Cisco WAP121 Wireless-N Access Point with Power over Ethernet

Secure, Affordable Wireless-N Connectivity

Highlights

- Provides affordable high-bandwidth 802.11n wireless connectivity for demanding applications
- Easy to set up and use with wizard-based configuration
- Safeguards business information with enhanced security, including advanced encryption, highly secure authentication, and rogue access point detection
- Attractive design with internal antennas offers flexible installation options
- Connects to Power over Ethernet (PoE) devices, simplifying installation and eliminating the need for expensive additional wiring

Product Overview

In an increasingly mobile workplace, providing secure, high-speed wireless connectivity to employees and guests is more important than ever. The Cisco WAP121 Wireless-N Access Point with PoE is an easy, affordable way to improve the performance and reach of your small business network with advanced 802.11n wireless technology. This flexible solution is ideal for connecting up to 10 employees and can scale to accommodate additional users and changing business needs.

Designed for today's performance-intensive applications, the Cisco WAP121 employs 802.11n wireless technology to deliver high throughput and extended range throughout your office. It features built-in quality-of-service (QoS) features that let you prioritize bandwidth-sensitive traffic, enabling the deployment of business-quality voice over IP (VoIP) and video applications.

The Cisco WAP121 is simple to set up and use, with intuitive wizard-based configuration to get you up and running in minutes. A sleek, compact design with flexible mounting options enables the access point to smoothly blend into any small business environment. Support for PoE makes the device easy to install without the need for separate power plugs or expensive new wiring.

To enhance reliability and safeguard sensitive business information, the Cisco WAP121 supports both Wired Equivalent Privacy (WEP) and Wi-Fi Protected Access (WPA2), encoding all your wireless transmissions with powerful encryption. 802.1X RADIUS authentication helps keep unauthorized users out. For organizations that need to provide secure wireless access to employees, customers, and partners, it also provides support for separate virtual networks, with granular configuration options that let you provide the appropriate level of access for different users.

With the Cisco WAP121, you can extend highly secure business-class wireless networking anywhere in the office, with the reliability and flexibility to meet changing business needs.

Figure 1 shows a typical configuration using this Wireless Access Point.

Figure 1. Typical Configuration

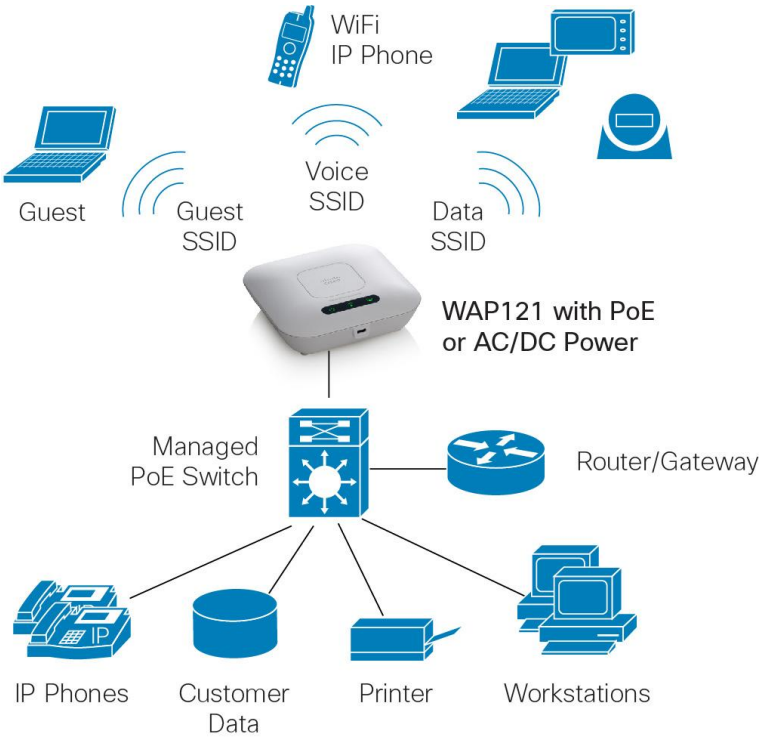
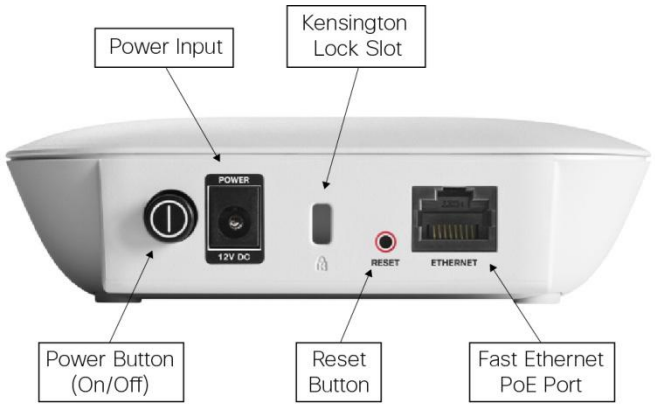


Figure 2. Front Panel of the Cisco WAP121 Wireless-N Access Point with PoE

Figure 3. Back Panel of the Cisco WAP121 Wireless-N Access Point with PoE



Features

- Highly secure, high-speed 802.11n wireless networking delivers enhanced throughput and extended range for bandwidth-intensive applications.
- Wizard-based setup and configuration enables fast, simple deployment.
- Robust security, including WPA2, 802.1X with RADIUS secure authentication, and rogue access point detection, protects sensitive business information.
- Support for PoE enables easy installation without expensive additional wiring.
- Client bridge mode lets you expand your network by wirelessly connecting to a second Ethernet network.
- Elegant, compact design with internal antennas and versatile mounting kit enables installation on a ceiling, wall, or desktop.
- IntelligentQoS prioritizes network traffic to help keep critical network applications running at top performance.
- Power-saving sleep mode and port control features help maximize energy efficiency.
- Highly secure guest access enables safe wireless connectivity for visitors.
- Support for IPv6 lets you deploy future networking applications and operating systems without costly upgrades

Specifications

Table 1 lists the specifications, package contents, and minimum requirements for the Cisco WAP121 Wireless-N Access Point.

