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Cisco WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point

High-Performance, Ruggedized, and Highly Secure Business-Class Wireless-AC Connectivity for Outdoor Spaces

Highlights

- · Provides cost-effective 802.11ac outdoor connectivity with speed up to 1.9Gbps
- Supports 3x3 multiple-input multiple-output (MIMO) technology with three spatial streams for maximum performance on both 2.4- and 5.0-GHz radios
- Outdoor-rated IP66 enclosure designed for challenging outdoor environments such as rain and extreme temperatures, as well surge protection support
- Dual Gigabit Ethernet LAN with Energy Efficient Ethernet and link aggregation support
- · A captive portal helps enable highly secure guest access with customized roles and rights
- · Single Point Setup requires no controller for easy, cost-effective deployment of multiple access points
- Works right out of the box with easy installation and a simple web-based configuration and wizard

Product Overview

Constant Wi-Fi access is becoming the norm in today's always-connected world, both for an increasingly mobile workforce and for consumers. Moreover, mobile devices and social media applications continue to grow and proliferate, putting tremendous pressure on wireless networks, especially in outdoor user environments such as outdoor business campuses, school campuses, pools, and other public settings.

To stay connected, people need dependable, business-class wireless access to network applications anytime, anywhere, whether they are indoors or outdoors. The Cisco[®] WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point is purpose-built to meet the demands of your outdoor spaces. The WAP571E access point offers a rugged housing built to handle anything from rain, snow, and even high or low temperatures.

The WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point provides a simple, cost-effective way to extend highly secure, high-performance mobile networking to outdoor spaces. It uses concurrent, dual-band radio for improved coverage and user capacity. The 3x3 multiple-input multiple-output (MIMO) technology with three spatial streams allows the access point to run at maximum performance in both the 5.0-GHz and 2.4-GHz frequency. Gigabit Ethernet LAN interfaces with Power over Ethernet (PoE) facilitates flexible installation and can reduce cabling and wiring costs. Intelligent quality-of-service (QoS) features let you prioritize bandwidth-sensitive traffic for voice over IP (VoIP) and video applications.

To provide highly secure guest access to visitors and other users, the WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point supports a captive portal with multiple authentication options and the ability to configure rights, roles, and bandwidth. A customized guest login page lets you present a welcome message and access details, and reinforces your brand with company logos.

WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Points are easy to set up and use, with an intuitive wizard-based configuration to get you up and running in minutes. An attractive design with flexible mounting options allows the access points to smoothly blend into any small-business environment.

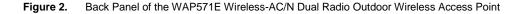
To enhance reliability and safeguard sensitive business information, WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Points support both Wi-Fi Protected Access (WPA) Personal and Enterprise, encoding all your wireless transmissions with powerful encryption. In addition, 802.1X RADIUS authentication helps keep unauthorized users out.

Designed to scale smoothly as your organization grows, the access points feature controller-less Single Point Setup, which simplifies the deployment of multiple access points without additional hardware. With the WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point, you can extend business-class wireless networking to employees and guests anywhere in the business properties, with the flexibility to meet new business needs for years to come.

Figures 1 and 2 show the product's front and back panels, respectively.

Figure 1. Front Panel of the WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point







