

Cisco Aironet 3600 Series Access Point



Cisco Aironet® 3600i Access Point

- Sleek design with internal antennas
- Ideal for office environments

Cisco Aironet 3600e Access Point

- 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 options or suspended 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 Modular Architecture Design

- IEEE 802.11ac Wave 1 Module
- Cisco Hyperlocation Module with Advanced Security
- Cisco Aironet Wireless Security Module
- Cisco Universal Small Cell 8718
- Cisco Universal Small Cell 8818
- 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
- 24/7 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
- The 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
- Set policies to prohibit devices that interfere with the Wi-Fi network or jeopardize network security

Secure Interoperability

- Controller-based deployment only



Delivering up to three times more coverage versus competition for tablets, smartphones, and high-performance laptops, the industry's only 4x4 MIMO, three-spatial-stream access point delivers mission-critical reliability. Current solutions struggle to scale to meet demands on the wireless networks from the influx of diverse mobile devices and mobile applications. The Cisco Aironet® 3600 Series sustains reliable connections at higher speeds further from the access point than competing solutions, resulting in up to three times more availability of 450 Mbps rates, and optimizing the performance of more mobile devices. Cisco® Aironet 3600 Series is an innovative, modular platform that offers unparalleled investment protection with future module expansion to support incoming 802.11ac clients with 1.3 Gbps rates, or offer comprehensive security and spectrum monitoring and control.

Cisco Aironet 3600 Series includes Cisco ClientLink 2.0 to boost performance and range for clients and includes Cisco CleanAir spectrum intelligence for a self-healing, self-optimizing network.

RF Excellence

Building on the Cisco Aironet heritage of RF excellence, the 3600 Series is a flagship access point, delivering industry-leading performance for secure and reliable [wireless](#) connections.

Enterprise-class silicon and optimized radios deliver a robust mobility experience which includes:

- 802.11n with 4x4 multiple-input multiple-output (MIMO) technology with three spatial streams, which sustains 450-Mbps rates over a greater range for more capacity and reliability than competing access points.
- Cisco ClientLink 2.0 technology to improve downlink performance to all mobile devices including one-, two-, and three-spatial-stream devices on 802.11n while improving battery life on mobile devices such as smartphones and tablets.
- Cisco CleanAir™ technology, which provides proactive, high-speed spectrum intelligence to combat performance problems due to wireless interference.
- Modular architecture design, enabling flexible add-on options in the form of a Wireless Security Module, an IEEE 802.11ac Module, Hyperlocation Module with Advanced Security, or the Cisco Universal Small Cell 8718, 8818 or 5310 Module that are tightly integrated with the Cisco Aironet 3600 Series Access Point platform, and is completely field-upgradable.
- MIMO equalization optimized uplink performance and reliability by minimizing the impact of signal fade.

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 [802.11n antennas](#) delivering optimal coverage for a variety of deployment scenarios.

Scalability

The Cisco Aironet 3600 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 3600 Series Access Points.

Table 1. Product Specifications for Cisco Aironet 3600 Series Access Points

| Item | Specification |
|--------------|--|
| Part Numbers | <p>The Cisco Aironet 3600i Access Point: Indoor environments, with internal antennas</p> <ul style="list-style-type: none">• AIR-CAP3602I-x-K9 - Dual-band controller-based 802.11a/g/n• AIR-CAP3602I-xK910 - Eco-pack (dual-band 802.11a/g/n) 10 quantity access points <p>The Cisco Aironet 3600e Access Point: Indoor, challenging environments, with external antennas</p> <ul style="list-style-type: none">• AIR-CAP3602E-x-K9 - Dual-band controller-based 802.11a/g/n• AIR-CAP3602E-xK910 - Eco-pack (dual-band 802.11a/g/n) 10 quantity access points <p>Cisco SMARTnet® Service for the Cisco Aironet 3600i Access Point with internal antennas CON-SNT-CAP3621x - SMARTnet 8x5xNBD 3600i access point (dual-band 802.11 a/g/n)</p> <ul style="list-style-type: none">• Qty(10) CON-SNT-CAP3621x - SMARTnet 8x5xNBD 10 quantity eco-pack 3600i access point (dual-band 802.11a/g/n) <p>Cisco SMARTnet Service for the Cisco Aironet 3600e Access Point with external antennas</p> <ul style="list-style-type: none">• CON-SNT-CAP3602x - SMARTnet 8x5xNBD 3600e access point (dual-band 802.11 a/g/n)• Qty(10) CON-SNT-CAP3602x - SMARTnet 8x5xNBD 10 quantity eco-pack 3600e access point (dual-band |

