

# Cisco Aironet 1830 Series Access Points



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## Product overview

Ideal for small and medium-sized networks, the Cisco® Aironet® 1830 Series delivers industry-leading wireless performance with support for the latest Wi-Fi standard, IEEE's new 802.11ac Wave 2 specification, and meets the growing requirements of wireless networks by delivering a better user experience. The 1830 Series extends support to a new generation of Wi-Fi clients, such as smartphones, tablets, and high-performance laptops that have integrated 802.11ac Wave 1 or Wave 2 support.

## Features and benefits

With 802.11ac Wave 2, the 1830 Series provides a data rate of up to 867 Mbps on the 5-GHz radio, exceeding the data rates offered by today's high-end 802.11n access points. It also enables a total aggregate dual-radio data rate of up to 1 Gbps, providing the necessary foundation for enterprise and service provider networks 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 users' day-to-day work, but should enable a high-performance experience while allowing users to move freely. The 1830 Series delivers industry-leading performance for highly secure and reliable wireless connections and provides a robust mobility experience that includes:

- 802.11ac Wave 2 with 3x3 Multiple-Input Multiple-Output (MIMO) technology with two spatial streams when operating in single-user or multiuser MIMO mode, offering 867-Mbps rates for more capacity and reliability than competing access points.
- Multiuser MIMO (MU-MIMO) allows transmission of data to multiple 802.11ac Wave 2 capable clients simultaneously to improve client experience. Prior to MU-MIMO, 802.11n and 802.11ac Wave 1 access points could transmit data to only one client at a time, typically referred to as single-user MIMO.
- Transmit beamforming technology improves downlink performance to mobile devices, including one- and two-spatial-stream devices on 802.11ac, while improving battery life on mobile devices such as smartphones and tablets.
- Flexible deployment mode through the [Mobility Express Solution](#) is ideal for small to medium-sized deployments that require multiple access points. Easy setup allows the 1830 Series to be deployed on networks without a physical controller.

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

## Product specifications

**Table 1.** Product specifications

Feature	Specifications
<b>Software</b>	Cisco Unified Wireless Network Software Release with AireOS wireless controllers: <ul style="list-style-type: none"> <li>• 8.1.121.0 or later for the Cisco Aironet 1830 Series Access Points</li> </ul>
<b>Deployment modes</b>	Centralized, standalone, sniffer**, Cisco FlexConnect™, monitor**, OfficeExtend**, mesh**
<b>Supported wireless LAN controllers</b>	<ul style="list-style-type: none"> <li>• Cisco 2500 Series Wireless Controllers, Cisco 3500 series Wireless Controllers, Cisco Wireless Controller Module for ISR G2, Cisco Wireless Services Module 2 (WiSM2) for Cisco Catalyst® 6500 Series Switches, Cisco 5500 Series Wireless Controllers, Cisco Flex® 7500 Series Wireless Controllers, Cisco 8500 Series Wireless Controllers, Cisco 9800 series Wireless Controllers, Cisco 5760 Wireless LAN Controller, ** Cisco Catalyst 3650 and 3850 Series Switches with integrated controller**</li> <li>• Cisco Mobility Express</li> </ul>
<b>802.11n version 2.0 (and related) capabilities</b>	<ul style="list-style-type: none"> <li>• 3x3 MIMO with two spatial streams</li> <li>• Maximal Ratio Combining (MRC)</li> <li>• 20- and 40-MHz channels</li> <li>• PHY data rates up to 300 Mbps (40 MHz with 5 GHz)</li> <li>• Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx)</li> <li>• 802.11 Dynamic Frequency Selection (DFS)</li> <li>• Cyclic Shift Diversity (CSD) support</li> </ul>
<b>802.11ac Wave 1 and 2 capabilities</b>	<ul style="list-style-type: none"> <li>• 3x3 MIMO with two spatial streams, single-user or multiuser MIMO</li> <li>• MRC</li> <li>• 802.11ac beamforming (transmit beamforming)</li> <li>• 20-, 40-, and 80-MHz channels</li> <li>• PHY data rates up to 867 Mbps (80 MHz in 5 GHz)</li> <li>• Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx)</li> <li>• 802.11 DFS</li> <li>• CSD support</li> </ul>