Features

- Concurrent dual-band radio support up to 1.3 Mbps on a 5.0-Ghz radio and 600 Mbps on a 2.4-Ghz radio to make the most of capacity and coverage
- 3x3 MIMO with three spatial streams on both 5.0 GHz and 2.4GHz allows maximum performance
- Outdoor-rated IP66 enclosure designed for challenging outdoor environments, such as rain and extreme temperatures, as well surge protection support
- Single Point Setup, a controller-less technology, simplifies the deployment and management of multiple access points, without requiring additional hardware
- A two-Gigabit Ethernet LAN interface can enable a high-speed uplink to the wired network and link aggregation support to increase the overall bandwith between the two ports
- Robust security, including WPA2, 802.1X with RADIUS secure authentication, and rogue access point detection help protect sensitive business information
- Captive portal support facilitates highly secure, customized guest access with multiple rights and roles
- A simple installation and intuitive web-based configuration and wizard facilitate fast, simple deployment and setup in minutes
- Support for Power over Ethernet (PoE) allows for easy installation without expensive additional wiring
- Sleek design with multiple internal antennas and a versatile mounting kit allows for installation on a pole or a wall
- Intelligent quality of service (QoS) prioritizes network traffic to help keep critical network applications running at top performance
- · Power-saving sleep mode and port control features help increase energy efficiency
- Workgroup Bridge mode lets you expand your network by wirelessly connecting to a second Ethernet network
- Support for IPv6 lets you deploy future networking applications and operating systems without costly upgrades
- · A limited lifetime hardware warranty provides peace of mind

Specifications

Table 1 lists the specifications, package contents, and minimum requirements for the WAP571E access point.

 Table 1.
 Specifications for the WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point

Specifications	Description			
Standards	IEEE 802.11ac, 802.11a, 802.11n, 802.11g, 802.11b, 802.3af, 802.3u, 802.1X (security authentication), 802.1Q (VLAN), 802.1D (Spanning Tree), 802.11i (WPA2 security), 802.11e (wireless QoS), IPv4 (RFC 791), IPv6 (RFC 2460)			
Ports	2 LAN Gigabit Ethernet autosensing			
Cabling type	Category 5e or better			
Antennas	Internal antennas optimized for installation on a wall			
LED indicators	One LED			
Operating system	Linux			
Physical Interfaces				
Ports	2- 10/100/1000 Ethernet, with support for 802.3at at PoE support is only for 1 port and not 2 ports			
Buttons	Reset button			
LEDs	One multi-function LED			
Physical Specifications				
Physical dimensions (W x D x H)	9.05 x 7.87 x 1.96 in. (230 x 200 x 50 mm)			
Weight	2.97 lb or 1350g			
Network Capabilities				
VLAN support	Yes			
Number of VLANs	1 management VLAN plus 32 VLANs for SSIDs			
802.1X supplicant	Yes			
SSID-to-VLAN mapping	Yes			
Auto-channel selection	Yes			
Spanning tree	Yes			
Load balancing	Yes			
IPv6	Yes • IPv6 host support • IPv6 RADIUS, syslog, Network Time Protocol (NTP)			
Layer 2	802.1Q-based VLANS, 32 active VLANS plus 1 management VLAN			
Security				
WPA, WPA2	Yes, including Enterprise authentication			
Access control	Yes, management access control list (ACL) plus MAC ACL			
Secure management	HTTPS			
SSID broadcast	Yes			
Rogue access point detection	Yes			
Mounting and Physical Secur	ity			
Multiple mounting options	Mounting bracket included for easy wall or pole mounting			
Quality of Service				
QoS	Wi-Fi Multimedia and Traffic Specification (WMM TSPEC), client QoS			

