Cisco Aironet 1570 Series Outdoor Access Point

Next-Generation Outdoor Wireless

- Dual-band 2.4 and 5 GHz with 802.11ac Wave 1 support on the integrated 5-GHz radio
- Cisco® CleanAir™ technology provides integrated spectrum intelligence for a self-configuring and self-healing network
- ClientLink improves reliability and coverage for legacy clients
- Improved 802.11ac range and performance with 4x4:3 multiple-input multiple-output (MIMO) technology
- 1.3 Gbps data rates
- Multiple-radio support (802.11b/g/n, 802.11a/n/ac)
- DOCSIS 3.0/EuroDOCSIS/JapanDOCSIS 3.0, 16x8 hybrid fiber-coaxial (HFC) cable modem option
- Improved radio sensitivity and range performance with four antenna MIMO and three spatial streams
- Multiple uplink options (Gigabit Ethernet-10/100/1000 BaseT, Fiber SFP, interface-cable (certain models)
- NEMA Type 4X certified enclosure

Cisco Aironet 1572IC

- Internal Antennas with Cable modem model

Cisco Aironet 1572EC

- Cable modem model with External Antennas

Cisco Aironet 1572EAC

- External antenna model

High-Performance Outdoor Wireless

The Cisco® Aironet® 1570 Series Outdoor Access Point with Cisco CleanAir™ technology is the industry's first enterprise and carrier-grade 802.11ac access point to create a self-healing and self-optimizing wireless network that mitigates the impact of wireless interference. It offers a flexible, secure, and scalable mesh network for high-performance mobility across large metropolitan-sized areas, enterprise campuses, manufacturing yards, and mining pits.

The Cisco Aironet 1570 Series supports multiple-device and multiple-network application delivery such as real-time seamless mobility, video surveillance, 3rd Generation (3G) and 4G data offload, and public and private Wi-Fi access. Designed to meet customer needs in a broad range of industries, the Cisco Aironet 1570 Series offers the following benefits:

- Flexible deployment options: Access or mesh network, extension of an Ethernet network, and Ethernet, fiber, wireless, or cable backhaul.
- Service provider support: Wi-Fi for next-generation mobile data offload and personalized mobile services.
- Cisco CleanAir technology: Integrated spectrum intelligence to detect, classify, and mitigate RF interference from unauthorized wireless bridges or malicious devices.
- High-bandwidth video surveillance over Wi-Fi without the high cost of installing cables over long distances.
- High-performance, multipurpose network with low CapEx and OpEx.
- Integrated wired and wireless: The Cisco Borderless Network Architecture provides cost savings with end-to-end network access solutions that include wireless, switching, routing, and security.

Flexible, High-Performance Mesh

The Cisco Aironet 1570 Series Outdoor Access Point offers a flexible, secure, and scalable mesh platform that is part of the Cisco Unified Wireless Network and the Cisco Service Provider Wi-Fi solution. It offers high-performance mobility across large metropolitan-sized areas and enterprise campuses, manufacturing yards, and mining pits. Carrier-grade design allows service providers to take advantage of Wi-Fi for next-generation mobile data offloads. The Cisco Aironet 1570 Series provides high-performance device access through improved radio sensitivity and range with 802.11a/b/g/n/ac multiple-input multiple-output (MIMO) technology, with three spatial streams. Multiple uplink and power options are available. The 802.3at-compliant, Power-over-Ethernet (PoE) interface makes it easy to connect IP devices, such as IP video cameras. NEMA Type 4X enclosures help ensure a robust system that can withstand demanding environments. The external antenna models include the option to attach an external module to the Access Point and power off the 802.3at from that AP.

Cisco CleanAir Technology

The Cisco Aironet 1570 Series with Cisco CleanAir technology provides the highest-performance 802.11ac connectivity for mission-critical outdoor networks by detecting interference from unauthorized devices, as well as common outdoor interference sources, such as WiMAX networks and wireless bridging products. The 1570 Series uses chip-level intelligence to create a spectrum-aware, self-healing, and self-optimizing wireless network that mitigates the impact of wireless interference. Cisco CleanAir technology is a systemwide feature of the Cisco Unified Wireless Network that improves wireless network quality by detecting RF interference that other systems can’t recognize, identifying the source, locating it, and then making automatic adjustments to optimize wireless coverage.

