

Cisco Aironet 3700 Series Access Points



Dual-band 2.4 GHz and 5 GHz with 802.11ac Wave 1 support on the integrated 5-GHz radio

Cisco Aironet 3700i Access Point

- · Sleek design with internal antennas
- · Ideal for office environments

Cisco Aironet 3700e and 3700p Access Points

- Sleek design with external antenna
- Rugged metal housing and extended operating temperature
- Ideal for factories, warehouses, and other indoor industrial environments
- · Versatile RF coverage with external antennas
- UL 2043 plenum rated for above-ceiling installation or for suspending from drop ceilings
- Classify over 20 different types of interference, including non-Wi-Fi interference, within 5 to 30 seconds
- Automatic remedial action and less manual intervention

Investment Protection with Flexible Modular Architecture Design

- Cisco Hyperlocation Module with Advanced Security
- Cisco Aironet Access Point Module for Wireless Security
- Cisco Universal Small Cell 8718
- Cisco Universal Small Cell 5310

Troubleshooting Forensics for Faster Interference Resolution and Proactive Action

- Historic interference information for back-in-time analysis and faster problem solving
- 24x7 monitoring with remote access reduces travel and speeds resolution
- Cisco Spectrum Expert Connect provides real-time, raw spectrum data to help with difficult-to-diagnose interference problems
- Air quality index in Cisco CleanAir[®] technology provides a snapshot of network performance and the impact of interference

Robust Security and Policy Enforcement

- Industry's first access point with non-Wi-Fi detection for off-channel rogues
- Supports rogue access point detection and detection of denial-of-service attacks
- Management frame protection detects malicious users and alerts network administrators
- Enables policies to prohibit devices that interfere with the Wi-Fi network or jeopardize network security

Secure Interoperability

Controller-based deployment only



With the industry's only enterprise class 4x4 MIMO, three-spatial-stream access points that support the IEEE's new 802.11ac specification, the Cisco® Aironet® 3700 Series delivers industry-leading performance and a High Density Experience (HD Experience) for both the enterprise and service provider markets. The Aironet 3700 Series extends support to a new generation of Wi-Fi clients, such as smartphones, tablets, and high-performance laptops that have integrated 802.11ac support.

In its first implementation, 802.11ac wave 1 provides a rate of up to 1.3 Gbps, roughly triple the rates offered by today's high-end 802.11n access points. This provides the necessary foundation for enterprise and service provider networks alike to stay ahead of the performance and bandwidth expectations and needs of their wireless users.

Due to its convenience, wireless access is increasingly the preferred form of network connectivity for corporate users. Along with this shift, there is an expectation that wireless should not slow down user's day-to-day work, but should enable a high-performance experience while allowing users to move freely around the corporate environment.

By Utilizing a Purpose-built Innovative Chipset with the Best-inclass RF Architecture for a High Density Experience (HD Experience).

High Density Experience (HD Experience)

Building on the Cisco Aironet heritage of RF excellence, the 3700 Series utilizes a Purpose-built Innovative Chipset with the Best-in-class RF Architecture. This chipset provides a High Density Experience for enterprise network designed for mission critical, high performance applications. The 3700 is a series of flagship access points, delivering industry-leading performance for highly secure and reliable <u>wireless</u> connections and delivers a robust mobility experience that includes:

- 802.11ac with 4x4 multiple-input multiple-output (MIMO) technology with three spatial streams, offering sustained 1.3-Gbps rates over a greater range for more capacity and reliability than competing access points.
- Cross AP Noise Reduction¹ is a Cisco innovation that enables Access Points to intelligently collaborate in real-time to allow more users to connect with optimized signal quality and performance.
- Optimized AP Roaming ensures clients will associate with the best AP offering the best data rate available.
- Cisco ClientLink 3.0 technology to improve downlink performance to all mobile devices, including one-, two-, and three-spatial-stream devices on 802.11ac while improving battery life on mobile devices such as smartphones and tablets.
- Cisco CleanAir® technology enhanced with 80-MHz Channel Support, provides proactive, high-speed spectrum intelligence across 20-, 40-, and 80-MHz-wide channels to combat performance problems due to wireless interference.
- Modular architecture design that is carried forward from the <u>Cisco Aironet 3600 Series</u>, enabling flexible add-on options in the form of the Cisco Aironet <u>Access Point Module for Wireless Security</u>, <u>Cisco Hyperlocation Module with Advanced Security</u>, and Cisco Universal Small Cell <u>8718 module</u>, or <u>5310 module</u>, all of which are tightly integrated with the Aironet 3700 Series Access Point platform and are completely field-upgradable. MIMO equalization optimizes uplink performance and reliability by reducing the impact of signal fade.

