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## Cisco WAP571 Wireless-AC/N Premium Dual Radio Access Point with PoE

# High-Performance, Easy-to-Deploy, Highly Secure Business-Class Wireless-AC Connectivity for Indoor Spaces

#### **Highlights**

- · Provides cost-effective 802.11ac 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
- Dual Gigabit Ethernet LAN with Energy Efficient Ethernet and link aggregation support
- · 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 simple web-based configuration and wizard

#### **Product Overview**

In today's dynamic business environment, employees are becoming more mobile and collaborative than ever. To stay productive, they need dependable, business-class access to network applications throughout the office. Cisco<sup>®</sup> WAP571 Wireless-AC/N Premium Dual Radio Access Points provide a simple, cost-effective way to extend highly secure, high-performance mobile networking to your employees and guests, so they can stay connected anywhere in the office, regardless of what mobile devices they use. This flexible solution lets you connect dozens of employees, and can scale to accommodate additional users and changing business needs.

The WAP571 Wireless-AC/N Premium Dual Radio Access Point 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 reduces 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, WAP571 Wireless-AC/N Premium Dual Radio Access Points support 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.

WAP571 Wireless-AC/N Premium Dual Radio Access Points are easy to set up and use, with intuitive wizardbased 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, WAP571 Wireless-AC/N Premium Dual Radio 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 a Wireless-AC/N Premium Dual Radio Access Point, you can extend business-class wireless networking to employees and guests anywhere in the office, with the flexibility to meet new business needs for years to come.

Figure 1 shows a typical wireless access point configuration. Figures 2 and 3 show the product's front and back panels, respectively.

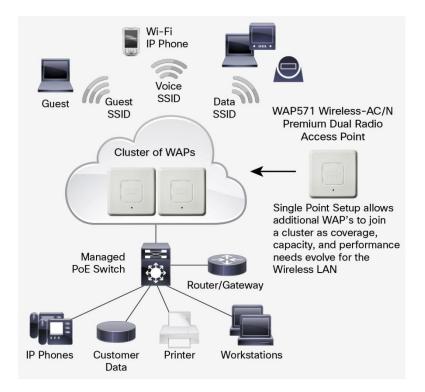


Figure 1. Typical Configuration



Figure 2. Front Panel of the WAP571 Wireless-AC/N Premium Dual Radio Access Point

Figure 3. Back Panel of the WAP571 Wireless-AC/N Premium Dual Radio 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 2.4 GHz allows for maximum performance
- 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 also 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
- A captive portal support facilitates highly secure, customized guest access with multiple rights and roles

- Simple installation and an intuitive web-based configuration and wizard facilitate fast, simple deployment and setup in minutes
- · Support for 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 ceiling, wall, or desktop
- Intelligent QoS prioritizes network traffic to help keep critical network applications running at top performance
- A 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 WAP571 Wireless-AC/N Premium Dual Radio 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 or ceiling
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
Lock slot	Slot for Kensington lock
LEDs	One multi-function LED
Physical Specifications	
Physical dimensions (W x D x H)	9.05 x 9.05 x 1.57 in. (230 x 230 x 40 mm)
Weight	1.71 lb (778g)
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

Table 1. WAP571 Wireless-AC/N Premium Dual Radio Access Point Specifications

Specifications	Description			
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 Security				
Multiple mounting options	Mounting bracket included for easy ceiling or wall mounting			
Physical security lock	Kensington lock slot			
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			
Multiple Access Point Manageme	ent			
Single Point Setup	Yes			
Number of access points per cluster	16			
Active clients per cluster	960			
Configuration				
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)			
Management				
Management protocols	Web browser, Simple Network Management Protocol (SNMP) v3, Bonjour			
Remote management	Yes			
Event logging	Local, remote syslog, email alerts			
Network diagnostics	Logging and packet capture			
Web firmware upgrade	Firmware upgradable through web browser, imported or exported configuration file			
Dynamic Host Configuration Protocol (DHCP)	DHCP client			
IPv6 host	Yes			
HTTP redirect	Yes			
Wireless				
Frequency	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/256QAM) 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 11 for 20-MHz bandwidth; 7 for 40-MHz bandwidth 802.11 dynamic frequency selection (DFS)			