Feature	Specifications									
<b>+Data rates supported</b>	<b>802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps</b>									
	<b>802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps</b>									
	<b>802.11n data rates on 2.4 GHz (only 20 MHz and MCS 0 to MCS 23) and 5 GHz:</b>									
	<b>MCS index<sup>1</sup></b>		<b>GI<sup>2</sup> = 800 ns</b>		<b>GI = 800 ns</b>		<b>GI = 400 ns</b>		<b>GI = 400 ns</b>	
			<b>20-MHz rate (Mbps)</b>		<b>40-MHz rate (Mbps)</b>		<b>20-MHz rate (Mbps)</b>		<b>40-MHz rate (Mbps)</b>	
	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	
<b>Data rates supported</b>	<b>MCS index<sup>1</sup></b>		<b>GI<sup>2</sup> = 800 ns</b>		<b>GI = 800 ns</b>		<b>GI = 400 ns</b>		<b>GI = 400 ns</b>	
			<b>20-MHz rate (Mbps)</b>		<b>40-MHz rate (Mbps)</b>		<b>20-MHz rate (Mbps)</b>		<b>40-MHz rate (Mbps)</b>	
	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		
<b>802.11ac data rates (5 GHz):</b>										
<b>MCS index</b>		<b>Spatial streams</b>		<b>GI = 800 ns</b>		<b>GI = 400 ns</b>				
				<b>20-MHz rate (Mbps)</b>		<b>40-MHz rate (Mbps)</b>		<b>80-MHz rate (Mbps)</b>		
0		1		6.5		13.5		29.3		
1		1		13		27		58.5		
				<b>20-MHz rate (Mbps)</b>		<b>40-MHz rate (Mbps)</b>		<b>80-MHz rate (Mbps)</b>		
1		1		13		27		58.5		

<sup>1</sup> MCS Index: The Modulation and Coding Scheme (MCS) index determines the number of spatial streams, the modulation, the coding rate, and data rate values.

<sup>2</sup> GI: A Guard Interval (GI) between symbols helps receivers overcome the effects of multipath delay spreads.

Feature	Specifications							
	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
	<b>MCS index</b>		<b>Spatial streams</b>		<b>GI = 800 ns</b>		<b>GI = 400 ns</b>	
			<b>20-MHz rate (Mbps)</b>	<b>40-MHz rate (Mbps)</b>	<b>80-MHz rate (Mbps)</b>	<b>20-MHz rate (Mbps)</b>	<b>40-MHz rate (Mbps)</b>	<b>80-MHz rate (Mbps)</b>
	9	1	-	180	390	-	200	433.3
	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	-	360	780	-	400	866.7
<b>Maximum number of nonoverlapping channels</b>	<b>A (A regulatory domain):</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz)</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul> <b>B (B regulatory domain):</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.500 to 5.720 GHz; 12 channels</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul> <b>C (C regulatory domain):</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul> <b>D (D regulatory domain):</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul>				<b>K (K regulatory domain):</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.500 to 5.620 GHz; 7 channels</li> <li>• 5.745 to 5.805 GHz; 4 channels</li> </ul> <b>N (N regulatory domain):</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul> <b>Q (Q regulatory domain):</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.500 to 5.700 GHz; 11 channels</li> </ul> <b>R (R regulatory domain):</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.660 to 5.805 GHz; 7 channels</li> </ul>			