| Item | Specification |
|---|--|
| | <p>802.11a/g/n)</p> <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, 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 | <p>Cisco Unified Wireless Network Software Release with AireOS Wireless Controllers:</p> <ul style="list-style-type: none"> 7.2 or later for the Cisco Aironet 3600 Series Access Point 7.4 or later for support of the Wireless Security Module for the 3600 Series Access Point 7.5 or later for support of the 802.11ac Wave 1 Module for the 3600 Series Access Point <p>Cisco IOS XE Software Release:</p> <ul style="list-style-type: none"> 3.2.0SE or later for the Cisco Aironet 3600 Series Access Point 3.3.0SE or later for the Cisco 802.11ac Wave 1 Module for the 3600 Series Access Point Wireless Security Module for the 3600 Series Access Point support |
| Supported Wireless LAN Controllers | <p>AireOS Wireless Controllers</p> <ul style="list-style-type: none"> 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 <p>Cisco IOS Wireless Controllers</p> <ul style="list-style-type: none"> Cisco 5760 Wireless LAN Controller, Cisco Catalyst 3850 Series Switches, Cisco Catalyst 3650 Series Switches |
| Module Options | <p>Cisco Aironet IEEE 802.11ac Wave 1 Module</p> <ul style="list-style-type: none"> Supports the IEEE 802.11ac specification and the features defined by the Wi-Fi Alliance for the first wave of Wi-Fi CERTIFIED 11ac 3x3:3SS (spatial streams), 80-MHz wide channels, 256 quadrature amplitude modulation (QAM), and data rates up to 1.3 Gbps Wi-Fi Alliance certified - http://www.wi-fi.org/certified-products-advanced-search <p>Hyperlocation Module with Advanced Security</p> <ul style="list-style-type: none"> Hyperlocation Module provides full-spectrum scanning both 2.4- and 5-GHz for, WIPS for comprehensive detection and mitigation of over the network attacks, Cisco CleanAir technology detecting 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 wifi device for a quicker refresh of the devices location One-meter of location accuracy of associated Wi-Fi clients, 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 <p>Cisco Aironet Wireless Security Module</p> <ul style="list-style-type: none"> Provides full-spectrum scanning for, WIPS for comprehensive detection and mitigation of over the network attacks, Cisco CleanAir technology detecting devices causing network interference, rogue device detection, context (location) awareness, FastLocate, and radio resource management (RRM) solutions FastLocate, provides faster updates per wifi device for a quicker refresh of the devices 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) <p>Cisco Universal Small Cell 8718</p> <ul style="list-style-type: none"> Dual-band Switchable Multi-Mode 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 2/4 (USC8718-M24-K9) <p>Cisco Universal Small Cell 8818</p> <ul style="list-style-type: none"> Dual-band Switchable Multi-Mode Module, LTE only Software configurable to operate on either LTE cell. Band 1/3 (USC8818-C13-K9) Software configurable to operate on either LTE cell. Band 2/4 (USC8818-C24-K9) <p>Cisco Universal Small Cell 5310</p> <ul style="list-style-type: none"> 3GPP band 1 (2100 MHz), 16 users, voice (R99), packet data (HSPA/HSDPA+) |