The new Cisco Aironet 3700 Series sustains reliable connections at higher speeds farther from the access point than competing solutions, resulting in up to three times more availability of 1.3-Gbps rates and optimizing the performance of more mobile devices. The 3700 Series carries forward the modular architecture first introduced with the Aironet 3600 Series and offers unparalleled investment protection, with support for a series of modular solutions providing customers the ability to add significant value to their wireless network to meet new demands within their business environment.

All of these features help ensure the best possible end-user experience on the wireless network.

Cisco also offers the industry's broadest selection of <u>802.11n and 802.11ac antennas</u>, delivering optimal coverage for a variety of deployment scenarios.

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¹ Post FCS, enabled in a future software release

Scalability

The Cisco Aironet 3700 Series is a component of the Cisco Unified Wireless Network, which can scale to as many as 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 highly secure access to mobility services and applications and offering the lowest total cost of ownership and investment protection by integrating smoothly with the existing wired network.

Product Specifications

Table 1 lists the specifications for the Cisco Aironet 3700 Series Access Points.

Table 1. Product Specifications

tem	Specification						
Part numbers	Cisco Aironet 3700i Access Point: Indoor environments, with internal antennas, Universal Regulatory Domain						
	(UX)						
	AIR-AP3702I-UXK9: Dual-band, controller-based 802.11a/g/n/ac						
	AIR-AP3702I-UXK9C: Dual-band, controller-based 802.11a/g/n/ac (Configurable)						
	AIR-AP3702I-UXK910: Eco-pack (dual-band 802.11a/g/n/ac) 10 quantity access points						
	 AIRAP3702I-UXK910C: Eco-pack (dual-band 802.11a/g/n/ac) 10 quantity access points (Configurable) 						
	Cisco SMARTnet Total Care™ Service for the Cisco Aironet 3700i Access Point with internal antennas, Univers Regulatory Domain (UX)						
	 CON-SNT-AP3702IUX: SMARTnet 8x5xNBD for 3700i access point (dual-band 802.11a/g/n/ac) 						
	 CON-SNT-AP3702IUX x 10: SMARTnet 8x5xNBD for 10-quantity eco-pack 3700i access point (dual-band 802.11a/g/n/ac) 						
	Cisco Aironet 3700e Access Point: Indoor, challenging environments, with external antennas, Universal Regulatory Domain (UX)						
	AIR-AP3702E-UXK9: Dual-band controller-based 802.11a/g/n/ac						
	 AIR-AP3702E-UXK9: Dual-band controller-based 802.11a/g/n/ac (Configurable) 						
	 AIR-AP3702E-UXK910: Eco-pack (dual-band 802.11a/g/n/ac), 10 quantity access points 						
	AIRAP3702E-UXK910C: Eco-pack (dual-band 802.11a/g/n/ac), 10 quantity access points (Configurable)						
	Cisco SMARTnet Total Care Service for the Cisco Aironet 3700e Access Point with external antennas, Universa Regulatory Domain (UX)						
	• CON-SNT-AP3702EU: SMARTnet 8x5xNBD for 3700e access point (dual-band 802.11a/g/n/ac)						
	 CON-SNT-AP3702EU x 10: SMARTnet 8x5xNBD for 1- quantity eco-pack 3700e access point (dual-band 802.11a/g/n/ac) 						
	Cisco Aironet 3700i Access Point: Indoor environments, with internal antennas						
	AIR-CAP3702I-x-K9: Dual-band, controller-based 802.11a/g/n/ac						
	 AIR-CAP3702I-xK910: Eco-pack (dual-band 802.11a/g/n/ac) 10 quantity access points 						
	Cisco Aironet 3700e Access Point: Indoor, challenging environments, with external antennas						
	• AIR-CAP3702E-x-K9: Dual-band controller-based 802.11a/g/n/ac						
	AIR-CAP3702E-xK910: Eco-pack (dual-band 802.11a/g/n/ac) 10 quantity access points						
	Cisco Aironet 3700p Access Point: high-density environments, with narrow-beamwidth, high-gain, antennas						
	• AIR-CAP3702P-x-K9: Dual-band controller-based 802.11a/g/n/ac						
	AIR-CAP3702P-xK910: Eco-pack (dual-band 802.11a/g/n/ac) 10 quantity access points						
	Cisco Smart Net Total Care [™] for the Cisco Aironet 3700i Access Point with internal antennas						
	CON-SNT-3702IA: SNTC-8X5XNBD 802.11ac Ctrlr AP 4x Duration: 12 Month(s)						
	Cisco Smart Net Total Care for the Cisco Aironet 3700e Access Point with external antennas						
	• CON-SNT-3702EA: SNTC-8X5XNBD 802.11ac Ctrlr AP 4x4:3SS w/Cisco CleanAir; Ex Duration: 12 Month(s)						
	Cisco Smart Net Total Care for the Cisco Aironet 3700p Access Point with external antennas						
	CON-SNT-AIR3APAK: SNTC-8X5XNBD 802.11ac Ctrlr AP 4x Duration: 12 Month(s)						
	Cisco Wireless LAN Services						
	AS-WLAN-CNSLT: Cisco Wireless LAN Network Planning and Design Service						
	AS-WLAN-CNSLT: Cisco Wireless LAN Network Planning and Design Service AS-WLAN-CNSLT: Cisco Wireless LAN 802.11n Migration Service						
	AS-WLAN-CNSLT: <u>Cisco Wireless LAN Performance and Security Assessment Service</u> Pagulatory domains: (x = regulatory domain)						
	Regulatory domains: (x = regulatory domain) Customers are responsible for verifying approval for use in their individual countries.						