Specifications	Description						
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 802.11g: 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 802.11g: 29.24 dBm         IEEE 802.11n MCS0 (HT20): 29.25 dBm         IEEE 802.11n MCS0 (HT40): 33.81 dBm						
Frequency band and operating channels	Frequency Band	Channel No.	Frequen	cy	Channel No.	Frequency	
cnanneis	2400~2483.5M Hz	1 2 3 4 5	2412 MH 2417 MH 2422 MH 2427 MH 2432 MH	z z z	7 8 9 10 11	2442 MHz 2447 MHz 2452 MHz 2457 MHz 2462 MHz	
	Frequency	6	2437 MH		-	-	
	Band	Channel No.		Frequency		Channel No.	
	5150~5250 MHz Band 1	36 38 40 42 52 54		5180 MHz 5190 MHz 5200 MHz 5210 MHz 5260 MHz 5270 MHz		44 46 48 - 60 62	
	5250~5350 MHz Band 2 58 100 102 104			5280 MHz 5290 MHz 5500 MHz 5510 MHz 5520 MHz		64 - 112 116 132	
	5470~5725 MHz Band 3	108		5530 MHz 5540 MHz		134 136	
		110 149 151		5550 MHz 5745 MHz 5755 MHz		140 157 159	
	5725~5850 MHz Band 4	153		5765 MHz		161	
		155		5775 MHz		165	

Specifications	Description
Specifications Transmitted output power	Description           24 GHz           802.11b: 20.0 +/- 1.5 dBm at CH6, all rates           802.11g: 20.0 +/- 1.5 dBm at CH6, 54 Mbps           802.11g: 17.0 +/- 1.5 dBm at CH6, MCS0           802.11n(HT20): 20.0 +/- 1.5 dBm at CH6, MCS7           802.11n(HT20): 17.0 +/- 1.5 dBm at CH6, MCS7           802.11n(HT40): 16.0 +/- 1.5 dBm at CH6, MCS7           802.11n(HT20): 20.0 +/- 1.5 dBm at CH6, MCS7           802.11a(HT20): 21.0 +/- 1.5 dBm at CH6, MCS7           802.11a: 22.0 +/- 1.5 dBm at GMbps           802.11a: (HT20): 22.0 +/- 1.5 dBm at MCS0           802.11ac(HT20): 21.0 +/- 1.5 dBm at MCS0           802.11ac(HT40): 14.0 +/- 1.5 dBm at MCS0           802.11ac(HT40): 21.0 +/- 1.5 dBm at MCS0           802.11ac(HT80): 20.0 +/- 1.5 dBm at MCS0           802.11ac(HT80): 18.0 +/- 1.5 dBm at MCS0           802.11ac(HT20): 18.0 +/- 1.5 dBm at MCS0           802.11ac(HT20): 18.0 +/- 1.5 dBm at MCS0           802.11ac(HT40): 18.0 +/- 1.5 dBm at MCS9           802.11ac(HT40): 18.0 +/- 1.5 dBm at MCS9           802.11ac(HT40): 14.0 +/- 1.5 dBm at MCS9           802.11ac(HT80): 14.0 +/- 1.5 dBm at MCS9           802.11ac(HT80): 14.0 +/- 1.5 dBm at MCS9
Wireless isolation	Wireless isolation between clients
External antennas	None
Internal antennas	6 Internal fixed PIFA antenna
Antenna gain in dBi	1.99 dBi for 5 Ghz and 1.28 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 • 802.11ac(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

Specifications	Description			
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	0° to 40°C (32° to 104°F)			
Storage temperature	-20° to 70°C (-4° to 158°F)			
Operating humidity	10% to 85% noncondensing			
Storage humidity	5% to 90% noncondensing			
System memory	256 MB RAM 128 MB flash			
Package Contents				
<ul> <li>WAP571 Wireless-AC/N F</li> <li>Ceiling and wall mounting</li> <li>Quick-start guide</li> <li>Ethernet network cable</li> </ul>	remium Dual Radio Access Point kit			
Minimum Requirements				
<ul><li>Switch or router with PoE</li><li>Web-based configuration:</li></ul>				
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
WAP571-A-K9	WAP571 Wireless-AC/N Premium Dual Radio Access Points (United States)
WAP571-C-K9	WAP571 Wireless-AC/N Premium Dual Radio Access Points (China)
WAP571-E-K9	WAP571 Wireless-AC/N Premium Dual Radio Access Points (Europe, EU region, United Kingdom, HK, Thailand, UAE, Turkey, South Africa, Vietnam)
WAP571-K-K9	WAP571 Wireless-AC/N Premium Dual Radio Access Points (Korea)
WAP571-B-K9	WAP571 Wireless-AC/N Premium Dual Radio Access Points (Canada, Argentina, Colombia, Mexico, Brazil)
WAP571-I-K9	WAP571 Wireless-AC/N Premium Dual Radio Access Points (India, Chile, Saudi Arabia, Malaysia, Singapore, Philippines)
WAP571-N-K9	WAP571 Wireless-AC/N Premium Dual Radio Access Points (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>Product Warranties webpage</u>.

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