| Item | Specification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|------------------------|-------------------------|--------------------|------------|--|--------------------|--------------------|--------------------|--------------------|---|-----|------|-----|----|---|----|----|------|----|---|------|------|------|----|---|----|----|------|----|---|----|----|------|----|---|----|-----|------|-----|---|------|-------|----|-----|---|----|-----|------|-----|---|----|----|------|----|---|----|----|------|----|----|----|----|------|----|----|----|-----|------|-----|----|----|-----|------|-----|----|-----|-----|-------|-----|----|-----|-----|-----|-----|----|-----|-----|-------|-----|----|------|------|------|----|----|----|----|------|----|----|------|-------|----|-----|----|----|-----|------|-----|----|-----|-----|-----|-----|----|-----|-----|-------|-----|----|-------|-------|-----|-----|----|-----|-----|-------|
| 802.11n Version 2.0 (and Related) Capabilities | <ul style="list-style-type: none"> • 3GPP band 2/5 (band 2 – 1930 and band 5 - 869), 16 users, voice (R99), packet data (HSPA/HSDPA+) • 4x4 multiple-input multiple-output (MIMO) with three spatial streams • 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) • Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx) • 802.11 dynamic frequency selection (DFS) • Cyclic shift diversity (CSD) support | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>Data Rates Supported</p> <p>802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps</p> <p>802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps</p> <p>802.11n data rates (2.4 GHz and 5 GHz):</p> <table border="1"> <thead> <tr> <th rowspan="2">MCS Index¹</th> <th colspan="2">GI² = 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> <tr><td>2</td><td>19.5</td><td>40.5</td><td>21.7</td><td>45</td></tr> <tr><td>3</td><td>26</td><td>54</td><td>28.9</td><td>60</td></tr> <tr><td>4</td><td>39</td><td>81</td><td>43.3</td><td>90</td></tr> <tr><td>5</td><td>52</td><td>108</td><td>57.8</td><td>120</td></tr> <tr><td>6</td><td>58.5</td><td>121.5</td><td>65</td><td>135</td></tr> <tr><td>7</td><td>65</td><td>135</td><td>72.2</td><td>150</td></tr> <tr><td>8</td><td>13</td><td>27</td><td>14.4</td><td>30</td></tr> <tr><td>9</td><td>26</td><td>54</td><td>28.9</td><td>60</td></tr> <tr><td>10</td><td>39</td><td>81</td><td>43.3</td><td>90</td></tr> <tr><td>11</td><td>52</td><td>108</td><td>57.8</td><td>120</td></tr> <tr><td>12</td><td>78</td><td>162</td><td>86.7</td><td>180</td></tr> <tr><td>13</td><td>104</td><td>216</td><td>115.6</td><td>240</td></tr> <tr><td>14</td><td>117</td><td>243</td><td>130</td><td>270</td></tr> <tr><td>15</td><td>130</td><td>270</td><td>144.4</td><td>300</td></tr> <tr><td>16</td><td>19.5</td><td>40.5</td><td>21.7</td><td>45</td></tr> <tr><td>17</td><td>39</td><td>81</td><td>43.3</td><td>90</td></tr> <tr><td>18</td><td>58.5</td><td>121.5</td><td>65</td><td>135</td></tr> <tr><td>19</td><td>78</td><td>162</td><td>86.7</td><td>180</td></tr> <tr><td>20</td><td>117</td><td>243</td><td>130</td><td>270</td></tr> <tr><td>21</td><td>156</td><td>324</td><td>173.3</td><td>360</td></tr> <tr><td>22</td><td>175.5</td><td>364.5</td><td>195</td><td>405</td></tr> <tr><td>23</td><td>195</td><td>405</td><td>216.7</td><td>450</td></tr> </tbody> </table> | MCS Index ¹ | GI ² = 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 | 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 | 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 | 405 | 216.7 |
| MCS Index ¹ | GI ² = 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | 405 | 216.7 | 450 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

² GI: A guard interval (GI) between symbols helps receivers overcome the effects of multipath delays.