RF Excellence

Building on the Cisco Aironet heritage of RF excellence, the Cisco Aironet 1570 Series delivers industry-leading performance for secure and reliable wireless connections. Industrial-grade parts, enterprise-class silicon-level intelligence, and optimized radios deliver a robust mobility experience. The Cisco Aironet 1570 Series provides a set of tools that deliver the robust, scalable wireless foundation required to realize the true potential of outdoor wireless mobility:

- Cisco ClientLink technology to raise uplink and downlink performance of and coverage to 802.11a/g/n/ac clients
- Radio resource management (RRM) for automated channel selection and power setting management of access points
- Advanced capabilities to select data rates, adjust power, and manage quality of service (QoS) for access points

Centrally Managed Mesh Network

Central management and troubleshooting of the Cisco outdoor wireless access points prevent costly maintenance service calls to outdoor locations. The Cisco Prime Infrastructure (CPI) works in conjunction with the Cisco Aironet Access Points and Cisco Wireless LAN Controllers to configure and manage the wireless networks. With CPI, network administrators have a single solution for RF prediction, policy provisioning, network optimization, troubleshooting, security monitoring, and wireless LAN systems management. Cisco CleanAir technology is integrated into the CPI to provide real-time information on your outdoor network. Wireless network security is also a part of a unified wired and wireless solution. Cisco wireless network security offers the highest level of network security, which helps ensure that data remains private and secure and that the network is protected from unauthorized access.

Cisco Aironet 1572EAC External Antenna Access Points

The Cisco Aironet 1572EAC Outdoor Access Points are the standard models, dual-radio system with external antenna ports that are compliant with IEEE 802.11b/g/n standards (2.4 GHz) and 802.11a/n/ac (5-GHz). The 1572EAC has four (4) external antenna connections which can be configured as a) four double-band 2/5GHz ports, or b) two pairs of single-band (2.4 & 5 GHz). They have Ethernet and fiber Small Form-Factor Pluggable (SFP) backhaul options. These models also have a PoE-out (802.3at) port that can power a video surveillance camera or other devices. A Highly flexible AP, the Cisco Aironet 1572EAC is well equipped for municipal and campus deployments, video surveillance applications, mining environments, and data offload.

Cisco Aironet 1572IC/1572EC Cable Modem Access Points

Where service providers have already invested in a broadband cable network, the Cisco next-generation outdoor wireless mesh can seamlessly extend network connectivity with the Cisco Aironet 1572IC/1572EC access points by connecting to its integrated cable modem interface. The Cisco Aironet 1572IC/1572EC Outdoor Mesh Access Points are dual-radio systems with DOCSIS 3.0/EuroDOCSIS/JapanDOCSIS 3.0 (16x8 HFC) compliant cable modem for power and backhaul. They have dual-band radios that are compliant with IEEE 802.11b/g/n (2.4 GHz) and 802.11a/n/ac (5 GHz) standards. The 1572IC has an integrated, four-element, dual-band antenna and easily fits within the 30 cm height restriction for service providers. The 1572EC has four external antenna connections, that can be configures as 2/5 GHz dual-band or two 2.4 GHz plus two 5 GHz ports that support Omni and directional antennas.

External and Integrated Antennas

The Cisco Aironet 1572E Outdoor Access Points can also use four Cisco AIR-ANT2568VG-N or four AIR-ANT2547VG-N Antennas. These dual-band, omnidirectional, stick antennas have a gain of 6/8 dBi or 4/7 dBi on bands 2/5 GHz respectively. The 1572 can also utilize a number of single or dual band antenna. A summary of those antennas is listed in the below table.

