Cisco WAP125 Wireless-AC Dual Band Desktop Access Point with PoE

Contents

Guest Access, Highly Secure Connectivity, Simplified Configuration.

Highlights

- Provides cost-effective 802.11ac/n connectivity for 2.4-GHz and 5-GHz clients with speeds up to 867 Mbps
- Gigabit Ethernet LAN interface with Power over Ethernet (PoE) enables flexible installation
- Secure guest WiFi access with 3rd party cloud managed guest WiFi services support
- Works right out of the box with easy installation and deployment
- Cisco Umbrella integration to protect wireless devices from malware and phishing
- Supported by the new Cisco® FindIT Network Management platform for easy management and control
- Provides peace of mind with a limited lifetime hardware warranty

Product overview

In today's dynamic business environment, employees are becoming more mobile and collaborative than ever. Businesses are now depending on cloud applications like Office 365 or Gmail. To stay productive, they need reliable, and fast wireless network to access mission critical applications with no delays. The Cisco WAP125 Wireless-AC Dual Band Desktop Access Point with PoE provide a simple, cost-effective and secure wireless networking to your employees and guests, so they can have the best experience to stay connected anywhere in the office. This flexible solution lets you connect dozens of employees, and can scale to accommodate additional users and changing business needs.

The WAP125 access point uses concurrent dual-band radio for improved coverage on mobile devices. A Gigabit Ethernet LAN interface with PoE supports 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 WiFi access to visitors and other users, the WAP125 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. The WAP125 access point also offers support for 3rd party cloud managed guest WiFi services allowing you to control internet access for guests and give your customers a better guest WiFi experience.

The WAP125 access point is easy to set up and use, with intuitive and mobile friendly wizard-based configuration to get you up and running in minutes. An attractive, compact design with integrated stand allows the access point to be placed on a desk or other flat surface.

To enhance reliability and safeguard sensitive business information, the WAP125 access point supports 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.

The WAP125 access point is now integrated with Cisco Umbrella to protect employee and guest WiFi against web threats such as malware, ransomware and more.