Feature	Specifications	
	<p><b>E (E regulatory domain):</b></p> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz)</li> </ul> <p><b>F (F regulatory domain):</b></p> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.250 to 5.350 GHz; 4 channels</li> <li>• 5.725 to 5.825 GHz; 4 channels</li> </ul> <p><b>H (H regulatory domain):</b></p> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.150 to 5.350 GHz; 8 channels</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul> <p><b>I (I regulatory domain):</b></p> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> </ul>	<p><b>S (S regulatory domain):</b></p> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.500 to 5.700 GHz; 11 channels</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul> <p><b>T (T regulatory domain):</b></p> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.280 to 5.320 GHz; 3 channels</li> <li>• 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz)</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul> <p><b>Z (Z regulatory domain):</b></p> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.180 to 5.320 GHz; 8 channels</li> <li>• 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz)</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul>

**Note:** Customers are responsible for verifying approval for use in their individual countries. To verify approval that corresponds to a particular country, visit <https://www.cisco.com/go/aironet/compliance>.

Maximum number of nonoverlapping channels	2.4 GHz	5 GHz
	<ul style="list-style-type: none"> <li>• 802.11b/g: <ul style="list-style-type: none"> <li>◦ 20 MHz: 3</li> </ul> </li> <li>• 802.11n: <ul style="list-style-type: none"> <li>◦ 20 MHz: 3</li> <li>◦ 40 MHz: 1 (hardware capable)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 802.11a: <ul style="list-style-type: none"> <li>◦ 20 MHz: 25</li> </ul> </li> <li>• 802.11n: <ul style="list-style-type: none"> <li>◦ 20 MHz: 25</li> <li>◦ 40 MHz: 12</li> </ul> </li> <li>• 802.11ac: <ul style="list-style-type: none"> <li>◦ 20 MHz: 21</li> <li>◦ 40 MHz: 12</li> <li>◦ 80 MHz: 6</li> </ul> </li> </ul>

**Note:** This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.

Receive sensitivity	2.4 GHz	802.11g (non HT20)	802.11a (non HT20)	
	<ul style="list-style-type: none"> <li>• 802.11b (CCK) <ul style="list-style-type: none"> <li>◦ -101 dBm @ 1 Mbps</li> <li>◦ -98 dBm @ 2 Mbps</li> <li>◦ -92 dBm @ 5.5 Mbps</li> <li>◦ -89 dBm @ 11 Mbps</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 802.11g (non HT20) <ul style="list-style-type: none"> <li>◦ -96 dBm @ 6 Mbps</li> <li>◦ -95 dBm @ 9 Mbps</li> <li>◦ -94 dBm @ 12 Mbps</li> <li>◦ -92 dBm @ 18 Mbps</li> <li>◦ -88 dBm @ 24 Mbps</li> <li>◦ -85 dBm @ 36 Mbps</li> <li>◦ -81 dBm @ 48 Mbps</li> <li>◦ -79 dBm @ 54 Mbps</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 802.11a (non HT20) <ul style="list-style-type: none"> <li>◦ -96 dBm @ 6 Mbps</li> <li>◦ -95 dBm @ 9 Mbps</li> <li>◦ -94 dBm @ 12 Mbps</li> <li>◦ -92 dBm @ 18 Mbps</li> <li>◦ -88 dBm @ 24 Mbps</li> <li>◦ -85 dBm @ 36 Mbps</li> <li>◦ -80 dBm @ 48 Mbps</li> <li>◦ -79 dBm @ 54 Mbps</li> </ul> </li> </ul>	
Receive sensitivity	2.4 GHz		5 GHz	5 GHz
	<ul style="list-style-type: none"> <li>• 802.11n (HT20) <ul style="list-style-type: none"> <li>◦ -96 dBm @ MCS0</li> <li>◦ -93 dBm @ MCS1</li> <li>◦ -90 dBm @ MCS2</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• 802.11n (HT20) <ul style="list-style-type: none"> <li>◦ -96 dBm @ MCS0</li> <li>◦ -92 dBm @ MCS1</li> <li>◦ -90 dBm @ MCS2</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 802.11n (HT40) <ul style="list-style-type: none"> <li>◦ -93 dBm @ MCS0</li> <li>◦ -90 dBm @ MCS1</li> <li>◦ -87 dBm @ MCS2</li> </ul> </li> </ul>

