access points (Future) <p>Cisco SMARTnet® Service for the Cisco Aironet 700 Series Access Point with internal antennas</p> <ul style="list-style-type: none"> CON-SNT-AIRCAP7x - SMARTnet 8x5xNBD 702i access point (dual-band 802.11 a/g/n) (e.g. CON-SNT-AIRCAP7A for 702i internal antenna for A Domain) <p>Cisco Wireless LAN Services</p> <ul style="list-style-type: none"> AS-WLAN-CNSLT - Cisco Wireless LAN Network Planning and Design Service AS-WLAN-CNSLT - Cisco Wireless LAN 802.11n Migration Service AS-WLAN-CNSLT - Cisco Wireless LAN Performance and Security Assessment Service <p>Regulatory domains: (x = regulatory domain)</p> <p>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.</p> <p>Not all regulatory domains have been approved. As they are approved, the part numbers will be available on the Global Price List.</p>																			
Software	<ul style="list-style-type: none"> Cisco Unified Wireless Network Software Release 7.5 Cisco IOS® Software Release (future) 																			
Deployment Modes	<ul style="list-style-type: none"> Controller-based, FlexConnect, Monitor, Converged Access (future) and Autonomous (future) 																			
802.11n	<ul style="list-style-type: none"> 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 (Tx/Rx) 802.11 dynamic frequency selection (DFS) (Bin 5) Cyclic shift diversity (CSD) support 																			
Data Rates Supported	<p>802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps</p> <p>802.11bg: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps</p> <p>802.11n data rates (2.4 GHz¹ and 5 GHz):</p> <table border="1"> <thead> <tr> <th rowspan="2">MCS Index²</th> <th colspan="2">GI³ = 800ns</th> <th colspan="2">GI = 400ns</th> </tr> <tr> <th>20-MHz Rate (Mbps)</th> <th>40-MHz Rate (Mbps)</th> <th>20-MHz Rate (Mbps)</th> <th>40-MHz Rate (Mbps)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>6.5</td> <td>13.5</td> <td>7.2</td> <td>15</td> </tr> <tr> <td>1</td> <td>13</td> <td>27</td> <td>14.4</td> <td>30</td> </tr> </tbody> </table>	MCS Index ²	GI ³ = 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
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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				
	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 Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz) • 5.745 to 5.825 GHz; 5 channels C Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.745 to 5.825 GHz; 5 channels E Regulator Domain: <ul style="list-style-type: none"> • 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) I Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels K Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.620 GHz; 7 channels • 5.745 to 5.805 GHz; 4 channels 		N Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.745 to 5.825 GHz; 5 channels Q Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 11 channels R Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.660 to 5.805 GHz; 7 channels S Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.745 to 5.825 GHz; 5 channels T Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.462 GHz; 11 channels • 5.280 to 5.320 GHz; 3 channels • 5.500 to 5.700 GHz; 11 channels • 5.745 to 5.825 GHz; 5 channels Z Regulator Domain: <ul style="list-style-type: none"> • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz) • 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 <ul style="list-style-type: none"> • 802.11b/g: <ul style="list-style-type: none"> ◦ 20 MHz: 3 • 802.11n: <ul style="list-style-type: none"> ◦ 20 MHz: 3 		5 GHz <ul style="list-style-type: none"> • 802.11a: <ul style="list-style-type: none"> ◦ 20 MHz: 21 • 802.11n: <ul style="list-style-type: none"> ◦ 20 MHz: 21 ◦ 40 MHz: 9 		
	Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.				