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

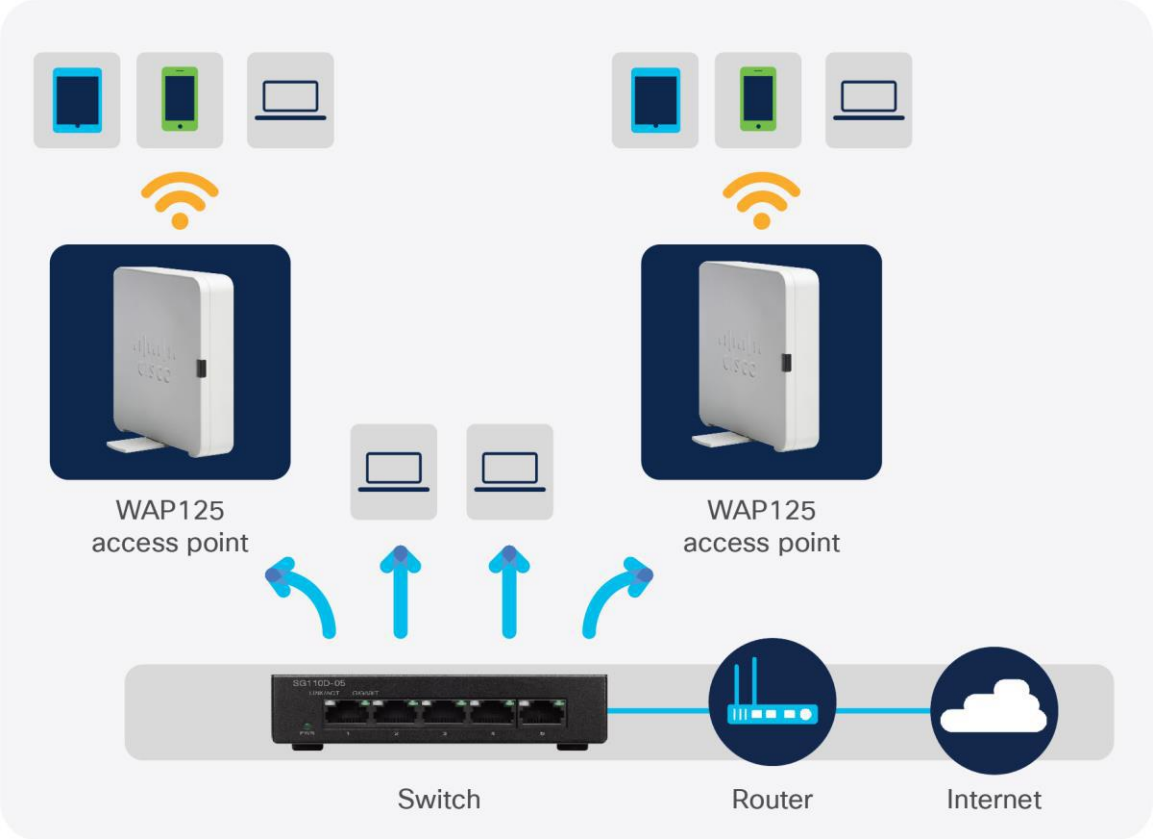


Figure 1.
Typical wireless access point configuration

Figure 2.
Front panel

Figure 3.
Back panel

Features

- The single radio supports both 5 GHz and 2.4 GHz, with speeds up to 867 Mbps for increased capacity and coverage
- The Gigabit Ethernet LAN interface can enable a high-speed uplink to the wired network
- Robust security, including WPA2, 802.1X with RADIUS secure authentication, and rogue access point detection, helps protect sensitive business information
- A captive portal supports secure, customized guest access with multiple rights and roles
- Simple installation and an intuitive web-based configuration wizard enable fast, simple deployment and setup in minutes
- Support for PoE makes installation easy without expensive additional wiring
- Support Plug and Play feature for mass deployments, when using FindIT network management platform
- Sleek design with multiple internal antennas and integrated stand
- Intelligent QoS prioritizes network traffic to help keep critical network applications running at top performance
- Workgroup Bridge mode lets you expand your network by wirelessly connecting to a second Ethernet network
- Support for Cisco FindIT Network Management platform offers easy management and control

Specifications

Table 1 lists the specifications, package contents, and minimum requirements for the WAP125 access point. Table 2 lists the access point's RF performance.

Table 1. Specifications

Specifications	Description
Standards	IEEE 802.11ac, 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)
Cabling type	Category 5e or better
Antennas	Internal antennas optimized for installation on desktop
Led indicators	1 multifunction LED
Operating system	Linux
Physical Interfaces	
Ports	10/100/1000 Ethernet, with support for 802.3af /at PoE, power port for AC adapter (included)
Power supply	External 12V/1A DC power jack (Energy Star 2.0 compliant with Efficiency Level 6) and 802.3af/at PoE
Buttons	Reset button, power on/off push button
Lock slot	Slot for Kensington lock
LEDs	1 LED
Physical Specifications	
Physical dimensions (W x D x H)	4.85 x 4.85 x 1.25 in. (123 x 123 x 31 mm)
Weight	0.67 lb (303 g)
Network Capabilities	
VLAN support	Yes
Number of VLANs	1 management VLAN plus 8 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, 8 active VLANs plus 1 management VLAN

Specifications	Description
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	
Mounting options	Desktop
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 867-Mbps data rate (real-world throughput will vary)
Recommended user support	Up to 64 connective users, 10 active users
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 bands (2.4 and 5 GHz)

