

# Cisco WAP131 Wireless-N Dual Radio Access Point with PoE

## Improved Coverage, Easy to Deploy, Secure Business-Class Wireless-N Connectivity

### Highlights

- Provides cost-effective 802.11n connectivity for 2.4-GHz and 5-GHz clients
- Single Power over Ethernet (PoE) Gigabit Ethernet for connecting to PoE switch
- PD port allows access point to be powered by backbone switch
- 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. The Cisco® WAP131 Wireless-N Dual Radio Access Point provides a simple, cost-effective way to extend secure, high-performance mobile networking to your employees and guests, so they can 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 Cisco WAP131 Wireless-N Dual Radio Access Point uses concurrent dual-band radios for improved coverage and user capacity. The Gigabit Ethernet port allows the AP to be powered by PoE switch to help 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.

The Cisco WAP131 Wireless-N Dual Radio Access Point is easy to set up and use, with intuitive wizard-based configuration to get you up and running in minutes. An attractive desktop design with an integrated stand allows you to place the AP on your desk vertically or horizontally.

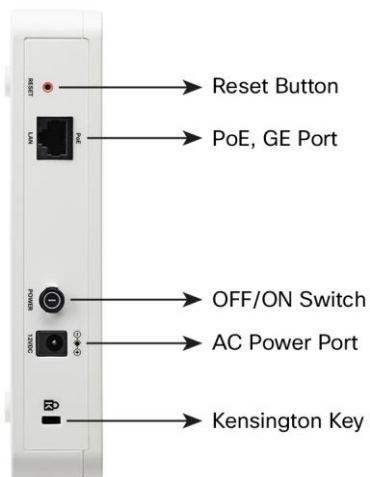
To enhance reliability and safeguard sensitive business information, the Cisco WAP131 Wireless-N Dual Radio Access Point supports both Wi-Fi Protected Access (WPA) Personal and Enterprise, encoding all your wireless transmissions with powerful encryption. In addition, 802.1 X RADIUS authentications help keep unauthorized users out.

Figure 1 shows the front panel of the Cisco WAP131 Wireless-N Dual Radio Access Point with PoE, and Figure 2 shows the back panel.

**Figure 1.** Front Panel of Cisco WAP131 Wireless-N Dual Radio Access Point with PoE



**Figure 2.** Back Panel of Cisco WAP131 Wireless-N Dual Radio Access Point with PoE



## Features

- Concurrent dual-band radio support for up to 300 Mbps per radio to maximize capacity and coverage.
- Single Gigabit Ethernet LAN interface enables 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.
- Simple installation and intuitive web-based configuration and wizard enable fast, simple deployment and setup in minutes.
- Desktop design with integrated stand, for easy access and placement.
- Intelligent QoS 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.
- 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.
- Limited lifetime hardware warranty provides peace of mind.

## Specifications

Table 1 lists the specifications, package contents, and minimum requirements for the Cisco WAP131 access point, and Table 2 gives RF performance information.