| Item | Specification | | |
|--|---|--|--|
| Frequency Band and 20-MHz Operating Channels | A (A regulatory 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 (C regulatory domain): <ul style="list-style-type: none"> ● 2.412 to 2.472 GHz; 13 channels ● 5.745 to 5.825 GHz; 5 channels E (E regulatory 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 (I regulatory domain): <ul style="list-style-type: none"> ● 2.412 to 2.472 GHz, 13 channels ● 5.180 to 5.320 GHz; 8 channels K (K regulatory 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 (N regulatory 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 (Q regulatory 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 (R regulatory 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 (S regulatory 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 (T regulatory 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, 8 channels (excludes 5.600 to 5.640 GHz) ● 5.745 to 5.825 GHz; 5 channels |
| <p>Note: 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, visit: http://www.cisco.com/go/aironet/compliance.</p> | | | |
| 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 |
| <p>Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.</p> | | | |
| Receive Sensitivity | <ul style="list-style-type: none"> ● 802.11b (CCK) <ul style="list-style-type: none"> ○ -101 dBm @ 1 Mb/s ○ -98 dBm @ 2 Mb/s ○ -92 dBm @ 5.5 Mb/s ○ -89 dBm @ 11 Mb/s | <ul style="list-style-type: none"> ● 802.11g (non HT20) <ul style="list-style-type: none"> ○ -91 dBm @ 6 Mb/s ○ -91 dBm @ 9 Mb/s ○ -91 dBm @ 12 Mb/s ○ -90 dBm @ 18 Mb/s ○ -87 dBm @ 24 Mb/s ○ -85 dBm @ 36 Mb/s ○ -80 dBm @ 48 Mb/s ○ -79 dBm @ 54 Mb/s | <ul style="list-style-type: none"> ● 802.11a (non HT20) <ul style="list-style-type: none"> ○ -90 dBm @ 6 Mb/s ○ -90 dBm @ 9 Mb/s ○ -90 dBm @ 12 Mb/s ○ -89 dBm @ 18 Mb/s ○ -86 dBm @ 24 Mb/s ○ -83 dBm @ 36 Mb/s ○ -78 dBm @ 48 Mb/s ○ -77 dBm @ 54 Mb/s |

| Item | Specification | | | |
|--|---|--|---|---|
| | 2.4-GHz <ul style="list-style-type: none"> ● 802.11n (HT20) <ul style="list-style-type: none"> ◦ -90 dBm @ MCS0 ◦ -90 dBm @ MCS1 ◦ -90 dBm @ MCS2 ◦ -88 dBm @ MCS3 ◦ -85 dBm @ MCS4 ◦ -80 dBm @ MCS5 ◦ -78 dBm @ MCS6 ◦ -77 dBm @ MCS7 ◦ -90 dBm @ MCS8 ◦ -90 dBm @ MCS9 ◦ -89 dBm @ MCS10 ◦ -86 dBm @ MCS11 ◦ -82 dBm @ MCS12 ◦ -78 dBm @ MCS13 ◦ -77 dBm @ MCS14 ◦ -75 dBm @ MCS15 ◦ -90 dBm @ MCS16 ◦ -89 dBm @ MCS17 ◦ -87 dBm @ MCS18 ◦ -84 dBm @ MCS19 ◦ -81 dBm @ MCS20 ◦ -76 dBm @ MCS21 ◦ -75 dBm @ MCS22 ◦ -74 dBm @ MCS23 | | 5-GHz <ul style="list-style-type: none"> ● 802.11n (HT20) <ul style="list-style-type: none"> ◦ -91 dBm @ MCS0 ◦ -90 dBm @ MCS1 ◦ -89 dBm @ MCS2 ◦ -86 dBm @ MCS3 ◦ -83 dBm @ MCS4 ◦ -78 dBm @ MCS5 ◦ -77 dBm @ MCS6 ◦ -75 dBm @ MCS7 ◦ -91 dBm @ MCS8 ◦ -89 dBm @ MCS9 ◦ -87 dBm @ MCS10 ◦ -84 dBm @ MCS11 ◦ -80 dBm @ MCS12 ◦ -76 dBm @ MCS13 ◦ -75 dBm @ MCS14 ◦ -73 dBm @ MCS15 ◦ -90 dBm @ MCS16 ◦ -88 dBm @ MCS17 ◦ -85 dBm @ MCS18 ◦ -82 dBm @ MCS19 ◦ -79 dBm @ MCS20 ◦ -74 dBm @ MCS21 ◦ -73 dBm @ MCS22 ◦ -72 dBm @ MCS23 | 5-GHz <ul style="list-style-type: none"> ● 802.11n (HT40) <ul style="list-style-type: none"> ◦ -88 dBm @ MCS0 ◦ -87 dBm @ MCS1 ◦ -86 dBm @ MCS2 ◦ -82 dBm @ MCS3 ◦ -80 dBm @ MCS4 ◦ -75 dBm @ MCS5 ◦ -73 dBm @ MCS6 ◦ -72 dBm @ MCS7 ◦ -88 dBm @ MCS8 ◦ -86 dBm @ MCS9 ◦ -84 dBm @ MCS10 ◦ -80 dBm @ MCS11 ◦ -77 dBm @ MCS12 ◦ -73 dBm @ MCS13 ◦ -71 dBm @ MCS14 ◦ -70 dBm @ MCS15 ◦ -87 dBm @ MCS16 ◦ -84 dBm @ MCS17 ◦ -82 dBm @ MCS18 ◦ -78 dBm @ MCS19 ◦ -75 dBm @ MCS20 ◦ -71 dBm @ MCS21 ◦ -69 dBm @ MCS22 ◦ -68 dBm @ MCS23 |
| Maximum Transmit Power | 2.4 GHz <ul style="list-style-type: none"> ● 802.11b <ul style="list-style-type: none"> ◦ 23 dBm: 4 antennas ● 802.11g <ul style="list-style-type: none"> ◦ 23 dBm: 4 antennas ● 802.11n (HT20) <ul style="list-style-type: none"> ◦ 23 dBm: 4 antennas | | 5 GHz <ul style="list-style-type: none"> ● 802.11a <ul style="list-style-type: none"> ◦ 23 dBm: 4 antennas ● 802.11n (HT20) <ul style="list-style-type: none"> ◦ 23 dBm: 4 antennas ● 802.11n (HT40) <ul style="list-style-type: none"> ◦ 23 dBm: 4 antennas | |
| <p>Note: The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.</p> | | | | |
| Available Transmit Power Settings | 2.4 GHz <ul style="list-style-type: none"> ● 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) | | 5 GHz <ul style="list-style-type: none"> ● 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) | |
| <p>Note: The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.</p> | | | | |
| Integrated Antenna | <ul style="list-style-type: none"> ● 2.4 GHz, Gain 2 dBi, internal omni, horizontal beamwidth 360° ● 5 GHz, Gain 4 dBi, internal omni, horizontal beamwidth 360° | | | |