Specifications	Description	
Radio technologies	802.11b: Direct-Sequence Spread-Spectrum (DSSS) 802.11a/g/n/ac: Orthogonal Frequency Division Multiplexing (OFDM)	
Modulation types	802.11b: BPSK, QPSK, CCK 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM	
WLAN	802.11ac/n 2x2 Multiple-Input Multiple-Output (MIMO) with 2 spatial streams at 5 GHz 2x2 MIMO with 2 spatial streams at 2.4 GHz 20-, 40-, and 80-Mhz channels for 802.11ac 20 and 40 MHz for 802.11n PHY data rate up to 867Mbps	
Data rates supported	802.11a/b/g: • 54, 48, 36, 24, 18, 12, 9, 6, 11, 5.5, 2, and 1 Mbps • 802.11n: 6.5 to 300 Mbps ◦ 20-MHz bandwidth: MCS 0-15 for supported data rates ◦ 40-MHz bandwidth: MCS 0-15 for supported data rates • 802.11ac: 6.5 to 867 Mbps ◦ 20-MHz bandwidth: MCS 0-9 for supported data rates ◦ 40-MHz bandwidth: MCS 0-9 for supported data rates ◦ 80-MHz bandwidth: MCS 0-9 for supported data rates	
Frequency band and operating channels	**A/C Regulatory Domain:** • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.240 GHz; 4 channels • 5.745 to 5.825 GHz; 5 channels **E/J Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.240 GHz; 4 channels	**K Regulatory Domain:** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.240 GHz; 4 channels • 5.745 to 5.805 GHz; 4 channels
Non-overlapping channels	**2.4 GHz** • 802.11b/g ◦ 20 MHz: 3 • 802.11n ◦ 20 MHz: 3	**5 GHz** • 802.11a ◦ 20 MHz: 9 • 802.11n ◦ 20 MHz: 9 ◦ 40 MHz: 4 • 802.11ac ◦ 20 MHz: 9 ◦ 40 MHz: 4 ◦ 80 MHz: 2
Wireless isolation	Wireless isolation between clients	
External antennas	None	
Internal antennas	Internal Fixed Planar Inverted-F Antenna (PIFA)	
Antenna gain In dBi	Maximum antenna gain of 4.02 dBi on 2.4 GHz Maximum antenna gain of 5.63 dBi on 5 GHz	

Specifications	Description
Wireless Distribution System (WDS)	Yes
Fast roaming	Yes
Multiple SSIDs	8
Wireless VLAN map	Yes
WLAN security	Yes
Wi-Fi Multimedia (WMM)	Yes, with unscheduled automatic power save
Operating Modes	
Access point	Access Point mode, WDS Bridging, Workgroup Bridge mode
Environmental	
Power options	IEEE 802.3af Ethernet switch Cisco Power Injector: SB-PWR-INJ2-xx AC adapter included, 12V/1A POE peak power: 6.5W
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	

Specifications	Description
• WAP125 Wireless-AC/N Dual Band Desktop Access Point • Power adapter 12V/1A • Quick-start guide • Ethernet network cable	
Minimum Requirements	
• Switch/router with PoE support, PoE injector, or AC power adapter • Web-based configuration: Web browser	
Warranty	
Access point	Limited lifetime

Table 2. RF performance

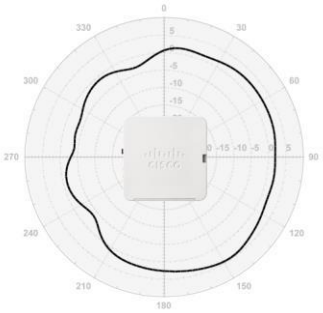
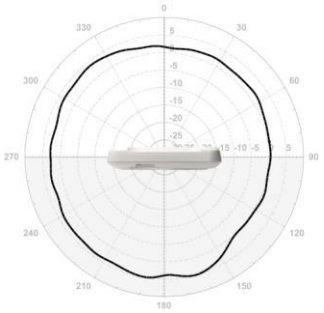
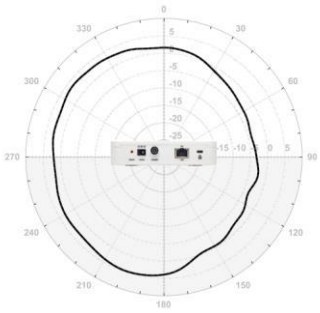
	Maximum Transmit Power (dBm) Per Chain	Receiver Sensitivity (dBm) Per Chain
2.4 GHz – 802.11b		
1 Mbps	18.0 +/- 1.5	-96.0
11 Mbps	18.0 +/- 1.5	-88.0
2.4 GHz – 802.11g		
6 Mbps	18.0 +/- 1.5	-92.0
54 Mbps	17.0 +/- 1.5	-75.0
2.4 GHz – 802.11n HT20		
MCS0/8	18.0 +/- 1.5	-92.0
MCS7/15	17.0 +/- 1.5	-73.0
2.4 GHz – 802.11n HT40		
MCS0/8	17.0 +/- 1.5	-90.0
MCS7/15	16.0 +/- 1.5	-71.0
5 GHz – 802.11a		
6 Mbps	17.0 +/- 1.5	-90.0
54 Mbps	15.0 +/- 1.5	-73.0
5 GHz – 802.11n HT20		
MCS0/8	17.0 +/- 1.5	-90.0
MCS7/15	14.0 +/- 1.5	-71.0

