Cisco WAP321 Wireless-N Selectable-Band Access Point with Power over Ethernet

Secure Wireless-N Networking with Gigabit Ethernet Connectivity

Highlights

- Provides selectable-band high-bandwidth 802.11n wireless connectivity for maximum performance
- Supports high-speed connections with Gigabit Ethernet LAN interface for demanding applications
- Bridges wired LANs together wirelessly to reduce cabling and installation costs
- Easy to set up and use with wizard-based configuration
- Safeguards business information with enhanced security, including advanced encryption, secure authentication, and rogue access point detection

Figure 1. Front Panel of the Cisco WAP321 Wireless-N Selectable Access Point with PoE

Product Overview

As business applications become more powerful and sophisticated, organizations are looking for new ways to extend the performance and reach of their office networks. Delivering secure, high-speed wireless connectivity to employees, partners, and guests anywhere in the office is key. The Cisco® WAP321 Wireless-N Selectable-Band Access Point with PoE makes it easy to deliver advanced 802.11n wireless networking with business-class features – at an affordable price. This flexible solution is perfect for connecting up to 20 employees and can be expanded to accommodate additional users and changing business needs.

Built specifically for small businesses, the Cisco WAP321 offers selectable-band 802.11n wireless technology to deliver high throughput and extended range throughout your office. Advanced quality-of-service (QoS) features

let you prioritize traffic to support bandwidth-sensitive applications. This sophisticated control enables you to take advantage of voice over WLAN (VoWLAN) to place or receive calls over the wireless LAN infrastructure.

Designed for growing organizations, the Cisco WAP321 offers the ability to smoothly scale your network by bridging wired LANs together wirelessly, to reduce cabling and installation costs. It supports multiple Service Set Identifiers (SSIDs) to enable you to segregate traffic for different departments, users, and communication devices.

For companies that need to provide secure wireless guest access, the Cisco WAP321 offers captive portal support that lets you create a wireless hotspot with visitor authentication.

The Cisco WAP321 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. Power over Ethernet (PoE) support 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 data, the Cisco WAP321 supports Wi-Fi Protected Access (WPA2), encoding all your wireless transmissions with powerful encryption. 802.1X RADIUS authentication helps keep unauthorized users out.

With the Cisco WAP321, you can build on your existing network to deliver high-performance wireless access – with the scalability you need as your business grows and evolves.

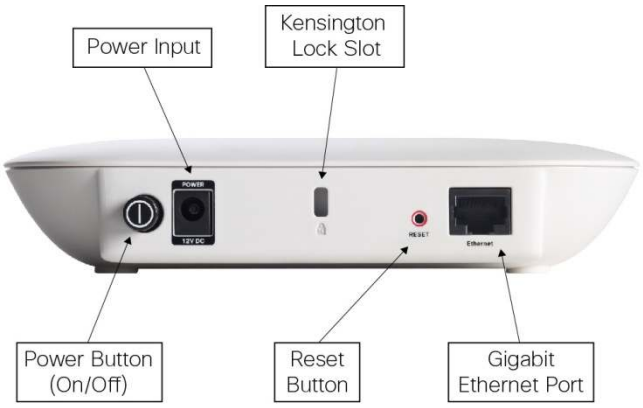
Figure 2 shows a typical configuration using this Wireless Access Point.

Figure 2. Typical Configuration

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.
- Gigabit Ethernet LAN interface provides high-speed connectivity for faster downloads and demanding applications.
- Selectable-band wireless access lets you switch bands to minimize interference from other office devices and improve performance.
- Robust security, including WPA2, 802.1X with RADIUS secure authentication, and rogue access point detection, helps protect sensitive business information.
- Power over Ethernet (PoE) support enables easy installation without the expense of 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.
- Intelligent quality of service (QoS) prioritizes network traffic to 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.

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



Specifications

Table 1 lists the specifications, package contents, and minimum requirements for the Cisco WAP321 Wireless-N access point.