Item	Specification
	To verify approval and to identify the regulatory domain that corresponds to a particular country by model of Access Point, visit https://www.cisco.com/go/aironet/compliance.
	As regulatory domains are approved, the part numbers will be available on the Global Price List.
Software	Cisco Unified Wireless Network Software Release with AireOS Wireless Controllers:
	• 7.6 or later for the Cisco Aironet 3700 Series Access Point
	• 7.6 or later for support of the Wireless Security Module for the 3700 Series Access Point
	Cisco IOS XE Software Release:
	3.3.1SE or later for the Cisco Aironet 3700 Series Access Point
Supported wireless LAN controllers	 Cisco 2500 Series Wireless Controllers, Cisco Wireless Controller Module for ISR G2, Cisco Wireless Services Module 2 (WiSM2) for Catalyst[®] 6500 Series Switches, Cisco 5500 Series Wireless Controllers, Cisco Flex[®] 7500 Series Wireless Controllers, Cisco 8500 Series Wireless Controllers, Cisco Virtual Wireless Controller
	Cisco 5760 Wireless LAN Controller, Cisco Catalyst 3850 Series Switches, Cisco Catalyst 3650 Series Switches
Module options	Hyperlocation Module with Advanced Security
	 Hyperlocation Module provides full-spectrum scanning, both 2.4 and 5 GHz, for comprehensive detection and mitigation of over-the-network attacks, Cisco CleanAir technology to detect devices causing network interference, rogue device detection, context (location) awareness, FastLocate, and radio resource management (RRM) solutions
	BLE Beacon, incorporates five centrally managed virtual BLE beacons with separate Universal Unique Identifiers (UUIDs) and power levels
	 FastLocate provides faster updates per Wi-Fi device for a quicker refresh of the device's location Provides one to three-meter (median) of location accuracy of associated Wi-Fi clients, depending on deployment,
	when paired with the Hyperlocation Antenna
	 Provides full scanning of all 2.4- and 5-GHz channels while the access point is serving data clients on the integrated radios
	Cisco Aironet Access Point Module for Wireless Security
	 Provides full-spectrum scanning for comprehensive detection and mitigation of over-the-network attacks, Cisco CleanAir technology to detect devices causing network interference, rogue device detection, context (location) awareness, FastLocate, and radio resource management (RRM) solutions
	• FastLocate provides faster updates per Wi-Fi device for a quicker refresh of the device's location
	 Provides full scanning of all 2.4- and 5-GHz channels while the access point is serving data clients on the integrated radios (802.11b/g/n and 802.11a/n)
	Cisco Universal Small Cell 8718 Dual-band, switchable multimode module, first band for LTE with 2x50 mw MIMO, one band for 3G with 100 mw transmit and receive diversity
	Software configurable to operate as UMTS and LTE. Band 1/3 (USC8718-M13-K9)
	Software configurable to operate as UMTS and LTE. Band 1/7 (USC8718-M17-K9) Software configurable to operate as UMTS and LTE. Band 1/4 (USC8740 M34 K9)
	 Software configurable to operate as UMTS and LTE. Band 2/4 (USC8718-M24-K9) Cisco Universal Small Cell 5310
	• 3GPP band 1 (2100 MHz), 16 users, voice (R99), packet data (HSPA/HSDPA+)
	• 3GPP band 2/5 (band 2 - 1930 and band 5 - 869), 16 users, voice (R99), packet data (HSPA/HSDPA+)
802.11n version 2.0	4x4 MIMO with three spatial streams
(and related) capabilities	Maximal ratio combining (MRC)
	802.11n and 802.11a/g beamforming 20- and 40-MHz channels
	PHY data rates up to 450 Mbps (40 MHz with 5 GHz) PHY data rates up to 450 Mbps (40 MHz with 5 GHz)
	 Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx)
	802.11 dynamic frequency selection (DFS)
	Cyclic shift diversity (CSD) support
802.11ac Wave 1 capabilities	4x4 MIMO with three spatial streams MRC
- Capasimiso	802.11ac beamforming
	• 20-, 40-, and 80-MHz channels
	PHY data rates up to 1.3 Gbps (80 MHz with 5 GHz)
	Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx)
	• 802.11 DFS • CSD support
Data rates supported	802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps
Sata rates supported	
	802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps
	802.11n data rates on 2.4 GHz:

