Data sheet Cisco public



Cisco Aironet 1560 Series Outdoor Access Points



Zapraszamy do kontaktu! Więcej informacji: www.kreski.pl



Contents

Features and benefits	3
Prominent feature/differentiator/capability	4
Product specifications	5
Ordering Information	15
Warranty information	15
Cisco and partner services	15
Cisco Capital	15
For more information	16



Cisco Aironet® 1560 Series Outdoor Access Points offer the latest 802.11ac Wave 2 functions in a rugged, low-profile housing that service providers and enterprises can deploy easily.



Ideal for applications requiring rugged outdoor Wi-Fi coverage, the Cisco Aironet 1560 Series Access Points offer the latest IEEE 802.11ac Wave 2 radio standard in a compact, aesthetically pleasing, easy-to-deploy package. The 1560 Series offers flexible deployment options for service providers and enterprise networks, that need the fastest links possible for mobile, outdoor clients (smartphones, tablets, and laptops) and wireless backhaul. With options for internal or external antennas, the 1560 Series Access Points give network operators the flexibility to balance their desired wireless coverage with their need for easy deployment. The Cisco Aironet 1560 Series is built on the strong base of Cisco® wireless innovations such as:

- Cisco CleanAir® technology for spectrum intelligence
- Cisco ClientLink technology for beamforming
- Radio Resource Management (RRM) for dynamic transmitter channel and power control

Whether deployed as a traditional access point or wireless mesh access point, the Cisco Aironet 1560 Series provides the throughput capacity needed for today's bandwidth-hungry devices.

Features and benefits

Table 1 lists the features and benefits of the Cisco Aironet 1560 Series.

Table 1. Features and Benefits of Cisco Aironet 1560 Series

Feature	Benefit
802.11ac Wave 2 radio	Provides up to 1.3-Gbps data rates with 3×3 Multiple Input, Multiple Output (MIMO) and up to three spatial streams
Multiuser MIMO (MU-MIMO)	Allows transmission of data to multiple 802.11ac Wave 2-capable clients simultaneously to improve client experience; prior to 802.11ac Wave 2, access points could transmit data to only one client at a time, typically referred to as single-user MIMO



Feature	Benefit
Flexible deployment modes	Allows for deployment of the 1560 in a variety of ways including point -to-point and mesh networks; it can also be deployed with the Cisco Mobility Express Solution, which is ideal f or small to medium -sized deployments that supports multiple access points without a physical controller; all deployment modes are easy to set up and configure
Small Form-Factor Pluggable (SFP) port	Supports optical fiber-based network connectivity for remote locations

Prominent feature/differentiator/capability

The Cisco Aironet 1560 Series offers the following features:

- Improved performance for multiple client devices: The 802.11ac Wave 2 access points use MU-MIMO technology, which allows different data streams to all flow at once from the access point to multiple 802.11ac Wave 2-supported devices. Now, multiple 802.11ac Wave 2 devices can connect at the same time, getting the information they need quicker.
- 5-GHz support: The Cisco Aironet 1560 Series doubles the scale of 5 -GHz mobile devices and raises the performance of high-density environments.
- 4G LTE Coexistence: The Cisco Aironet 1560 Series includes robust filtering around the 2.4 GHz unlicensed band to block out nearby licensed 4G LTE cellular signals.
- Cisco Flexible Antenna Port technology uses software configurable for either single- or dual-band antennas. It allows you to use the same antenna ports for either dual-band antennas to reduce footprint or single-band antennas to optimize radio coverage.
- Cisco Mobility Express: This solution is designed to bring enterprise-class wireless access to small and medium-sized networks. Easy to set up with low maintenance, Mobility Express includes advanced features from Cisco and does not require a physical controller appliance.
- Cisco High Density Experience (HDX): Cisco HDX comes standard on the 1560, giving this access point top-of-the-line network efficiency over a large number of wireless clients. HDX uses customized chipsets to target the needs of high-density networks. It is built with best-in-class RF architecture and gives a better user experience for high-performance applications.



Product specifications

Table 2 lists the specifications of the 1560 access point.