Specifications	Description			Description				
Performance								
Wireless throughput	Up to 1.9Gbps data rate (real-world throughput will vary)							
Recommended user support	Up to 200 connective users, 50 active users per radio							
Multiple-Access Point Manag	ccess Point Management							
Single Point Setup	Yes							
Number of access points per cluster	16							
Active clients per cluster	960							
Configuration								
Web user interface	Built-in web user inter	face for easy browser-b	ased configuration (HT	TP/HTTPS)				
Management								
Management protocols	Web browser, Simple	Network Management	Protocol (SNMP) v3, Bo	onjour				
Remote management	Yes							
Event logging	Local, remote syslog, email alerts							
Network diagnostics	Logging and packet ca	Logging and packet capture						
Web firmware upgrade	Firmware upgradable through web browser, imported and exported configuration file							
Dynamic Host Configuration Protocol (DHCP)	DHCP client							
IPv6 host	Yes							
HTTP redirect	Yes							
Wireless								
Frequency	Dual concurrent radio	s (2.4 and 5 GHz)						
Radio and modulation type	Dual radio, orthogonal frequency division multiplexing (OFDM) IEEE 802.11a/n: OFDM (BPSK/QPSK/16QAM/64QAM/256AM) IEEE 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)							
WLAN	802.11n/ac 3x3 MIMO with 3 spatial streams at 5 GHz and 2.4 GHz 21 for 20-MHz bandwidth; 9 for 40-MHz bandwidth; 4 for 80-MHz bandwidth 1 for 20-MHz bandwidth; 7 for 40-MHz bandwidth 802.11 dynamic frequency selection (DFS)							
Data rates supported	IEEE 802.11b: DSSS (1/2/5.5/11) IEEE 802.11g: OFDM (6/9/12/18/24/36/48/54) IEEE 802.11g: oFDM (6/9/12/18/24/36/48/54) IEEE 802.11n: see the below table IEEE 802.11b: 12.94 MHz IEEE 802.11g: 24.49 MHz IEEE 802.11n MCS0 (HT20): 27.44 MHz IEEE 802.11b: 29.76 dBm IEEE 802.11b: 29.76 dBm IEEE 802.11g: 29.24 dBm IEEE 802.11n MCS0 (HT20): 29.25 dBm IEEE 802.11n MCS0 (HT40): 23.81 dBm							
Frequency band and	Frequency Band	Channel No.	Frequency	Channel No.	Frequency			
operating channels	2400~2483.5 MHz	1	2412 MHz	7	2442 MHz			
		2	2417 MHz	8	2447 MHz			
		3	2422 MHz	9	2452 MHz			
		4	2427 MHz	10	2457 MHz			
		5	2432 MHz	11	2462 MHz			

Specifications	Description				
		6			
	Frequency Band	Channel No.	Frequency	Channel No.	
	5470~5725 MHz	106	5530 MHz	134	
	Band 3	108	5540 MHz	136	
		110	5550 MHz	140	
Transmitted output power	• 002 11h; 20 0 ; /	- 1.5 dBm at CH6, al			
	 802.11g: 20.0 +/ 802.11g: 17.0 +/ 802.11n(HT20): 802.11n(HT20): 802.11n(HT40): 5 GHz UNII-1 (5150- 802.11a: 22.0 +/ 802.11a: (1720): 802.11ac(HT20): 802.11ac(HT20): 802.11ac(HT40): 802.11ac(HT40): 802.11ac(HT80): 802.11ac(HT20): 802.11ac(HT20): 802.11ac(HT40): 802.11ac(HT40): 802.11ac(HT40): 802.11ac(HT80): 5 GHz UNII-3 (5725- 802.11a: 22.0 +/ 802.11ac(HT20): 802.11ac(HT20): 802.11ac(HT20): 802.11ac(HT20): 802.11ac(HT40): 	- 1.5 dBm at CH6, 6 - 1.5 dBm at CH6, 5- 20.0 +/- 1.5 dBm at (17.0 +/- 1.5 dBm at (- 1.5 dBm at 6 Mbps - 1.5 dBm at 54 Mbp : 22.0 +/- 1.5 dBm at : 14.0 +/- 1.5 dBm at : 21.0 +/- 1.5 dBm at : 21.0 +/- 1.5 dBm at : 20.0 +/- 1.5 dBm at : 20.0 +/- 1.5 dBm at : 14.0 +/- 1.5 dBm at : 14.0 +/- 1.5 dBm at : 15 dBm at 54 Mbp : 15 dBm at 54 Mbp : 18.0 +/- 1.5 dBm at : 14.0 +/- 1	Mbps 4 Mbps 5 Mbps 5 McS0 6 MCS7 5 MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 Extended (5470 – 5725 MHz 5 MCS0 MCS9 MCS0 MCS9 S MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 MCS0 MCS9 MCS0 MCS0 MCS9 MCS0 MCS0 MCS9 MCS0 MCS0 MCS9 MCS0 M	;)	
Wireless isolation	Wireless isolation be	etween clients			
External antennas	None				
Internal antennas		6 Internal fixed PIFA antenna			
Antenna gain in dBi	3.55 dBi for 5 GHz, 2	2.98 dBI for 2.4 GHz			
Receiver sensitivity		n at 54 Mbps -71 dBm at MCS7 -68 dBm at MCS7 n at 6 Mbps n at 54 Mbps - 63 dBm at MCS9 : -60 dBm at MCS9			
Wireless distribution system (WDS)	• 802.11ac(HT80): Yes	36 ubm at MCS9			