Feature	Specifications																																																				
	<ul style="list-style-type: none"> <li>◦ -87 dBm @ MCS3</li> <li>◦ -84 dBm @ MCS4</li> <li>◦ -79 dBm @ MCS5</li> <li>◦ -78 dBm @ MCS6</li> <li>◦ -76 dBm @ MCS7</li> <li>◦ -93 dBm @ MCS8</li> <li>◦ -90 dBm @ MCS9</li> <li>◦ -87 dBm @ MCS10</li> <li>◦ -84 dBm @ MCS11</li> <li>◦ -81 dBm @ MCS12</li> <li>◦ -76 dBm @ MCS13</li> <li>◦ -75 dBm @ MCS14</li> <li>◦ -73 dBm @ MCS15</li> </ul>		<ul style="list-style-type: none"> <li>◦ -86 dBm @ MCS3</li> <li>◦ -83 dBm @ MCS4</li> <li>◦ -79 dBm @ MCS5</li> <li>◦ -77 dBm @ MCS6</li> <li>◦ -76 dBm @ MCS7</li> <li>◦ -93 dBm @ MCS8</li> <li>◦ -89 dBm @ MCS9</li> <li>◦ -87 dBm @ MCS10</li> <li>◦ -83 dBm @ MCS11</li> <li>◦ -80 dBm @ MCS12</li> <li>◦ -76 dBm @ MCS13</li> <li>◦ -74 dBm @ MCS14</li> <li>◦ -73 dBm @ MCS15</li> </ul>	<ul style="list-style-type: none"> <li>◦ -84 dBm @ MCS3</li> <li>◦ -80 dBm @ MCS4</li> <li>◦ -76 dBm @ MCS5</li> <li>◦ -75 dBm @ MCS6</li> <li>◦ -73 dBm @ MCS7</li> <li>◦ -90 dBm @ MCS8</li> <li>◦ -87 dBm @ MCS9</li> <li>◦ -84 dBm @ MCS10</li> <li>◦ -81 dBm @ MCS11</li> <li>◦ -77 dBm @ MCS12</li> <li>◦ -73 dBm @ MCS13</li> <li>◦ -72 dBm @ MCS14</li> <li>◦ -70 dBm @ MCS15</li> </ul>																																																	
	<b>802.11ac receive sensitivity</b>																																																				
	<b>802.11ac (non HT80)</b> <ul style="list-style-type: none"> <li>• -89 dBm @ 6 Mbps</li> <li>• -73 dBm @ 54 Mbps</li> </ul>																																																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="334 884 472 968" rowspan="2">MCS index</th> <th data-bbox="472 884 735 968" rowspan="2">Spatial streams</th> <th colspan="3" data-bbox="735 884 1502 968"></th> </tr> <tr> <th data-bbox="735 968 873 1014">VHT20</th> <th data-bbox="873 968 1260 1014">VHT40</th> <th data-bbox="1260 968 1502 1014">VHT80</th> </tr> </thead> <tbody> <tr> <td data-bbox="334 1014 472 1060">0</td> <td data-bbox="472 1014 735 1060">1</td> <td data-bbox="735 1014 873 1060">-96 dBm</td> <td data-bbox="873 1014 1260 1060">-93 dBm</td> <td data-bbox="1260 1014 1502 1060">-89 dBm</td> </tr> <tr> <td data-bbox="334 1060 472 1106">7</td> <td data-bbox="472 1060 735 1106">1</td> <td data-bbox="735 1060 873 1106">-76 dBm</td> <td data-bbox="873 1060 1260 1106">-73 dBm</td> <td data-bbox="1260 1060 1502 1106">-70 dBm</td> </tr> <tr> <td data-bbox="334 1106 472 1152">8</td> <td data-bbox="472 1106 735 1152">1</td> <td data-bbox="735 1106 873 1152">-71 dBm</td> <td data-bbox="873 1106 1260 1152">-69 dBm</td> <td data-bbox="1260 1106 1502 1152">-66 dBm</td> </tr> <tr> <td data-bbox="334 1152 472 1199">9</td> <td data-bbox="472 1152 735 1199">1</td> <td data-bbox="735 1152 873 1199">NA</td> <td data-bbox="873 1152 1260 1199">-67 dBm</td> <td data-bbox="1260 1152 1502 1199">-64 dBm</td> </tr> <tr> <td data-bbox="334 1199 472 1245">0</td> <td data-bbox="472 1199 735 1245">2</td> <td data-bbox="735 1199 873 1245">-93 dBm</td> <td data-bbox="873 1199 1260 1245">-90 dBm</td> <td data-bbox="1260 1199 1502 1245">-86 dBm</td> </tr> <tr> <td data-bbox="334 1245 472 1291">7</td> <td data-bbox="472 1245 735 1291">2</td> <td data-bbox="735 1245 873 1291">-73 dBm</td> <td data-bbox="873 1245 1260 1291">-70 dBm</td> <td data-bbox="1260 1245 1502 1291">-67 dBm</td> </tr> <tr> <td data-bbox="334 1291 472 1337">8</td> <td data-bbox="472 1291 735 1337">2</td> <td data-bbox="735 1291 873 1337">-68 dBm</td> <td data-bbox="873 1291 1260 1337">-66 dBm</td> <td data-bbox="1260 1291 1502 1337">-63 dBm</td> </tr> <tr> <td data-bbox="334 1337 472 1400">9</td> <td data-bbox="472 1337 735 1400">2</td> <td data-bbox="735 1337 873 1400">NA</td> <td data-bbox="873 1337 1260 1400">-64 dBm</td> <td data-bbox="1260 1337 1502 1400">-61 dBm</td> </tr> </tbody> </table>					MCS index	Spatial streams				VHT20	VHT40	VHT80	0	1	-96 dBm	-93 dBm	-89 dBm	7	1	-76 dBm	-73 dBm	-70 dBm	8	1	-71 dBm	-69 dBm	-66 dBm	9	1	NA	-67 dBm	-64 dBm	0	2	-93 dBm	-90 dBm	-86 dBm	7	2	-73 dBm	-70 dBm	-67 dBm	8	2	-68 dBm	-66 dBm	-63 dBm	9	2	NA	-64 dBm	-61 dBm
MCS index	Spatial streams																																																				
		VHT20	VHT40	VHT80																																																	
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8	2	-68 dBm	-66 dBm	-63 dBm																																																	
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<b>Maximum transmit power</b>	<b>2.4 GHz</b> <ul style="list-style-type: none"> <li>• 802.11b <ul style="list-style-type: none"> <li>◦ 22 dBm, 3 antennas</li> </ul> </li> <li>• 802.11g <ul style="list-style-type: none"> <li>◦ 22 dBm, 3 antennas</li> </ul> </li> <li>• 802.11n (HT20) <ul style="list-style-type: none"> <li>◦ 22 dBm, 3 antennas</li> </ul> </li> </ul>		<b>5 GHz</b> <ul style="list-style-type: none"> <li>• 802.11a <ul style="list-style-type: none"> <li>◦ 23 dBm, 3 antennas</li> </ul> </li> <li>• 802.11n (HT20) <ul style="list-style-type: none"> <li>◦ 23 dBm, 3 antennas</li> </ul> </li> <li>• 802.11n (HT40) <ul style="list-style-type: none"> <li>◦ 23 dBm, 3 antennas</li> </ul> </li> <li>• 802.11ac <ul style="list-style-type: none"> <li>◦ non-HT80: 23 dBm, 3 antennas</li> <li>◦ VHT20: 23 dBm, 3 antennas</li> <li>◦ VHT40: 23 dBm, 3 antennas</li> <li>◦ VHT80: 23 dBm, 3 antennas</li> </ul> </li> </ul>																																																		
<b>Note:</b> The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.																																																					