Table 1. Specifications for the Cisco WAP121 Wireless-N Access Point

Specifications	Description
Standards	IEEE 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	LAN Fast Ethernet auto sensing, DC jack
Switch	Power button (on/off)
Buttons	Power (on/off) push button, Reset button
Cabling type	Category 5e or better
Antennas	Internal antennas optimized for wall, ceiling, or desktop placement

Specifications	Description
LEDs	Power, WLAN, LAN
Operating system	Linux
Physical Interfaces	
Ports	10BASE-T/100BASE-TX Ethernet, 12V DC power with support for 802.3af PoE
Power supply	External 12V 0.5A DC power jack (Energy Star 2.0 compliant with Efficiency Level 5) and 802.3af PoE
Buttons	Power (on/off) push button; Reset button
Lock slot	Slot for Kensington lock
LED	Power, Wireless, Ethernet
Physical Specifications	
Physical dimensions (W x D x H)	4.89 x 4.89 1.38 in or 124.17 x 124.17 x 35 mm
Weight	0.37 lb or 168 g
Network Capabilities	
VLAN support	Yes
Number of VLANs	1 management VLAN plus 4 VLANs for SSID
Multiple SSIDs	4
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), etc.
Layer 2	802.1Q-based VLANS, 4 active VLANS plus 1 management VLAN
Security	
WPA/WPA2/WEP	Yes, including Enterprise authentication
Access control	Yes, management access control list (ACL) plus MAC ACL
Secure management	HTTPS
Wi-Fi Protected Setup (WPS)	Yes (soft WPS, no hardware push button)
SSID broadcast	Yes
Rogue access point detection	Yes
Mounting and Physical Security	
Multiple mounting options	Desktop installation; mounting bracket included for easy ceiling or wall mounting
Physical security lock	Kensington lock slot
Quality of Service	
Quality of service (QoS)	Wi-Fi Multimedia & Traffic Specification (WMM TSPEC)
Performance	
Wireless throughput	Up to 300 Mbps data rate (real world throughput will vary)
Recommended user support	Up to 16 connected users, or 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

Specifications	Description
Event logging	Local, remote syslog, email alerts
Network diagnostics	Logging and packet capture
Web firmware upgrade	Firmware upgradable through web browser, imported/exported configuration file
Dynamic Host Configuration Protocol (DHCP)	DHCP client
IPv6 host	Yes
HTTP redirect	Yes
Wireless	
Frequency	Single-band 2.4GHz
Radio and modulation type	Single radio, orthogonal frequency division multiplexing(OFDM)
WLAN	802.11n
Operating channels	1 to 13 (depending on country) Channels 1 through 11 (FCC) Channels 1 through 13 (ETSI)
Wireless isolation	Wireless isolation between clients
External antennas	None
Internal antennas	Internal fixed PIFA antennas
Antenna gain in dBi	2dBi each antenna
Transmitted output power	• 802.11b@11Mbps: 17dBm • 802.11g@54Mbps: 13 dBm • 802.11n@HT20HT40, MCS15: 13dBm
Receiver sensitivity	• 802.11b: 11Mbps@–86dBm • 802.11g: 54Mbps@–71dBm • 802.11n: 300Mbps@–64dBm
Wireless distribution system (WDS)	Yes
Roaming	Yes
Multiple SSIDs	4
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, Client Bridge mode
Environmental	
Power	12V,0.5ADC input, and IEEE802.3af compliant PoE
Certifications	FCC class B, CE, IC, Wi-Fi
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
Package Contents	
• Cisco WAP121 Wireless-N Access Point with PoE • Ceiling/wall mounting kit • User guide on CD-ROM • Quick-start guide • Ethernet network cable • 12V, 0.5A power supply	

Specifications	Description
Minimum Requirements	
• 802.11b, 802.11g, 802.11n wireless adapter with TCP/IP protocol installed per PC • Switch/router with PoE support or PoE injector when used with PoE • Web-based configuration: Java-enabled web browser	
Warranty	
Access point	Limited lifetime
Power supply	1 year warranty

Ordering Information

Table 2.

Part Number	Description
WAP121-A-K9-AU	Cisco WAP121 Wireless-N Access Point with PoE (Australia, New Zealand)
WAP121-A-K9-CA	Cisco WAP121 Wireless-N Access Point with PoE (Canada)
WAP121-A-K9-NA	Cisco WAP121 Wireless-N Access Point with PoE (U.S., Latin America)
WAP121-A-K9-AR	Cisco WAP121 Wireless-N Access Point with PoE (Argentina)
WAP121-E-K9-CN	Cisco WAP121 Wireless-N Access Point with PoE (China)
WAP121-E-K9-G5	Cisco WAP121 Wireless-N Access Point with PoE (Europe)
SB-PWR-INJ1-xx	Cisco Small Business Gigabit Power over Ethernet Injector

Cisco Limited Lifetime Warranty for Cisco Small Business Series Products

This Cisco Small Business product comes with a limited lifetime hardware warranty for complete peace of mind. Product warranty terms and other information applicable to Cisco products are available at www.cisco.com/go/warranty.

Cisco Small Business Support Service

This optional service offers affordable, 3-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.

For More Information

For more information on Cisco Small Business products and solutions, visit www.cisco.com/smallbusiness or www.cisco.com/go/WAP121.

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