 Table 2.
 Specifications of Cisco Aironet 1560 Series

Item	Specification	on						
802.11ac Wave 1 and 2 capabilities	 1562I: 3 x 3 MIMO with three spatial streams 1562E/D 2 x 2 MIMO with two spatial streams Multi- and single-user MIMO Maximal Ratio Combining (MRC) 802.11ac beamforming (transmit beamforming) 20-, 40-, and 80-MHz channels PHY data rates up to 1.3 Gbps (80 MHz in 5 GHz) Packet aggregation: A-MPDU (Tx/Rx) and A-MSDU (Tx/Rx) 802.11 Dynamic Frequency Selection (DFS) Cyclic-Shift-Diversity (CSD) support 							
802.11n (and related) capabilities	 1562I: 3 x 3 MIMO with three spatial streams 1562E/D: 2 x 2 MIMO with two spatial streams MRC 20- and 40-MHz channels PHY data rates up to 450 Mbps Packet aggregation: A-MPDU (Tx/Rx) and A-MSDU (Tx/Rx) 802.11 DFS CSD support 							
Data rates supported	802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps 802.11b/g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps 802.11n data rates on 2.4 and 5 GHz:							
	MCS Index	GI4 = 800 ns		GI = 400 ns				
		20-MHz Rates (Mbps)	40-MHz Rates (Mbps)	20-MHz Rates (Mbps)	40-MHz Rates (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			



Item	Specificat	ion							
	10	39		81		43.3	90		
	11	52	52		108 57.8		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		
	16	19.5		40.5		21.7	45		
	17	39		81		43.3	90		
	18	58.5		121.5		65	135		
	19	78		162		86.7	180		
	20	117		243		130	270		
	21	156		324		173.3	360		
	22	175.5		364.5		195	405		
	23	195	40)5	216.7	,	450		
	802.11ac [Data Rates (5 GHz)						
	Spatial Streams	MCS	GI = 800	ns		GI = 400 ı	าร		
			20 MHz	40 MHz	80 M	Hz 20 MHz	40 MHz	80 MHz	
	1	0	6.5	13.5	29.3	7.2	15	32.5	
	1	1	13	27	58.5	14.4	30	65	
	1	2	19.5	40.5	87.8	21.7	45	97.5	
	1	3	26	54	117	28.9	60	130	
	1	4	39	81	175.5	5 43.3	90	195	
	1	5	52	108	234	57.8	120	260	
	1	6	58.5	121.5	263.3	3 65	135	292.5	
	1	7	65	135	292.5	72.2	150	325	
	1	8	78	162	351	86.7	180	390	
	1	9	-	180	390	_	200	433.3	
	2	0	13	27	58.5	14.4	30	65	
	2	1	26	54	117	28.9	60	130	
	2	2	39	81	175.5	43.3	90	195	
	2	3	52	108	234	57.8	120	260	
	2	4	78	162	351	86.7	180	390	
	2	5	104	216	468	115.6	240	520	



Item	Specification	on						
	2	6	117	243	526.5	130	270	585
	2	7	130	270	585	144.4	300	650
	2	8	156	324	702	173.3	360	780
	2	9	_	360	780	-	400	866.7
	3	0	19.5	40.5	87.8	21.7	45	97.5
	3	1	39	81	175.5	43.3	90	195
	3	2	58.5	121.5	263.3	65	135	292.5
	3	3	78	162	351	86.7	180	390
	3	4	117	243	526.5	130	270	585
	3	5	156	324	702	173.3	360	780
	3	6	175.5	364.5	_	195	405	_
	3	7	195	405	877.5	216.7	450	975
	3	8	234	486	1053	260	540	1170
	3	9	260	540	1170	288.9	600	1300
	B: 2.412 to 2.4 5.180 to 5.2 5.260 to 5.3 5.500 to 5.3 5.745 to 5.8 C: 2.412 to 2.4 5.745 to 5.8 D: 2.412 to 2.4	325 GHz, 5 c 462 GHz, 11 240 GHz, 4 c 320 GHz, 4 c 720 GHz, 12 325 GHz, 5 c 472 GHz, 13 325 GHz, 5 c 462 GHz, 11 365 GHz, 7 c	channels hannels channels hannels channels channels					
	5.500 to 5.5 5.660 to 5.7 F: 2.412 to 2.4	472 GHz, 13 580 GHz, 5 c 700 GHz, 3 c 472 GHz, 13 305 GHz, 4 c	hannels hannels channels					