Item	Specification		
Receive Sensitivity (Combined sensitivity)	802.11b -98 dBm @ 1 Mb/s -95 dBm @ 2 Mb/s -93 dBm @ 5.5 Mb/s -91 dBm @ 11 Mb/s	802.11g -94dBm @ 6 Mb/s -92 dBm @ 9 Mb/s -91 dBm @ 12 Mb/s -89 dBm @ 18 Mb/s -85 dBm @ 24 Mb/s -82 dBm @ 36 Mb/s -78 dBm @ 48 Mb/s -76 dBm @ 54 Mb/s	802.11a -93 dBm @ 6 Mb/s -91 dBm @ 9 Mb/s -90 dBm @ 12 Mb/s -87 dBm @ 18 Mb/s -84 dBm @ 24 Mb/s -81 dBm @ 36 Mb/s -76 dBm @ 48 Mb/s -75 dBm @ 54 Mb/s
	2.4-GHz 802.11n (HT20) -93 dBm @ MCS0 -90 dBm @ MCS1 -88 dBm @ MCS2 -85 dBm @ MCS3 -81 dBm @ MCS4 -77 dBm @ MCS5 -75 dBm @ MCS6 -74 dBm @ MCS7 -91dBm @ MCS8 -88 dBm @ MCS9 -86 dBm @ MCS10 -83 dBm @ MCS11 -79 dBm @ MCS12 -75 dBm @ MCS13 -73 dBm @ MCS14 -72 dBm @ MCS15	5-GHz 802.11n (HT20) -93 dBm @ MCS0 -90 dBm @ MCS1 -87 dBm @ MCS2 -83 dBm @ MCS3 -80 dBm @ MCS4 -75 dBm @ MCS5 -74 dBm @ MCS6 -72 dBm @ MCS7 -91 dBm @ MCS8 -88 dBm @ MCS9 -85 dBm @ MCS10 -81 dBm @ MCS11 -78 dBm @ MCS12 -73 dBm @ MCS13 -72 dBm @ MCS14 -70 dBm @ MCS15	5-GHz 802.11n (HT40) -89 dBm @ MCS0 -86 dBm @ MCS1 -83 dBm @ MCS2 -79 dBm @ MCS3 -76 dBm @ MCS4 -72 dBm @ MCS5 -71 dBm @ MCS6 -70 dBm @ MCS7 -88 dBm @ MCS8 -84 dBm @ MCS9 -81 dBm @ MCS10 -77 dBm @ MCS11 -74 dBm @ MCS12 -70 dBm @ MCS13 -69 dBm @ MCS14 -68 dBm @ MCS15
Maximum Transmit Power	2.4 GHz <ul style="list-style-type: none"> 802.11b <ul style="list-style-type: none"> 17 dBm with one antenna 802.11g <ul style="list-style-type: none"> 20 dBm with two antennas 802.11n (HT20) <ul style="list-style-type: none"> 20 dBm with two antennas 		5 GHz <ul style="list-style-type: none"> 802.11a <ul style="list-style-type: none"> 20 dBm with two antennas 802.11n non-HT duplicate mode <ul style="list-style-type: none"> 20 dBm with two antennas 802.11n (HT20) <ul style="list-style-type: none"> 20 dBm with two antennas 802.11n (HT40) <ul style="list-style-type: none"> 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)		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)
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	<ul style="list-style-type: none"> 2.4 GHz, gain 3.0 dBi, horizontal beamwidth 360° 5 GHz, gain 5.0 dBi, horizontal beamwidth 360° 		
Interfaces	<ul style="list-style-type: none"> 10/100/1000BASE-T autosensing (RJ-45) Management console port (RJ-45) DC power connector 		
Indicator	<ul style="list-style-type: none"> Status LED indicates boot loader status, association status, operating status, boot loader warnings, boot loader errors 		
Dimensions	<ul style="list-style-type: none"> Access point (without mounting bracket): 7 x 7 x 2 inches (177.6 x 177.6 x 50.4 mm) 		

Item	Specification
(W x L x H)	
Weight	<ul style="list-style-type: none"> 1.06 lb (0.48 kg)
Environmental	Cisco Aironet 702i <ul style="list-style-type: none"> Nonoperating (storage) temperature: -22 to 158°F (-3.0 to +70°C) Nonoperating (storage) Altitude Test: 25°C, 15,000 ft. Operating temperature: 32 to 104°F (0 to 40°C) Operating humidity: 10 to 90% percent (noncondensing) Operating Altitude Test: 40°C, 9843 ft.
System Memory	<ul style="list-style-type: none"> 128 MB DRAM 128 MB flash
Input Power Requirements	<ul style="list-style-type: none"> 44 to 57 VDC Power Supply and Power Injector: 100 to 240 VAC; 50 to 60 Hz
Powering Options	<ul style="list-style-type: none"> 802.3af Ethernet Switch Cisco Power Injectors (AIR-PWRINJ5=, AIR-PWRINJ4=) Cisco Local Power Supply (AIR-PWR-B=)
Power Draw	<ul style="list-style-type: none"> 9.5W (maximum) <p>Note: When deployed using PoE, the power drawn from the power sourcing equipment will be higher by some amount dependent on the length of the interconnecting cable. This additional power may be as high as 1.3W, bringing the total system power draw (access point + cabling) to 10.8W.</p>
Warranty	Limited Lifetime Hardware Warranty
Compliance	Standards <ul style="list-style-type: none"> Safety: <ul style="list-style-type: none"> UL 60950-1 CAN/CSA-C22.2 No. 60950-1 UL 2043 IEC 60950-1 EN 60950-1 Radio approvals: <ul style="list-style-type: none"> 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) SRRC (China) EN 301.489-1 and -17 (Europe) EN 60601-1-2 EMC requirements for the Medical Directive 93/42/EEC IEEE Standard: <ul style="list-style-type: none"> IEEE 802.11a/b/g, IEEE 802.11n, IEEE 802.11h, IEEE 802.11d Security: <ul style="list-style-type: none"> 802.11i, Wi-Fi Protected Access 2 (WPA2), WPA 802.1X Advanced Encryption Standards (AES), Temporal Key Integrity Protocol (TKIP) EAP Type(s): <ul style="list-style-type: none"> 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)

Item	Specification
	<ul style="list-style-type: none"> ◦ EAP-Subscriber Identity Module (SIM) • Multimedia: <ul style="list-style-type: none"> ◦ Wi-Fi Multimedia (WMM™) • Other: <ul style="list-style-type: none"> ◦ FCC Bulletin OET-65C ◦ RSS-102

Limited Lifetime Hardware Warranty

The Cisco Aironet 700 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>.

Cisco Wireless LAN Services

Realize the full business value of your technology investments faster with intelligent, customized services from Cisco and our partners. Backed by deep networking expertise and a broad ecosystem of partners, Cisco Wireless LAN Services enable you to deploy a sound, scalable mobility network that enables rich media collaboration while improving the operational efficiency gained from a converged wired and wireless network infrastructure based on the Cisco Unified Wireless Network. Together with partners, we offer expert plan, build, and run services to accelerate your transition to advanced mobility services while continuously optimizing the performance, reliability, and security of that architecture after it is deployed. For more details, visit: <http://www.cisco.com/go/wirelesslanservices>.

For More Information

For more information about the Cisco Aironet 700 Series, visit <http://www.cisco.com/go/wireless> or contact your local account representative.



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