Product ID	Freq. Band	Gain	Type	Required Qty.
AIR-ANT2568VG-N=	2.4 / 5 GHz	6 / 8 dBi	Omni	4
AIR-ANT2547VG-N=	2.4 / 5 GHz	4 / 7 dBi	Omni	4
AIR-ANT2588P3M-N=	2.4 / 5 GHz	8 / 8 dBi	Directional (120x30°)	1
AIR-ANT2513P4M-N=	2.4 / 5 GHz	13 / 13 dBi	Directional (30x30°)	1
AIR-ANT2450V-N=	2.4 GHz	5 dBi	Omni	1-4
AIR-ANT2480V-N=	2.4 GHz	8 dBi	Omni	1-4
AIR-ANT2413P2M-N=	2.4 GHz	13 dBi	Directional (30x30°)	1
AIR-ANT5180V-N=	5 GHz	8 dBi	Omni	1-4
AIR-ANT5114P2M-N=	5 GHz	14 dBi	Directional (30x30°)	1

The Cisco Aironet 1572I Outdoor Access Point includes a dual-band, integrated antenna radome. This antenna has four omnidirectional antenna elements that have antenna gains of 4/6 dBi gain on bands 2/5 GHz respectively.

Product Specifications

Table 1 lists specifications for the Cisco Aironet 1570 Series.

Table 1. Cisco Aironet 1570 Series Product Specifications

Item	Specification
Part numbers	**Cisco Aironet 1572IC Access Point with Internal antennas & DOCSIS 3.0 Cable Modem** • AIR-CAP1572IC1-zzK9 where “zz” represents the regulatory domain. • AIR-CAP1572IC2-zzK9 • AIR-CAP1572IC3-zzK9 • AIR-CAP1572IC4-zzK9 **Cisco Aironet 1572EC Access Point with External Antennas & DOCSIS 3.0 Cable Modem** • AIR-CAP1572EC1-zzK9 where “zz” represents the regulatory domain. • AIR-CAP1572EC2-zzK9 • AIR-CAP1572EC3-zzK9 • AIR-CAP1572EC3-zzK9 **Cisco Aironet 1572EAC Access Point with External Antennas** • AIR-CAP1572EAC-zzK9 where “zz” represents the regulatory domain. **The “zz”Regulatory Domain options are** (**note**: not all models available for all regulatory domains) • A- • C- • D- • E- • F- • H- • K- • M- • N- • Q-

<table>
<tr><th>Item</th><th>Specification</th></tr>
<tr><td></td><td>

R-
S-
T-
Z-
UX

- Not all models available for all regulatory domains
- Not all regulatory domains have been approved. As they are approved, the part numbers will be available on the Global Price List.
- The C1, C2, C3, C4 models are associated with the Upstream/Downstream cable modem analog filter and DOCSIS 3.0 options as listed below:

C1 5-42/ 54-1000 MHz North American DOCSIS 3.0
C2 5-85/ 108-1002 MHz North American DOCSIS 3.0
C3 5-65/ 108-1002 MHz EuroDOCSIS 3.0
C4 5-65/ 108-1002 MHz JapanDOCSIS 3.0

</td></tr>
<tr><td>802.11n Version 2.0 capabilities</td><td>

4x4 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

</td></tr>
<tr><td>802.11ac Wave 1 capabilities</td><td>

4x4 MIMO with three spatial streams
MRC
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

</td></tr>
<tr><td>DOCSIS 3.0 Capabilities</td><td>DOCSIS and EuroDOCSIS 3.0 16x8 cable modem provides:

Sixteen (16) bonded channels on the downstream with total throughput in excess of 600 Mbps (without overhead)
Eight (8) bonded channels on the upstream with total throughput in excess of 200 Mbps (without overhead)
Designed to meet DOCSIS 3.0 specifications as well as backward compatibility with existing DOCSIS 2.0, 1.1 and 1.0 networks
Enhanced packet processing technology to maximize performance

Channel-bonded cable modems must be used in conjunction with a cable modem termination system (CMTS) that supports channel bonding per the DOCSIS 3.0 specifications. When used with a non-channel-bonded CMTS, channel-bonded cable modems function as conventional DOCSIS 2.0 cable modems.</td></tr>
<tr><td>Data Rates Supported</td><td>802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps
802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps
802.11n data rates (2.4 GHz and 5 GHz):
<table>
<tr><th>MCS Index[1]</th><th>GI[2] = 800 ns</th><th></th><th>GI = 400 ns</th><th></th></tr>
<tr><th></th><th>20-MHz Rate (Mbps)</th><th></th><th>20-MHz Rate (Mbps)</th><th></th></tr>
<tr><td>0</td><td>6.5</td><td></td><td>7.2</td><td></td></tr>
<tr><td>1</td><td>13</td><td></td><td>14.4</td><td></td></tr>
<tr><td>2</td><td>19.5</td><td></td><td>21.7</td><td></td></tr>
</table>
</td></tr>
</table>