Item	Specificati	ion							
	MCS Index	r ²	GI ³ = 800 ns		GI = 40	00 ns			
			20-MHz Rate (Mbps)	20-MH	z Rate (Mbps)			
	0		6.5		7.2				
	1		13		14.4				
	2		19.5		21.7				
	3		26		28.9				
	4		39		43.3				
	5		52		57.8				
	6		58.5		65				
	7		65		72.2				
	8		13		14.4				
	9		26		28.9				
	10		39		43.3				
	11		52		57.8				
	12		78		86.7				
	13		104		115.6				
	14		117		130				
	15		130		144.4				
	16		19.5		21.7				
	17		39 4		43.3				
	18		58.5		65	65			
	19		78 86		86.7				
	20		117		130				
	21		156		173.3				
	22		175.5		195				
	23		195 216.7						
	802.11ac d	lata rates (5	GHz):						
	MCS Index	Spatial Streams		GI ³ =	800ns		GI = 400ns		
			20-MHz Rate (Mbps)	40-MH		80-MHz Rate (Mbps)	20-MHz Rate (Mbps)	40-MHz Rate (Mbps)	80-MHz Rate (Mbps)
	0	1	6.5	13.5		29.3	7.2	15	32.5
	1	1	13	27		58.5	14.4	30	65
	2	1	19.5	40.5		87.8	21.7	45	97.5
	3	1	26	54		117	28.9	60	130
	4	1	39	81		175.5	43.3	90	195
	5	1	52	108		234	57.8	120	260
	6	1	58.5	121.5		263.3	65	135	292.5
	7	1	65	135		292.5	72.2	150	325
	8	1	78	162		351	86.7	180	390
	9	1	-	180		390	-	200	433.3
	1	1	1	1		1	1	1	

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 delay spreads.