Item	Specification
	G:
	2.412 to 2.472 GHz, 13 channels
	5.745 to 5.825 GHz, 5 channels
	-Н:
	2.412 to 2.472 GHz, 13 channels
	5.745 to 5.825 GHz, 5 channels
	-I:
	2.412 to 2.472 GHz, 13 channels
	5.180 to 5.320 GHz, 8 channels
	-K:
	2.412 to 2.462 GHz, 11 channels
	5.280 to 5.320 GHz, 3 channels
	5.500 to 5.620 GHz, 7 channels
	5.745 to 5.805 GHz, 4 channels
	-L:
	2.412 to 2.472 GHz, 13 channels
	5.500 to 5.620 GHz, 7 channels
	5.745 to 5.865 GHz, 7 channels
	-M:
	2.412 to 2.472 GHz, 13 channels
	5.500 to 5.580 GHz, 5 channels
	5.660 to 5.700 GHz, 3 channels
	5.745 to 5.805 GHz, 4 channels
	-N:
	2.412 to 2.462 GHz, 11 channels
	5.745 to 5.825 GHz, 5 channels
	-Q:
	2.412 to 2.472 GHz, 13 channels
	5.500 to 5.700 GHz, 11 channels
	-R:
	2.412 to 2.472 GHz, 13 channels
	5.260 to 5.320 GHz, 4 channels
	5.660 to 5.700 GHz, 3 channels
	5.745 to 5.825 GHz, 5 channels
	-S:
	2.412 to 2.472 GHz, 13 channels
	5.500 to 5.700 GHz, 11 channels
	5.745 to 5.825 GHz, 5 channels
	-T:
	2.412 to 2.462 GHz, 11 channels
	5.500 to 5.580 GHz, 5 channels
	5.660 to 5.700 GHz, 3 channels



Item	Specification Sp
	5.745 to 5.825 GHz, 5 channels
	-Z:
	2.412 to 2.462 GHz, 11 channels
	5.500 to 5.580 GHz, 5 channels
	5.660 to 5.700 GHz, 3 channels
	5.745 to 5.825 GHz, 5 channels

Note: Customers are responsible f or verifying approval f or use in their individual countries. To verify approval that corresponds t o a particular country, please visit https://www.cisco.com/go/aironet/compliance.

2.4 GHz 5 GHz Maximum number of • 802.11b/g: • 802.11a: nonoverlapping • 20 MHz: 3 • 20 MHz: 27 channels • 802.11n: • 802.11n: • 20 MHz: 3 • 20 MHz: 27 • 40 MHz: 13 • 40 MHz: 1 (hardware capable) • 802.11ac: • 20 MHz: 27 • 40 MHz: 13 • 80 MHz: 6

Note: This number varies by regulatory domain. Refer to the product documentation f or specific details f or each regulatory domain.

Receive Sensitivity							
			2.4 GHz Radio			5 GHz Radio	
	Spatial Stre	ams	15621	1562D/E		15621	1562D/E
802.11/11b							
1 Mbps	1	-100		-98	NA		NA
11 Mbps	1	-88		-87	NA		NA
802.11a/g							
6 Mbps	1	-92		-90	-94		-93
24 Mbps	1	-86		-83	-89		-88
54 Mbps	1	-76		-74	-80		-79
802.11n HT20							
MCS0	1	-90		-89	-91		-90
MCS4	1	-84		-82	-88		-86
MCS7	1	-77		-75	-80		-78
MCS8	2	-89		-88	-90		-89



Item	Specificatio	Specification							
MCS12	2	-82	-80	-85	-83				
MCS15	2	-75	-72	-78	-76				
MCS16	3	-89		-90					
MCS20	3	-81		-84					
MCS23	3	-73		-76					
802.11n HT40									
MCS0	1	-88	-86	-90	-90				
MCS4	1	-82	-80	-85	-83				
MCS7	1	-75	-74	-78	-76				
MCS8	2	-87	-86	-90	-90				
MCS12	2	-80	-78	-82	-81				
MCS15	2	-72	-70	-75	-73				
MCS16	3	-87		-90					
MCS20	3	-78		-81					
MCS23	3	-71		-74					
802.11ac VHT20									
MCS0	1			-95	-94				
MCS4	1			-88	-86				
MCS7	1			-81	-79				
MCS8	1			-77	-75				
MCS0	2			-94	-93				
MCS4	2			-86	-84				
MCS7	2			-78	-76				
MCS8	2			-74	-72				
MCS0	3			-93					
MCS4	3			-85					