[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				
	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	

802.11ac data rates (5 GHz):

MCS Index[3]	Spatial Streams	GI[4] = 800ns			GI = 400ns		
		20-MHz Rate (Mbps)	40-MHz Rate (Mbps)	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
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	-A Domain: • 2.400 to 2.4835 GHz, 11 channels • 5.280 to 5.320 GHz; 3 channels • 5.500 to 5.560 GHz, 4 channels • 5.680 to 5.700 GHz, 2 channels • 5.745 to 5.825 GHz, 5 channels -C Domain: • 2.400 to 2.4835 GHz; 13 channels • 5.725 to 5.850 GHz; 5 channels -D Domain: • 2.401 to 2.4835 GHz; 11 channels • 5.725 to 5.875 GHz; 7 channels -E Domain: • 2.401 to 2.4835 GHz; 13 channels • 5.470 to 5.725 GHz; 8 channels -K Domain: • 2.400 to 2.4835 GHz; 11 channels • 5.250 to 5.825 GHz; 14 channels -M Domain • 2.400 to 2.4835 GHz; 13 channels • 5.470 to 5.850 GHz; 12 channels -N Domain: • 2.400 to 2.4835 GHz; 11 channels • 5.725 to 5.850 GHz; 5 channels -Q Domain: • 2.400 to 2.4835 GHz; 13 channels • 5.470 to 5.725 GHz; 11 channels -R Domain: • 2.400 to 2.4835 GHz; 13 channels • 5.250 to 5.725 GHz; 11 channels -S Domain: • 2.400 to 2.4835 GHz; 13 channels • 5.725 to 5.850 GHz; 5 channels -T Domain: • 2.400 to 2.4835 GHz; 11 channels • 5.470 to 5.850 GHz; 16 channels -Z Domain: • 2.400 to 2.4835 GHz; 11 channels • 5.470 to 5.850 GHz; 12 channels	
Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.		
Maximum Number of Non-overlapping	**2.4 GHz**	**5 GHz**