Feature	Specifications	
<b>Available transmit power settings</b>	<b>2.4 GHz</b> <ul style="list-style-type: none"> <li>• 22 dBm</li> <li>• 19 dBm</li> <li>• 16 dBm</li> <li>• 13 dBm</li> <li>• 10 dBm</li> <li>• 7 dBm</li> <li>• 4 dBm</li> <li>• 1 dBm</li> </ul>	<b>5 GHz</b> <ul style="list-style-type: none"> <li>• 23 dBm</li> <li>• 20 dBm</li> <li>• 17 dBm</li> <li>• 14 dBm</li> <li>• 11 dBm</li> <li>• 8 dBm</li> <li>• 5 dBm</li> <li>• 2 dBm</li> </ul>
<p><b>Note:</b> The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.</p>		
<b>Integrated antenna</b>	<ul style="list-style-type: none"> <li>• 2.4 GHz, gain 3 dBi, internal omni, horizontal beamwidth 360°</li> <li>• 5 GHz, gain 5 dBi, internal omni, horizontal beamwidth 360°</li> </ul>	
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>• 1 x 10/100/1000BASE-T autosensing (RJ-45), Power over Ethernet (PoE)</li> <li>• Management console port (RJ-45)</li> <li>• USB 2.0 (enabled via future software)</li> </ul>	
<b>Indicators</b>	<ul style="list-style-type: none"> <li>• Status LED indicates boot loader status, association status, operating status, boot loader warnings, boot loader errors</li> </ul>	
<b>Dimensions (W x L x H)</b>	<ul style="list-style-type: none"> <li>• Access point (without mounting bracket): 8.3 x 8.3 x 2 in. (210.8 x 210.8 x 50.8 mm)</li> </ul>	
<b>Weight</b>	<ul style="list-style-type: none"> <li>• 2.05 lb (930 grams)</li> </ul>	
<b>Environmental</b>	<b>Cisco Aironet 1830i</b> <ul style="list-style-type: none"> <li>• Nonoperating (storage) temperature: -22° to 158°F (-30° to 70°C)</li> <li>• Nonoperating (storage) altitude test: 25°C, 15,000 ft.</li> <li>• Operating temperature: 32° to 104°F (0° to 40°C)</li> <li>• Operating humidity: 10% to 90% (noncondensing)</li> <li>• Operating altitude test: 40°C, 9843 ft.</li> </ul>	
<b>System memory</b>	<ul style="list-style-type: none"> <li>• 1 GB DRAM</li> <li>• 256 MB flash</li> </ul>	
<b>Input power requirements</b>	<ul style="list-style-type: none"> <li>• AP1830: 44 to 57 VDC</li> <li>• Power supply and power injector: 100 to 240 VAC; 50 to 60 Hz</li> </ul>	
<b>Power draw</b>	<ul style="list-style-type: none"> <li>• 15.4W</li> </ul> <p><b>Note:</b> When deployed using a PoE specification, the power drawn from the power sourcing equipment will be higher by some amount, depending on the length of the interconnecting cable.</p>	
<b>Powering options</b>	<ul style="list-style-type: none"> <li>• 802.3af/802.3at</li> <li>• Enhanced PoE</li> <li>• Cisco local power supply, AIR-PWR-C=</li> <li>• Cisco power injector, AIR-PWRINJ5= (<b>Note:</b> This injector supports 802.3af only), AIR-PWRINJ6=</li> </ul> <p><b>Note:</b> If 802.3af PoE is the source of power, the USB port is disabled.</p>	