Item	Specification							
	0	2	13	27	58.5	14.4	30	65
	1	2	26	54	117	28.9	60	130
	2	2	39	81	175.5	43.3	90	195
	3	2	52	108	234	57.8	120	260
	4	2	78	162	351	86.7	180	390
	5	2	104	216	468	115.6	240	520
	6	2	117	243	526.5	130	270	585
	7	2	130	270	585	144.4	300	650
	8	2	156	324	702	173.3	360	780
	9	2	78	780	780	-	400	866.7
	0	3	19.5	40.5	87.8	21.7	45	97.5
	1	3	39	81	175.5	43.3	90	195
	2	3	58.5	121.5	263.3	65	135	292.5
	3	3	78	162	351	86.7	180	390
	4	3	117	243	526.5	130	270	585
	5	3	156	324	702	173.3	360	780
	6	3	175.5	364.5	-	195	405	-
	7	3	195	405	877.5	216.7	450	975
	8	3	234	486	1053	260	540	1170
	9	3	260	540	1170	288.9	600	1300
Frequency band and 20-MHz operating channels				• 2.412 • 5.180 • 5.745 Q (Q reg • 2.412 • 5.180 • 5.500 R (R regi • 2.412 • 5.180 • 5.660 S (S regi • 2.412 • 5.180 • 5.500 • 5.745 T (T regi • 2.412 • 5.280 • 5.500 (exclusion of the control of the con	Ilatory domain): to 2.462 GHz; 11 to 5.320 GHz; 8 co to 5.825 GHz; 5 co Ilatory domain): to 2.472 GHz; 13 to 5.320 GHz; 8 co to 5.700 GHz; 11 Ilatory domain): to 2.472 GHz; 13 to 5.320 GHz; 8 co to 5.700 GHz; 13 to 5.320 GHz; 8 co to 5.805 GHz; 7 co Ilatory domain): to 2.472 GHz; 13 to 5.320 GHz; 8 co to 5.700 GHz; 11 to 5.320 GHz; 5 co Ilatory domain): to 2.462 GHz; 11 to 5.320 GHz; 8 co des 5.600 to 5.640 to 5.825 GHz; 5 co Ilatory domain): to 2.462 GHz; 11 to 5.320 GHz; 8 co des 5.600 to 5.640 to 5.825 GHz; 5 co Ilatory domain): to 2.462 GHz; 11 to 5.320 GHz; 8 co des 5.600 to 5.640 to 5.825 GHz; 5 co Ilatory domain): to 2.462 GHz; 11 to 5.320 GHz; 8 co des 5.600 to 5.640 to 5.825 GHz; 5 co Ilatory domain):	hannels hannels channels hannels channels channels hannels hannels channels hannels channels hannels channels hannels channels hannels channels hannels channels hannels hannels hannels		
		2.472 GHz; 5.320 GHz;	13 channels 8 channels		• 5.745	to 5.825 GHz; 5 c	hannels	

Item	Specification	
	K (K regulatory domain):	
	• 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	

 $\textbf{Note:} \ \textbf{Customers are responsible for verifying approval for use in their individual countries.}$

To verify approval and to identify the regulatory domain that corresponds to a particular country by model of Access Point, visit https://www.cisco.com/go/aironet/compliance.