Item	Specification	n		
MCS7	3		-78	
MCS8	3		-72	
MCS9	3		-69	
802.11ac VHT40				
MCS0	1		-91	-90
MCS4	1		-85	-84
MCS7	1		-79	-77
MCS8	1		-75	-73
MCS9	1		-73	-71
MCS0	2		-91	-90
MCS4	2		-83	-82
MCS7	2		-76	-74
MCS8	2		-73	-70
MCS9	2		-71	-68
MCS0	3		-91	
MCS4	3		-82	
MCS7	3		-74	
MCS8	3		-69	
MCS9	3		-68	
802.11ac VHT80				
MCS0	1		-88	-88
MCS4	1		-83	-81
MCS7	1		-75	-73
MCS8	1		-71	-69
MCS9	1		-69	-67
MCS0	2		-88	-88
MCS4	2		-80	-78



Item	Specification		
MCS7	2	-73	-71
MCS8	2	-69	-67
MCS9	2	-67	-65
MCS0	3	-88	
MCS4	3	-78	
MCS7	3	-71	
MCS8	3	-67	
MCS9	3	-65	
Maximum conducted transmit power	1562I2.4 GHz: 29 dBm with 3 antennas5 GHz: 29 dBm with 3 antennas	1562D2.4 GHz: 27 dBm with 2 antennas5 GHz: 27 dBm with 2 antennas	1562E2.4 GHz: 27 dBm with 2 antennas5 GHz: 27 dBm with 2 antennas

Note: The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation f or specific details.

Interfaces	 WAN port 10/100/1000BASE-T Ethernet, autosensing (RJ-45), PoE in SFP port (fiber or electrical) Management console port (RJ-45) Multicolor LED DC power input Reset button 		
Uplink options	Ethernet, SFP, and wireless mesh		
Dimensions (L x W x D)	1562I: 9.0 x 6.8 x 3.9 in. (22.9 x 17.1 x 9.8 cm) 1562D: 9.0 x 6.8 x 4.3 in. (22.9 x 17.1 x 10.9 cm) 1562E:: 9.0 x 6.8 x 3.9 in. (22.9 x 17.1 x 9.8 cm)		
Weight	1562I: 5.6 lb (2.5 kg) 1562D: 5.7 lb (2.6 kg) 1562E: 5.6 lb (2.5 kg)		
Environmental	Operating temperature: • -40 to 65° C (-40 to 149° F) ambient air with no solar loading • -40 to 55° C (-40 to 131° F) ambient air with solar loading Storage temperature: -40 to 85° C (-40 to 185° F) Humidity: 5 - 95%, non-condensing Wind resistance: • Up to 100-mph sustained winds • Up to 165-mph wind gusts		