| Item | Specification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|------------------------------|---------|-------|----------------------|--|-------------|------------------|---------------------|---------|-------|----------------------|---------------------|-------------------------------------|--------------------|------|---|---|---|----------------------|------|---|-----|--|----------------------------|------|---|-----|--------------------|---------------------------------|--------------------------|------|---|---|------------------------|---------------------------|------|---|---|--|------------------------------|----|---|---|
| External Antenna (Sold Separately) | <ul style="list-style-type: none"> • Certified for use with antenna gains up to 6 dBi (2.4 GHz and 5 GHz) • Cisco offers the industry's broadest selection of 802.11n antennas delivering optimal coverage for a variety of deployment scenarios | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interfaces | <ul style="list-style-type: none"> • 10/100/1000BASE-T autosensing (RJ-45) • Management console port (RJ-45) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indicators | <ul style="list-style-type: none"> • Status LED indicates boot loader status, association status, operating status, boot loader warnings, boot loader errors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dimensions (W x L x H) | <ul style="list-style-type: none"> • Access point (without mounting bracket): 8.7 x 8.7 x 2.11 in. (22.1 x 22.1 x 5.4 cm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight | <ul style="list-style-type: none"> • 2.5 lbs (1.13 kg) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Environmental | <p>Cisco Aironet 3600i</p> <ul style="list-style-type: none"> • 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. <p>Cisco Aironet 3600e</p> <ul style="list-style-type: none"> • Nonoperating (storage) temperature: -22 to 158°F (-30 to 70°C) • Nonoperating (storage) Altitude Test -25°C, 15,000 ft. • Operating temperature: -4 to 131°F (-20 to 55°C) • Operating humidity: 10 to 90 percent (noncondensing) • Operating Altitude Test -40°C, 9843 ft. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| System Memory | <ul style="list-style-type: none"> • 256-MB DRAM • 32-MB flash | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input Power Requirements | <ul style="list-style-type: none"> • AP3600: 44 to 57 VDC • Power Supply and Power Injector: 100 to 240 VAC; 50 to 60 Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power draw | <p>* This is the power required at the PSE, which is a switch or injector.</p> <table border="1"> <thead> <tr> <th>Description</th> <th>AP Functionality</th> <th>PoE Budget* (Watts)</th> <th>802.3af</th> <th>E-PoE</th> <th>802.3at PoE+ PWRINJ4</th> </tr> </thead> <tbody> <tr> <td rowspan="3">PoE+ 802.3at</td> <td>3600 - No external module installed</td> <td>4x4:3 on 2.4/5 GHz</td> <td>15.4</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>3600 - 2.4GHz radio disabled + Wireless Security Module</td> <td>4x4:3 on 5 GHz + WSM</td> <td>15.4</td> <td>✓</td> <td>n/a</td> </tr> <tr> <td>3600 - 2.4GHz radio disabled + 802.11ac Module</td> <td>4x4:3 on 5 GHz only + 11ac</td> <td>15.4</td> <td>✓</td> <td>n/a</td> </tr> <tr> <td rowspan="3">PoE 802.3af</td> <td>3600 + Wireless Security Module</td> <td>4x4:3 on 2.4/5 GHz + WSM</td> <td>18.4</td> <td>x</td> <td>✓</td> </tr> <tr> <td>3600 + 802.11ac Module</td> <td>4x4:3 on 2.4/5 GHz + 11ac</td> <td>19.6</td> <td>x</td> <td>✓</td> </tr> <tr> <td>3600 + Universal Small Cell Module (USC5310)</td> <td>4x4:3 on 2.4/5 GHz + USC5310</td> <td>22</td> <td>x</td> <td>x</td> </tr> </tbody> </table> | | | | | | Description | AP Functionality | PoE Budget* (Watts) | 802.3af | E-PoE | 802.3at PoE+ PWRINJ4 | PoE+ 802.3at | 3600 - No external module installed | 4x4:3 on 2.4/5 GHz | 15.4 | ✓ | ✓ | 3600 - 2.4GHz radio disabled + Wireless Security Module | 4x4:3 on 5 GHz + WSM | 15.4 | ✓ | n/a | 3600 - 2.4GHz radio disabled + 802.11ac Module | 4x4:3 on 5 GHz only + 11ac | 15.4 | ✓ | n/a | PoE 802.3af | 3600 + Wireless Security Module | 4x4:3 on 2.4/5 GHz + WSM | 18.4 | x | ✓ | 3600 + 802.11ac Module | 4x4:3 on 2.4/5 GHz + 11ac | 19.6 | x | ✓ | 3600 + Universal Small Cell Module (USC5310) | 4x4:3 on 2.4/5 GHz + USC5310 | 22 | x | x |
| Description | AP Functionality | PoE Budget* (Watts) | 802.3af | E-PoE | 802.3at PoE+ PWRINJ4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PoE+ 802.3at | 3600 - No external module installed | 4x4:3 on 2.4/5 GHz | 15.4 | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3600 - 2.4GHz radio disabled + Wireless Security Module | 4x4:3 on 5 GHz + WSM | 15.4 | ✓ | n/a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3600 - 2.4GHz radio disabled + 802.11ac Module | 4x4:3 on 5 GHz only + 11ac | 15.4 | ✓ | n/a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PoE 802.3af | 3600 + Wireless Security Module | 4x4:3 on 2.4/5 GHz + WSM | 18.4 | x | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3600 + 802.11ac Module | 4x4:3 on 2.4/5 GHz + 11ac | 19.6 | x | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3600 + Universal Small Cell Module (USC5310) | 4x4:3 on 2.4/5 GHz + USC5310 | 22 | x | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Warranty | Limited Lifetime Hardware Warranty | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Compliance Standards | <ul style="list-style-type: none"> ◦ UL 60950-1 ◦ CAN/CSA-C22.2 No. 60950-1 ◦ UL 2043 ◦ IEC 60950-1 ◦ EN 60950-1 ◦ EN 50155 • 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 66 (Japan) ◦ ARIB-STD T71 (Japan) ◦ EMI and susceptibility (Class B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Item | Specification |
|------|--|
| | <ul style="list-style-type: none"> ◦ FCC Part 15.107 and 15.109 ◦ ICES-003 (Canada) ◦ VCCI (Japan) ◦ 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) ◦ 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 3600 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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For More Information

For more information about the Cisco Aironet 3600 Series, visit <http://www.cisco.com/go/wireless> or contact your local account representative.




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