Specifications	Description			
Fast roaming	Yes			
Multiple SSIDs	16 per Radio			
Wireless VLAN map	Yes			
WLAN security	Yes			
Wi-Fi Multimedia (WMM)	Yes, with unscheduled automatic power save			
Operating Modes				
Access point	Access point mode, Wireless Domain Services (WDS) bridging, Workgroup Bridge mode			
Environmental				
Power options	IEEE 802.3at/af Ethernet switch Peak power: 18 W ??			
Compliance	Safety: • UL 60950-1 • CAN/CSA-C22.2 No. 60950-1 • IEC 60950-1 • EN 60950-1 Radio approvals: • FCC Part 15.247, 15.407 • RSS-210 (Canada) • EN 300.328, EN 301.893 (Europe) • AS/NZS 4268.2003 (Australia and New Zealand) EMI and susceptibility (Class B): • FCC Part 15.107 and 15.109 • ICES-003 (Canada) • EN 301.489-1 and -17 (Europe)			
Operating temperature	-40° to 55°C (-40° to 131°F) with solar loading or -40 to 65°C (-40° to 149°F) without solar loading			
Storage temperature	-50° to 70°C (-58 to 158°F)			
Operating humidity	5% to 95% noncondensing			
Storage humidity	5% to 90% noncondensing			
System memory	256 MB RAM 128 MB flash			
Package Contents				
 Cisco WAP571E Wireles Wall and pole mounting I Quick-start guide Ethernet network cable 	s-AC/N Dual Radio Outdoor Wireless Access Point kit			
Minimum Requirements				
 Switch or router with PoE Web-based configuration 	E support n: Java-enabled web browser			
Warranty				
Access point	Limited lifetime			

Note: Depending on the part number (see table 1) one or more of the bands above may not be available in the product due to national regulations.

Note: Table 1 shows the maximum capability of the hardware. The transmit power may be reduced to comply with local regulatory requirements.

Ordering Information

Table 2 shows the product part numbers and descriptions to make ordering easier.

 Table 2.
 Product Ordering Information

Part Number	Description
WAP571E-A-K9	WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point (United States)
WAP571E-C-K9	WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point (China)
WAP571E-E-K9	WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point (Europe, EU region, United Kingdom, UAE, Turkey, South Africa)
WAP571E-K-K9	WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point (Korea)
WAP571E-B-K9	WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point (Canada, Argentina, Colombia, Mexico, Brazil)
WAP571E-H-K9	WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point (HK, Thailand, Singapore, Philippines, Vietnam)
WAP571E-N-K9	WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point (Australia/New Zealand)

Cisco Limited Lifetime Warranty for Cisco Small Business Products

This Cisco Small Business product comes with a limited lifetime hardware warranty. Product warranty terms and other information applicable to Cisco products are available on the Cisco <u>Warranty Listings webpage</u>.

Cisco Small Business Support Service

This optional service offers affordable, three-year, peace-of-mind coverage. This subscription-based, device-level service helps you protect your investment and derive maximum value from Cisco Small Business products. Delivered by Cisco and backed by your trusted partner, this comprehensive service includes software updates, extended access to the Cisco Small Business Support Center, and expedited hardware replacement, should it be required.

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Financing to Help You Achieve Your Objectives

Cisco Capital can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. Learn more.

For More Information

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