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 • 802.11ac: • 20 MHz: 21 • 40 MHz: 21 • 40 MHz: 9
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			° 20 MHZ: 21	
			。 40 MHz: 9	
			。 80 MHz: 4	
Note: This varies by re	gulatory domain. Refer to the pr	oduct documentation for specif	fic details for each regulatory do	main.
Receive sensitivity	• 802.11b (CCK)	• 802.11g (non HT20)	• 802.11a (non HT20)	
	∘ -101 dBm @ 1 Mbps	∘ -91 dBm @ 6 Mbps	∘ -93 dBm @ 6 Mbps	
	∘ -98 dBm @ 2 Mbps	∘ -91 dBm @ 9 Mbps	∘ -93 dBm @ 9 Mbps	
	∘ -92 dBm @ 5.5 Mbps	∘ -91 dBm @ 12 Mbps	∘ -93 dBm @ 12 Mbps	
	∘ -89 dBm @ 11 Mbps	∘ -90 dBm @ 18 Mbps	∘ -92 dBm @ 18 Mbps	
	·	∘ -87 dBm @ 24 Mbps	∘ -89 dBm @ 24 Mbps	
		∘ -85 dBm @ 36 Mbps	∘ -86 dBm @ 36 Mbps	
		∘ -80 dBm @ 48 Mbps	· -82 dBm @ 48 Mbps	
		· -79 dBm @ 54 Mbps	· -80 dBm @ 54 Mbps	
	2.4 GHz		5 GHz	5 GHz
	• 802.11n (HT20)		• 802.11n (HT20)	• 802.11n (HT40)
	∘ -90 dBm @ MCS0		∘ -93 dBm @ MCS0	∘ -90 dBm @ MCS0
	∘ -90 dBm @ MCS1		∘ -93 dBm @ MCS1	∘ -90 dBm @ MCS1
	∘ -90 dBm @ MCS2		∘ -92 dBm @ MCS2	∘ -89 dBm @ MCS2
	· -88 dBm @ MCS3		∘ -89 dBm @ MCS3	· -86 dBm @ MCS3
	· -85 dBm @ MCS4		· -86 dBm @ MCS4	∘ -83 dBm @ MCS4
	· -80 dBm @ MCS5		∘ -81 dBm @ MCS5	∘ -78 dBm @ MCS5
	· -78 dBm @ MCS6		∘ -80 dBm @ MCS6	∘ -77 dBm @ MCS6
	· -77 dBm @ MCS7		∘ -79 dBm @ MCS7	∘ -76 dBm @ MCS7
	∘ -90 dBm @ MCS8		∘ -93 dBm @ MCS8	∘ -90 dBm @ MCS8
	∘ -90 dBm @ MCS9		∘ -93 dBm @ MCS9	∘ -90 dBm @ MCS9
	∘ -89 dBm @ MCS10		∘ -90 dBm @ MCS10	∘ -87 dBm @ MCS10
	∘ -86 dBm @ MCS11		∘ -87 dBm @ MCS11	∘ -84 dBm @ MCS11
	∘ -82 dBm @ MCS12		∘ -84 dBm @ MCS12	∘ -81 dBm @ MCS12
	∘ -78 dBm @ MCS13		∘ -80 dBm @ MCS13	∘ -77 dBm @ MCS13
	∘ -77 dBm @ MCS14		∘ -79 dBm @ MCS14	∘ -76 dBm @ MCS14
	∘ -75 dBm @ MCS15		∘ -77 dBm @ MCS15	∘ -74 dBm @ MCS15
	• -90 dBm @ MCS16		• -93 dBm @ MCS16	• -90 dBm @ MCS16
	• -89 dBm @ MCS17		• -92 dBm @ MCS17	• -89 dBm @ MCS17
	• -87 dBm @ MCS18		• -89 dBm @ MCS18	• -86 dBm @ MCS18
	• -84 dBm @ MCS19		∘ -86 dBm @ MCS19	• -83 dBm @ MCS19
	• -81 dBm @ MCS20		• -83 dBm @ MCS20	• -80 dBm @ MCS20
	• -76 dBm @ MCS21		• -79 dBm @ MCS21	• -76 dBm @ MCS21
	• -75 dBm @ MCS22		• -77 dBm @ MCS22	• -74 dBm @ MCS22
	∘ -74 dBm @ MCS23		∘ -76 dBm @ MCS23	∘ -73 dBm @ MCS23

Item	Specification								
	802.11ac Receive Sensitivity								
	802.11ac (non HT80)								
	• -86 dBm @ 6 Mbps								
	• -76 dBm @ 54 Mbps								
	MCS Index ⁴	Spatial Streams							
			VHT20	VHT40	VHT80		VTH20-STBC	VHT40-STBC	VHT80-STBC
	0	1	-94 dBm	-91 dBm	-86 dBn	m	-94 dBm	-91 dBm	-86 dBm
	8	1	-77 dBm				-77 dBm		
	9	1		-72 dBm	-69 dBn	m		-73 dBm	-70 dBm
	0	2	-94 dBm	-91 dBm	-86 dBn	m			
	8	2	-75 dBm						
	9	2		-71 dBm	-67 dBn	n			
	0	3	-94 dBm	-91 dBm	-86 dBn	m			
	9	3	-71 dBm	-70 dBm	-65 dBn	m			
Maximum transmit	2.4 GHz			70 02	5 GH				
Note: The maximum po	• 802.11(• 23 dE • 802.11r • 23 dE	Bm, 4 antenr Bm, 4 antenr n (HT20) Bm, 4 antenr	 802.11n (HT20) 23 dBm, 4 antennas 802.11n (HT40) 						
specific details.	1			amy to marriage				product docum	
Available transmit power settings	20 dBm17 dBm14 dBm11 dBm8 dBm5 dBm	Hz 3 dBm (200 mW) 0 dBm (100 mW) 7 dBm (50 mW) 4 dBm (25 mW) 1 dBm (12.5 mW) dBm (6.25 mW) dBm (3.13 mW) dBm (1.56 mW)				5 GHz • 23 dBm (200 mW) • 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 po specific details.	wer setting w	ill vary by ch	annel and accor	rding to individua	I country	regulatio	ons. Refer to the	product docum	entation for
Integrated antenna		-		orizontal beamw rizontal beamwid		•			

⁴ MCS Index: The Modulation and Coding Scheme (MCS) index determines the number of spatial streams, the modulation, the coding rate, and data rate values.