Item	Specification Sp				
Environmental ratings	 IEC 60529 IP67 NEMA Type 4X Icing protection NEMA 250-2008 Corrosion NEMA 250-2008 (600 hours) Solar radiation EN 60068-2-5 (1200 W/ m2) Vibration MIL-STD-810 				
Antennas	 Integrated dual-b Dual Band AIR-ANT2568\ AIR-ANT2547\ AIR-ANT2547\ AIR-ANT2513F Single Band 2.4 GHz AIR-ANT2450\ AIR-ANT2450\ AIR-ANT2450\ AIR-ANT2413F GHz AIR-ANT5150\ AIR-ANT5150\ AIR-ANT5114F 	and direction /G-N /G-N /G-N /-N P3M-N= P4M-N= /-N= /-N= /-N= P2M-N= /-N= /-N= /-N= /-N= /-N= /-N= /-N= /	6 dBi (2.4 GHz), 4 dBi (2.4 GHz), 4 dBi (2.4 GHz), 8 dBi (2.4 GHz), 13 dBi (2.4 GHz), 5 dBi (2.4 GHz), 5 dBi (2.4 GHz), 5 dBi (2.4 GHz), 5 dBi (2.4 GHz), 6 dBi (2.4 GHz), 7 dBi (2.4 GHz), 8 dBi (2.4 GHz), 13 dBi (2.4 GHz), 14 dBi (5GHz), 8 dBi (5GHz), 14 dBi (5GHz),	8 dBi (5 GHz) 7 dBi (5 GHz) 7 dBi (5 GHz) 8 dBi (5 GHz) 8 dBi (5 GHz) 13 dBi (5 GHz) Omni Omni, vertical po Omni, horizontal Omni Directional, dual Omni, vertical po Omni, torizontal Omni Directional, dual	Omni Omni Omni Directional Directional Diarized polarized polarized polarized polarized
Powering options	 AC (with AIR-PWRADPT-RGD1=, AC/DC outdoor power adapter) 44-57 VDC input Universal Power of Ethernet (Cisco UPoE+ and Cisco UPoE), 802.3at Cisco power injectors: AIR-PWRINJ-60RGD1= (outdoor rated, 60W, with NEMA 5-15 AC plug) AIR-PWRINJ-60RGD2= (outdoor rated, 60W, unterminated AC cable) AIR-PWRINJ6= (indoor, 802.3at) Note: If 802.3at Power over Ethernet (PoE) is the source of power, the 1562I radios will shift from 3 x 3 to 2 x 2. 				
Power consumption	1562I 32 W 1562D/E 25 W	(3x3:3, ful	l power)		



Item	Specification Sp				
Compliance	 Safety UL60950, 2nd Edition CAN/CSA-C22.2 No. 60950, 2nd Edition IEC 60950, 2nd Edition EN 60950, 2nd Edition 				
	EN 60950, 2 nd Edition Immunity				
	 802.11i, Wi-Fi Protected Access 2 (WPA2), and WPA 802.1X authentication, including Extensible Authentication Protocol (EAP) and Protected EAP (EAP-PEAP), EAP Transport Layer Security (EAP-TLS), EAP-Tunneled TLS (EAP-TTLS), EAP-Subscriber Identity Module - (EAP-SIM), and Cisco LEAP VPN pass-through IP Security (IPsec) Layer 2 Tunneling Protocol (L2TP) 				
Warranty	MAC address filtering 1-year limited hardware warranty				



Ordering Information

Table 3 gives ordering information for the Cisco Aironet 1560 Series.

Table 3. Ordering Information for Cisco Aironet 1560 Series

Part Number	Product Description
Aironet 1560 Series	 AIR-AP1562I-x-K9: Dual-band 802.11a/g/n/ac, Wave 2, internal semi-omni antennas AIR-AP1562E-x-K9: Dual-band 802.11a/g/n/ac, Wave 2, external antennas AIR-AP1562D-x-K9: Dual-band 802.11a/g/n/ac, Wave 2, internal directional antennas
	Regulatory domains: (x = regulatory domain) Customers are responsible f or verifying approval f or use in their individual countries. To verify approval that corresponds to a particular country or the regulatory domain used in a specific country, visit https://www.cisco.com/go/aironet/compliance .
	Not all regulatory domains have been approved. As they are approved, the part numbers will be available on the Global Price List. • AIR-AP1562I-D-K9I: Dual-band 802.11a/g/n/ac, Wave 2, internal antennas (India only)
	Cisco SMARTnet [™] Service for the Cisco Aironet 1560 Series Access Points
	Refer to the Service part numbers available on Cisco Commerce Workspace f or available service offerings.

Warranty information

The Cisco Aironet 1560 Series Outdoor Access Points come with a 1 -year limited warranty that provides full warranty coverage of the hardware. The warranty includes 10 -day advance hardware replacement and helps ensure that software media are defect-free for 90 days. For more details, visit https://www.cisco.com/go/warranty.

Cisco and partner 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 help you 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, please visit: https://www.cisco.com/c/en/us/products/wireless/service-listing.html.

Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. Learn more.



For more information

For more information about the Cisco Aironet 1560 Series, visit https://www.cisco.com/go/wireless or contact your local Cisco account representative.



Zapraszamy do kontaktu! Więcej informacji: www.kreski.pl

Americas Headquarters Cisco Systems, Inc. San Jose, CA Asia Pacific Headquarters Cisco Systems (USA) Pte. Ltd. Singapore Europe Headquarters Cisco Systems International BV Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at https://www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Printed in USA C78-737417-15 03/21