Channels	• 802.11b/g: ◦ 20 MHz: 3 • 802.11n: ◦ 20 MHz: 3		• 802.11a: ◦ 20 MHz: 21 • 802.11n: ◦ 20 MHz: 21 ◦ 40 MHz: 9 • 802.11ac: ◦ 20 MHz: 21 ◦ 40 MHz: 9 ◦ 80 MHz: 5
Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.			
Receive Sensitivity	**802.11b (Complementary Code Keying [CCK])** -101 dBm @ 1 Mbps -98 dBm @ 2 Mbps -92 dBm @ 5.5 Mbps -89 dBm @ 11 Mbps	**802.11g (non HT20)** -94 dBm @ 6 Mbps -93 dBm @ 9 Mbps -92 dBm @ 12 Mbps -90 dBm @ 18 Mbps -86 dBm @ 24 Mbps -84 dBm @ 36 Mbps -79 dBm @ 48 Mbps -78 dBm @ 54 Mbps	**802.11a (non HT20)** -92 dBm @ 6 Mbps -91 dBm @ 9 Mbps -89 dBm @ 12 Mbps -87 dBm @ 18 Mbps -85 dBm @ 24 Mbps -81 dBm @ 36 Mbps -77 dBm @ 48 Mbps -76 dBm @ 54 Mbps
	2.4-GHz **802.11n (HT20)** -93 dBm @ MCS0 -91 dBm @ MCS1 -89 dBm @ MCS2 -86 dBm @ MCS3 -82 dBm @ MCS4 -78 dBm @ MCS5 -77 dBm @ MCS6 -75 dBm @ MCS7 -93 dBm @ MCS8 -91 dBm @ MCS9 -89 dBm @ MCS10 -86 dBm @ MCS11 -82 dBm @ MCS12 -78 dBm @ MCS13 -77 dBm @ MCS14 -75 dBm @ MCS15	**5-GHz** **802.11n (HT20)** -92 dBm @ MCS0 -89 dBm @ MCS1 -87 dBm @ MCS2 -85 dBm @ MCS3 -81 dBm @ MCS4 -77 dBm @ MCS5 -76 dBm @ MCS6 -75 dBm @ MCS7 -90 dBm @ MCS8 -87 dBm @ MCS9 -85 dBm @ MCS10 -82 dBm @ MCS11 -78 dBm @ MCS12 -74 dBm @ MCS13 -73 dBm @ MCS14 -72 dBm @ MCS15	**5-GHz** **802.11n (HT40)** -89 dBm @ MCS0 -86 dBm @ MCS1 -84 dBm @ MCS2 -82 dBm @ MCS3 -78 dBm @ MCS4 -74 dBm @ MCS5 -73 dBm @ MCS6 -72 dBm @ MCS7 -87 dBm @ MCS8 -84 dBm @ MCS9 -82 dBm @ MCS10 -79 dBm @ MCS11 -75 dBm @ MCS12 -71 dBm @ MCS13 -70 dBm @ MCS14 -69 dBm @ MCS15
Maximum Transmit Power	**2.4 GHz** • 802.11b (CCK) ◦ 30 dBm with 4 antennas • 802.11g (non HT duplicate mode) ◦ 30 dBm with 4 antennas • 802.11n (HT20) ◦ 30 dBm with 4 antennas		**5 GHz** • 802.11a ◦ 30 dBm with 4 antennas • 802.11n non-HT duplicate (802.11a duplicate) mode ◦ 30 dBm with 4 antennas • 802.11n (HT20) ◦ 30 dBm with 4 antennas • 802.11n (HT40) ◦ 30 dBm with 4 antennas • 802.11ac ◦ non-HT80:30 dBm, 4 antennas ◦ VHT20 30 dBm, 4 antennas ◦ VHT40: 30 dBm, 4 antennas ◦ VHT80: 30 dBm, 4 antennas ◦ VHT20-STBC: 30 dBm, 4 antennas ◦ VHT40-STBC: 30 dBm, 4 antennas ◦ VHT80-STBC: 30 dBm, 4 antennas
Note: The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.			
Network Interface	• 10/100/1000BASE-T Ethernet, autosensing (RJ-45) • Fiber SFP		