Item	Specification							
External antenna (sold separately)	AP3700E: Certified for use with AP3700P: Certified for use with addition of support for AIR-AN1 Cisco offers the industry's broat scenarios	n antenna gains up to 6 dBi (2.4 <u>T2513P4M-N=</u> 13 dBi (2.4 GHz	GHz and 5 GHz) and 5 GHz)	, similar to	the AP370			
Interfaces	10/100/1000BASE-T autosensing (RJ-45) Management console port (RJ-45)							
Indicators	Status LED indicates boot load errors	,	perating status, bo	ot loader w	arnings, b	oot loader		
Dimensions (W x L x H)	Access point (without mounting)	g bracket): 8.7 x 8.7 x 2.11 in. (2	2.1 x 22.1 x 5.4 c	m)				
Weight	• 2.5 lb (1.13 kg)							
Environmental	Cisco Aironet 3700i Nonoperating (storage) temperature: -22° to 158°F (-30° 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. Cisco Aironet 3700e/3700p Nonoperating (storage) temperature: -22° to 158°F (-30° to 70°C) Nonoperating (storage) altitude test: 25°C, 15,000 ft. Operating temperature: -4° to 122°F (-20° to 50°C) Operating humidity: 10% to 90% (noncondensing)							
System memory	• 512 MB DRAM • 64 MB flash							
Input power requirements	AP3700: 44 to 57 VDCPower supply and power inject	or: 100 to 240 VAC; 50 to 60 Hz	<u>z</u>					
Power draw	* This is the power required at the I	PSE, which is a switch or injector	or.					
	Description	AP Functionality	PoE Budget [*] (Watts)	802.3af	E-PoE	802.3at PoE+ PWRINJ4		
PoE+ 802.3at	3700 - No external module installed	4x4:3 on 2.4/5 GHz	16.8	x	✓	✓		
	3700 + Wireless Security Module	4x4:3 on 2.4/5 GHz + WSM	19.6	x	✓	✓		
PoE 802.3af	3700 - No external module installed	3x3:3 on 2.4/5 GHz	15.4	✓	n/a	n/a		
	3700 + Wireless Security Module	2x2:2 on 2.4/5 GHz + WSM	15.4	✓	n/a	n/a		
Warranty Compliance standards	Limited lifetime hardware warranty UL 60950-1 CAN/CSA-C22.2 No. 60950-1 UL 2043 IEC 60950-1 EN 60950-1 EN 50155 Radio approvals: FCC Part 15.247, 15.407 RSS-210 (Canada) EN 300.328, EN 301.893 (Europe) ARIB-STD 66 (Japan) ARIB-STD 771 (Japan) 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
	 EN 60601-1-2 EMC requirements for the Medical Directive 93/42/EEC
	IEEE standards:
	∘ IEEE 802.11a/b/g, 802.11n, 802.11h, 802.11d
	∘ IEEE 802.11ac Draft 5
	Security:
	802.11i, Wi-Fi Protected Access 2 (WPA2), WPA
	∘ 802.1X
	 Advanced Encryption Standards (AES), Temporal Key Integrity Protocol (TKIP)
	Extensible Authentication Protocol (EAP) types:
	EAP-Transport Layer Security (TLS)
	 EAP-Tunneled TLS (TTLS) or Microsoft Challenge Handshake Authentication Protocol Version 2 (MSCHAPv2)
	 Protected EAP (PEAP) v0 or EAP-MSCHAPv2
	 EAP-Flexible Authentication via Secure Tunneling (FAST)
	PEAP v1 or EAP-Generic Token Card (GTC)
	EAP-Subscriber Identity Module (SIM)
	Multimedia:
	∘ Wi-Fi Multimedia (WMM)
	Other:
	∘ FCC Bulletin OET-65C
	∘ RSS-102

Limited Lifetime Hardware Warranty

The Cisco Aironet 3700 Series Access Points come 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 are defect-free for 90 days. For more details, visit https://www.cisco.com/go/warranty.

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For More Information

For more information about the Cisco Aironet 3700 Series, visit https://www.cisco.com/go/wirelesslanservices or contact your local account representative.



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