Table 1. Specifications for the Cisco WAP321 Wireless-N Access Point

Specifications	Description
Standards	IEEE 802.11n, 802.11g, 802.11b, 802.3, 802.3u, 802.1X (security authentication), 802.1Q (VLAN), 802.11i(WPA2 security), 802.11e(wireless QoS), IPv4 (RFC 791), IPv6 (RFC 2460),
Ports	Ethernet, Power
Switch	Power button (on/off)
Buttons	Reset
Cabling type	Category 5e or better
LEDs	Power, Wireless, LAN
Operating system	Linux
Physical Interfaces	
Ports	Gigabit Ethernet, 12V DC powerwith support for 802.3af PoE
Power supply	Not included with access point, but supports external power 12V DC powerjack (Energy Star 2.0 compliant with Efficiency Level 5) and 802.3af Power over Ethernet
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)	6.66 x 6.67 x 1.38 in or 169.08 x 169.42 x 35 mm
Weight	0.606 lb or 275g
Network Capabilities	
Network protocols	IEEE 802.11n, 802.11g, 802.11b, 802.3, 802.3u, 802.1X (security authentication), 802.1Q (VLAN), 802.11i (WPA2 security), 802.11e (wireless QoS), IPv4 (RFC 791), IPv6 (RFC 2460), RADIUS, syslog, HTTP/HTTPS, Telnet/Secure Shell Protocol (SSH), Simple Network Management Protocol (SNMP)
VLAN support	Yes
Number of VLANs	1 management VLAN plus 8 VLANs for SSID
Multiple SSIDs	8
802.1Xsupplicant	Yes
802.11d	No
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, 8 active VLANS plus 1 management VLAN
Security	
WEP/WPA/WPA2	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)

Specifications	Description
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	Data rate =300 Mbps , actual client throughput will vary.
Recommended user support	Up to 32 connective users, 20 active users
Configuration	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
Management	
Management protocols	Web browser, 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/exported configuration file
Dynamic Host Configuration Protocol (DHCP)	DHCP client
IPv6 host	Yes
HTTP redirect	Yes, and captive portal
Wireless	
Frequency	Selectable-band 2.4GHz or 5GHz (not concurrent)
Radio and modulation type	Single radio, orthogonal frequency division multiplexing (OFDM)
WLAN	802.11n
Operating channels	1 to 13 (depending on country)
Wireless isolation	Wireless isolation between clients
External antennas	None
Internal antennas	Internal fixed PIFA antenna
Antenna gain in dBi	2dBi each antenna
Transmitted output power	• 802.11b@11Mbps: 17dBm • 802.11g@54Mbps: 13dBm • 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
Fast roaming	802.11i preauthentication
Active WLAN clients	Same as number of users. 32 max connected users, 20 active users recommended
Multiple SSIDs	8
Wireless VLAN map	Yes
WLAN security	Yes
Wi-Fi Multimedia (WMM)	Yes, with automatic power save

Specifications	Description
Operating Modes	
Access point	Access Point mode, WDS bridging, Client Bridge mode
Environmental	
Power	12V 1ADC input, and IEEE802.3af compliant PoE
Certifications	FCC class B, CE, IC, Wi-Fi
Operating temperature	0°to 40℃ (32°to 104℉)
Storage temperature	–20°to 70℃ (–4°to 158℉)
Operating humidity	10% to 85% noncondensing
Storage humidity	5% to 90% noncondensing
Package Contents	
• Cisco WAP321 Wireless-N Selectable-Band Access Point with PoE • Ceiling/wall mounting kit • User guide on CD-ROM • Ethernet network cable • Registration card	
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

Ordering Information

Table 2.

Part Number	Description
WAP321-A-K9	Cisco WAP321 Wireless-N Selectable-Band Access Point with PoE (U.S./Canada, Australia, New Zealand, India, Argentina, Brazil, Hong Kong, Singapore)
WAP321-E-K9	Cisco WAP321 Wireless-N Selectable-Band Access Point with PoE (Europe, Japan, Korea, Russia)
WAP321-C-K9	Cisco WAP321 Wireless-N Selectable-Band Access Point with PoE (China, Malaysia, Taiwan)
Cisco Small Business Wireless AP Accessories	
SB-PWR-INJ1-xx	Cisco Small Business Gigabit Power over Ethernet Injector
SB-PWR-12V-NA	Cisco Small Business 12V Power Adapter (North America)
SB-PWR-INJ1-NA	Cisco Small Business Gigabit Power over Ethernet Injector
SB-PWR-12V-BR	Cisco Small Business 12V Power Adapter (Brazil)
SB-PWR-12V-AR	Cisco Small Business 12V Power Adapter (Argentina)

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.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Printed in USA C78-697406-00 02/12