	Maximum Transmit Power (dBm) Per Chain	Receiver Sensitivity (dBm) Per Chain
5 GHz – 802.11n HT40		
MCS0/8	17.0 +/- 1.5	-88.0
MCS7/15	14.0 +/- 1.5	-69.0
5 GHz – 802.11ac HT20		
MCS0	17.0 +/- 1.5	-90.0
MCS8	12.0 +/- 1.5	-67.0
5 GHz – 802.11ac HT40		
MCS0	17.0 +/- 1.5	-88.0
MCS9	12.0 +/- 1.5	-63.0
5 GHz – 802.11ac HT80		
MCS0	17.0 +/- 1.5	-85.0
MCS9	12.0 +/- 1.5	-60.0

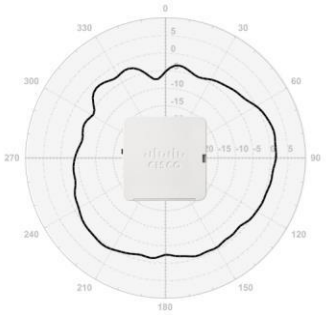
Note: This table shows the maximum capability of the hardware. The transmit power may be reduced to comply with local regulatory requirements.

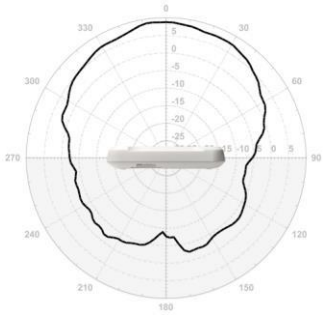
Signal Coverage Patterns

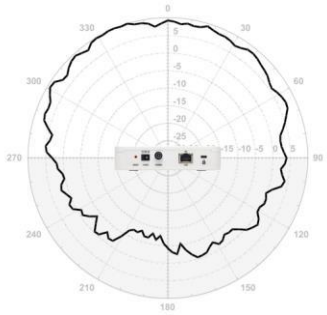
Radiation Pattern for 2.4GHz Antennas

Radiation Pattern for 5GHz Antennas







Ordering information

Table 3 shows the product part numbers and descriptions to make ordering easier.

Table 3. Ordering information

Part Number	Description
WAP125-A-K9-NA	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (United States, Canada, Colombia, Mexico)
WAP125-B-K9-BR	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (Brazil)
WAP125-A-K9-AR	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (Argentina)
WAP125-A-K9-AU	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (Australia, New Zealand)
WAP125-E-K9-EU	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (EU Regions, Philippines, Thailand, Vietnam, South Africa, Chile)
WAP125-E-K9-UK	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (United Kingdom, Saudi Arabia, UAE, Hong Kong, Singapore, Malaysia)
WAP125-E-K9-IN	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (India)
WAP125-C-K9-CN	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (China)
WAP125-K-K9-KR	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (Korea)
WAP125-J-K9-JP	Cisco WAP125 Wireless-AC/N Dual Band Desktop Access Point with PoE (Japan)

Cisco limited lifetime warranty for Cisco small business products

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