	• DOCSIS/EuroDOCSIS/JapanDOCSIS 3.0 (16x8) Cable modem interface (1572IC/1572EC)
Dimensions (L x W x D)	1572IC: 12.0 x 7.9 x 7.9 in. (30.5 x 20.1 x 20.1 cm) 1572EC/1572EAC: 12.0 x 7.9 x 6.2 in. (30.5 x 20.1 x 15.9 cm)
Weight	1572IC: 14.3 lbs (6.5 kg) 1572EC/1572EAC: 16.5 lbs (7.5 kg) Cable strand mounting bracket 1 (SMK1): 0.7 lbs (0.3 kg) Cable strand mounting bracket 2 (SMK2): 1.3 lbs (0.6 kg) Pole mounting Kit 1 (PMK1): 2.2 lbs (1.0 kg) Pole mounting Kit 2 (PMK1): 4.4 lbs (2.0 kg) Pole mounting Kit 3 (PMK1): 6.1 lbs (2.8 kg)
Environmental	Operating temperature: -40 to 55°C (-40 to 131°F) plus Solar Loading Storage temperature: -50 to 70°C (-58 to 158°F) Wind resistance: • Up to 100-MPH sustained winds • Up to 165-MPH wind gusts
Environmental Ratings	• IP67 • NEMA Type 4X
Antenna Gain	• Integrated Dual Band Omnidirectional Antenna Radome (1572IC) ◦ 4 dBi (2.4 GHz), 7 dBi (5 GHz) • External Dual-Band Omnidirectional Antennas (1572EC / 1572EAC) ◦ AIR-ANT2568V-N (6 dBi (2.4 GHz), 8 dBi (5 GHz)) ◦ AIR-ANT2547V-N (4 dBi (2.4 GHz), 7 dBi (5 GHz)) • External Dual-Band Directional Antennas (1572EC/1572EAC) • AIR-ANT2588P3M-R= (8 dBi (2.4 GHz), 8 dBi (5 GHz)) • AIR-ANT2513P4M-N= (13 dBi (2.4 GHz), 13 dBi (5 GHz)) • External Single Band Antennas (for 1572EC / 1572EAC) ◦ 2.4 GHz ◦ AIR-ANT2420V-N (2 dBi, omni); right-angle ◦ AIR-ANT2450V-N (5 dBi, omni) ◦ AIR-ANT2480V-N (8 dBi, omni) ◦ AIR-ANT2413P2M-N= (13 dBi, dual polarized patch) ◦ 5 GHz ◦ AIR-ANT5140V-N (4 dBi, omni); right-angle ◦ AIR-ANT5180V-N (8 dBi, omni) ◦ AIR-ANT5114P2M-N= (14 dBi, dual polarized patch)
Powering Options	**1572IC/1572EC** • 40-90 VAC, 50-60 Hz, quasi-square wave, Power over Cable • 12 VDC **1572EAC** • 90-305 VAC, 50-60 Hz • 12 VDC • UPOE • PoE with power injector
Warranty	1 year
Compliance	**Safety** • UL 60950, 2nd Edition • CAN/CSA-C22.2 No. 60950, 2nd Edition • IEC 60950, 2nd Edition • EN 60950, 2nd Edition **Immunity** • <= 5 mJ for 6kV/3kA @ 8/20 ms waveform • ANSI/IEEE C62.41 • EN61000-4-5 Level 4 AC Surge Immunity • EN61000-4-4 Level 4 Electrical Fast Transient Burst Immunity • EN61000-4-3 Level 4 EMC Field Immunity • EN61000-4-2 Level 4 ESD Immunity

	• EN60950 Overvoltage Category IV **Radio approvals** • FCC Part 15.247, 15.407 • FCC Bulletin OET-65C • RSS-210 • RSS-102 • AS/NZS 4268.2003 • EN 300 328 • EN 301 893 **EMI and susceptibility** • FCC part 15.107, 15.109 • ICES-003 • EN 301 489-1, -17 **Security** • Wireless bridging/mesh ◦ X.509 digital certificates ◦ MAC address authentication ◦ Advanced Encryption Standards (AES), Temporal Key Integrity Protocol (TKIP) • Wireless access ◦ 802.11i, Wi-Fi Protected Access (WPA2), WPA ◦ 802.1X authentication, including Extensible Authentication Protocol and Protected EAP (EAP-PEAP), EAP Transport Layer Security (EAP-TLS), EAP-Tunneled TLS (EAP-TTLS), and Cisco LEAP ◦ Advanced Encryption Standards (AES), Temporal Key Integrity Protocol (TKIP) ◦ VPN pass-through ◦ IP Security (IPsec) ◦ Layer 2 Tunneling Protocol (L2TP) • MAC address filtering •

Plan, Build, and Run Services for a Seamless Outdoor Experience

Professional services from Cisco and Cisco Advanced Wireless LAN Specialized Partners facilitate a smooth deployment of the next-generation wireless outdoor solution, while tightly integrating it with the wired and indoor wireless networks. Based on proven methodologies for planning and deploying end-to-end solutions with secure voice, video, and data technologies and years of experience designing and implementing some of the world's most complex enterprise-class wireless networks, our specialists can help you optimize mobile connectivity to transform your business operations.

We work with your IT staff to see that your architecture, physical sites, and operational staff are ready to support Cisco's integrated, next-generation, outdoor wireless solution that combines the high performance of the 802.11ac standard and Cisco CleanAir technology.

For More Information

For more information about Cisco wireless mesh, contact your local account representative or visit: http://www.cisco.com/go/outdoorwireless.

For more information about the Cisco Unified Wireless Network framework, visit: http://www.cisco.com/go/unifiedwireless.

For more information about the Cisco service provider Wi-Fi solution, visit: http://www.cisco.com/go/ap1570.

For more information about the Cisco Wireless LAN Services, visit: http://www.cisco.com/go/wirelesslanservices.