Feature	Specifications
<b>Warranty</b>	Limited lifetime hardware warranty
<b>Compliance standards</b>	<ul style="list-style-type: none"> <li>◦ UL 60950-1</li> <li>◦ CAN/CSA-C22.2 No. 60950-1</li> <li>◦ UL 2043</li> <li>◦ IEC 60950-1</li> <li>◦ EN 60950-1</li> <li>● Radio approvals: <ul style="list-style-type: none"> <li>◦ FCC Part 15.247, 15.407**</li> <li>◦ RSS-210 (Canada)</li> <li>◦ EN 300.328, EN 301.893 (Europe)</li> <li>◦ ARIB-STD 66 (Japan)</li> <li>◦ ARIB-STD T71 (Japan)</li> <li>◦ EMI and susceptibility (Class B)</li> <li>◦ FCC Part 15.107 and 15.109**</li> <li>◦ ICES-003 (Canada)</li> <li>◦ VCCI (Japan)</li> <li>◦ EN 301.489-1 and -17 (Europe)</li> </ul> </li> <li>● IEEE standards: <ul style="list-style-type: none"> <li>◦ IEEE 802.11a/b/g, 802.11n, 802.11h, 802.11d</li> <li>◦ IEEE 802.11ac Draft 5</li> </ul> </li> <li>● Security: <ul style="list-style-type: none"> <li>◦ 802.11i, Wi-Fi Protected Access 3 (WPA3), WPA2, WPA</li> <li>◦ 802.1X</li> <li>◦ Advanced Encryption Standard (AES)</li> </ul> </li> <li>● Extensible Authentication Protocol (EAP) types: <ul style="list-style-type: none"> <li>◦ EAP-Transport Layer Security (TLS)</li> <li>◦ EAP-Tunneled TLS (TTLS) or Microsoft Challenge Handshake Authentication Protocol Version 2 (MSCHAPv2)</li> <li>◦ Protected EAP (PEAP) v0 or EAP-MSCHAPv2</li> <li>◦ EAP-Flexible Authentication via Secure Tunneling (FAST)</li> <li>◦ PEAP v1 or EAP-Generic Token Card (GTC)</li> <li>◦ EAP-Subscriber Identity Module (SIM)</li> </ul> </li> <li>● Multimedia: <ul style="list-style-type: none"> <li>◦ Wi-Fi Multimedia (WMM)</li> </ul> </li> <li>● Other: <ul style="list-style-type: none"> <li>◦ FCC Bulletin OET-65C</li> <li>◦ RSS-102</li> </ul> </li> </ul>

