

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



Figure 2. Back Panel of the WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point



Features

- Concurrent dual-band radio support up to 1.3 Gbps 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 Secu	rity		
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		
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		

Specifications	Description				
Multiple-Access Point Manag	Multiple-Access Point Management				
Single Point Setup	Yes	Yes			
Number of access points per cluster	16				
Active clients per cluster	960	960			
Configuration					
Web user interface	Built-in web use	r interface for easy brows	ser-based configuration ((HTTP/HTTPS)	
Management					
Management protocols	Web browser, S	imple Network Managem	nent Protocol (SNMP) v3	, Bonjour	
Remote management	Yes				
Event logging	Local, remote sy	slog, email alerts			
Network diagnostics	Logging and pad	cket capture			
Web firmware upgrade	Firmware upgrad	dable through web brows	ser, imported and exporte	ed configuration file	
Dynamic Host Configuration Protocol (DHCP)	DHCP client				
IPv6 host	Yes	Yes			
HTTP redirect	Yes	Yes			
Wireless					
Frequency	Dual concurrent	Dual concurrent radios (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 802.11n: 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 802.11n MCS0 (HT40): 36.18 MHz IEEE 802.11b: 29.76 dBm IEEE 802.11g: 29.24 dBm IEEE 802.11n MCS0 (HT20): 29.25 dBm IEEE 802.11n MCS0 (HT20): 29.25 dBm				
Frequency band and operating channels	Frequency Band	Channel No.	Frequency	Channel No.	Frequency
	2400~2483.5M	1	2412 MHz	7	2442 MHz
	Hz	2	2417 MHz	8	2447 MHz
		3	2422 MHz	9	2452 MHz
		4	2427 MHz	10	2457 MHz
		5	2432 MHz	11	2462 MHz
		6	2437 MHz	-	-
	<u> </u>	-		<u> </u>	

Specifications	Description			
	Frequency Band	Channel No.	Frequency	Channel No.
	5150~5250	36	5180 MHz	44
	MHz Band 1	38	5190 MHz	46
		40	5200 MHz	48
		42	5210 MHz	-
		52	5260 MHz	60
		54	5270 MHz	62
-	5250~5350	56	5280 MHz	64
	MHz Band 2	58	5290 MHz	-
		100	5500 MHz	112
		102	5510 MHz	116
		104	5520 MHz	132
	5470~5725 MHz Band 3	106	5530 MHz	134
		108	5540 MHz	136
		110	5550 MHz	140
		149	5745 MHz	157
		151	5755 MHz	159
	5725~5850	153	5765 MHz	161
	MHz Band 4	155	5775 MHz	165
	 802.11b: 20.0 +/- 1.5 dBm at CH6, all rates 802.11g: 20.0 +/- 1.5 dBm at CH6, 6 Mbps 802.11g: 17.0 +/- 1.5 dBm at CH6, 54 Mbps 802.11g: 17.0 +/- 1.5 dBm at CH6, 54 Mbps 802.11n(HT20): 20.0 +/- 1.5 dBm at CH6, MCS0 802.11n(HT20): 10.0 +/- 1.5 dBm at CH6, MCS7 802.11n(HT40): 16.0 +/- 1.5 dBm at CH6, MCS7 5 GHz UNII-1 (5150-5250 MHz) 802.11a: 22.0 +/- 1.5 dBm at 6 Mbps 802.11a: 22.0 +/- 1.5 dBm at 54 Mbps 802.11a: 22.0 +/- 1.5 dBm at MCS0 802.11ac(HT20): 22.0 +/- 1.5 dBm at MCS9 802.11ac(HT20): 21.0 +/- 1.5 dBm at MCS9 802.11ac(HT40): 21.0 +/- 1.5 dBm at MCS9 802.11ac(HT80): 20.0 +/- 1.5 dBm at MCS9 802.11ac(HT80): 20.0 +/- 1.5 dBm at MCS9 802.11ac(HT80): 20.0 +/- 1.5 dBm at MCS9 5 GHz UNII-2 (5250 - 5350 MHz)/UNII-2 Extended (5470 – 5725 MHz) 802.11a: 18.0 +/- 1.5 dBm at 6 Mbps 802.11a: 18.0 +/- 1.5 dBm at 54 Mbps 802.11a: 18.0 +/- 1.5 dBm at 54 Mbps 802.11ac(HT20): 14.0 +/- 1.5 dBm at MCS9 802.11ac(HT20): 14.0 +/- 1.5 dBm at MCS9 802.11ac(HT20): 14.0 +/- 1.5 dBm at MCS9 802.11ac(HT30): 14.0 +/- 1.5 dBm at MCS9 802.11ac(HT20): 22.0 +/- 1.5 dBm at MCS9 802.11ac(HT20): 22.0 +/- 1.5 dBm at MCS9 802.11ac(HT40): 21.0 +/- 1.5 dBm at MCS9 802.11ac(HT40): 21.0 +/- 1.5 dBm at MCS9 802.11ac(HT40): 14.0 +/- 1.5 dBm at MCS0 802.11ac(HT40): 14.0 +/- 1.5 dBm at MCS0 802.11ac(HT40): 14.0 +/- 1.5 dBm at			

Specifications	Description
Wireless isolation	Wireless isolation between clients
External antennas	None
Internal antennas	6 Internal fixed PIFA antenna
Antenna gain in dBi	3.55 dBi for 5 GHz, 2.98 dBi for 2.4 GHz
Receiver sensitivity	2.4 GHz • 802.11b: -86 dBm at 11Mbps • 802.11g: -74 dBm at 54 Mbps • 802.11n(HT20): -71 dBm at MCS7 • 802.11n(HT40): -68 dBm at MCS7 5 GHz • 802.11a: -90 dBm at 6 Mbps • 802.11a: -75 dBm at 54 Mbps • 802.11a: -75 dBm at 54 Mbps • 802.11ac(HT20): -63 dBm at MCS9 • 802.11ac(HT40): -60 dBm at MCS9 • 802.11ac(HT80): -58 dBm at MCS9
Wireless distribution system (WDS)	Yes
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 Cisco power injector: SB-PWR-INJ2-xx Peak power: 18 Watts
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

Specifications	Description
Package Contents	
 Cisco WAP571E Wireless-AC/N Dual Radio Outdoor Wireless Access Point Wall and pole mounting kit Quick-start guide Ethernet network cable 	
Minimum Requirements	
 Switch or router with PoE support Web-based configuration: 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 Warranty Listings webpage.

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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