\* Supported via Cisco Mobility Express with controller function running on the access point - not Cisco IOS® Software Autonomous based.

\*\* Future.

## Warranty information

The Cisco Aironet 1830 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>.

## Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's [Corporate Social Responsibility](#) (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	<a href="#">Materials</a>
Information on electronic waste laws and regulations, including products, batteries, and packaging	<a href="#">WEEE compliance</a>

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

## Ordering information

To place an order, visit the [Cisco How to Buy page](#). To download software, visit the [Cisco Software Center](#).

**Table 2.** Ordering information

Product name	Part number
<b>Cisco Aironet 1830 Series</b>	<b>Cisco Aironet 1832i Access Point: Indoor environments, with internal antennas</b> <ul style="list-style-type: none"><li>AIR-AP1832I-x-K9: Dual-band, controller-based 802.11a/g/n/ac, Wave 2</li><li>AIR-AP1832I-x-K9C: Dual-band, controller-based 802.11a/g/n/ac, Wave 2, configurable, with default software Mobility Express<ul style="list-style-type: none"><li>Regulatory domains: (x = regulatory domain)</li><li>For Mobility Express, part number AIR-AP1832I-x-K9C offers default software option Mobility Express</li></ul></li></ul> <p>Customers are responsible for verifying approval for use in their individual countries. To verify approval that corresponds to a particular country or the regulatory domain used in a specific country, visit <a href="https://www.cisco.com/go/aironet/compliance">https://www.cisco.com/go/aironet/compliance</a>.</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>

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### Cisco Wireless LAN services

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