**Table 1.** Specifications for the Cisco WAP131 Wireless Access Point

Specifications	Description
<b>Standards</b>	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)
<b>Cabling type</b>	Category 5e or better
<b>Antennas</b>	Internal antennas optimized for desktop installation with vertical orientation
<b>LED indicators</b>	Power, WLAN, LAN
<b>Operating system</b>	Linux
<b>Physical Interfaces</b>	
<b>Ports</b>	10/100/1000 Ethernet, with support for 802.3af/at PoE, Power Port for AC adapter
<b>Power Supply</b>	External 12V 1.5A DC power jack (Energy Star 2.0 compliant with Efficiency Level 5) and 802.3af/at PoE
<b>Buttons</b>	Reset button, Power (on/off), Push button
<b>Lock slot</b>	Slot for Kensington lock
<b>LEDs</b>	Power, Wireless, Ethernet
<b>Physical Specifications</b>	
<b>Physical dimensions (W x D x H)</b>	6.693 x 6.693x 1.413 in. (170 x 170 x 35.9 mm)
<b>Weight</b>	0.89 lb (0.40kg)
<b>Network Capabilities</b>	
<b>VLAN support</b>	Yes
<b>Number of VLANs</b>	1 management VLAN plus 8 VLANs for SSIDs
<b>802.1X supplicant</b>	Yes
<b>SSID-to-VLAN mapping</b>	Yes
<b>Auto channel selection</b>	Yes
<b>Spanning tree</b>	Yes
<b>Load balancing</b>	Yes
<b>IPv6</b>	Yes <ul style="list-style-type: none"> <li>• IPv6 host support</li> <li>• IPv6 RADIUS, syslog, Network Time Protocol (NTP), etc.</li> </ul>
<b>Layer 2</b>	802.1Q-based VLANs, 8 active VLANs plus 1 management VLAN
<b>Security</b>	
<b>WPA and WPA2</b>	Yes, including Enterprise authentication
<b>Access control</b>	Yes, management access control list (ACL) plus MAC ACL
<b>Secure management</b>	HTTPS
<b>SSID broadcast</b>	Yes

Specifications	Description				
Rogue-access-point detection	No				
<b>Mounting and Physical Security</b>					
Mounting options	Desktop only				
Physical security lock	Kensington lock slot				
<b>Quality of Service</b>					
Quality of service (QoS)	Wi-Fi Multimedia and Traffic Specification (WMM TSPEC), Client QoS				
<b>Performance</b>					
Wireless throughput	Up to 300-Mbps data rate (real-world throughput will vary)				
Recommended user support	Up to 32 connective users, 16 active users per radio				
<b>Configuration</b>					
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)				
<b>Management</b>					
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/exported configuration file				
Dynamic Host Configuration Protocol (DHCP)	DHCP client				
IPv6 host	Yes				
HTTP redirect	No				
<b>Wireless</b>					
Frequency	Dual concurrent radios (2.4 and 5 GHz)				
Radio and modulation type	Dual radio, orthogonal frequency division multiplexing (OFDM)				
WLAN	802.11n 2x2 multiple-input multiple-output (MIMO) with 2 spatial streams 20, and 40 MHz for 802.11n PHY data rate up to 600 Mbps				
Data rates supported	802.11a/b/g: <ul style="list-style-type: none"> <li>• 54, 48, 36, 24, 18, 12, 9, 6, 11, 5.5, 2, and 1 Mbps</li> <li>• 802.11n: 6.5 to 300 Mbps <ul style="list-style-type: none"> <li>◦ 20-MHz bandwidth: MCS 0-15 for supported data rates</li> <li>◦ 40-MHz bandwidth: MCS 0-15 for supported data rates</li> </ul> </li> </ul>				
Frequency Band and 20-MHz Operating Channels	<table border="0"> <tr> <td style="vertical-align: top;"> <b>A Regulatory Domain:</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.180 to 5.240 GHz; 4 channels</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul> </td> <td style="vertical-align: top;"> <b>E Regulatory Domain:</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.180 to 5.240 GHz; 4 channels</li> </ul> </td> </tr> <tr> <td colspan="2"> <b>C Regulatory Domain:</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.745 to 5.805 GHz; 4 channels</li> </ul> </td> </tr> </table>	<b>A Regulatory Domain:</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.180 to 5.240 GHz; 4 channels</li> <li>• 5.745 to 5.825 GHz; 5 channels</li> </ul>	<b>E Regulatory Domain:</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz; 13 channels</li> <li>• 5.180 to 5.240 GHz; 4 channels</li> </ul>	<b>C Regulatory Domain:</b> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz; 11 channels</li> <li>• 5.745 to 5.805 GHz; 4 channels</li> </ul>	
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Maximum Number of Nonoverlapping Channels	<table border="0"> <tr> <td style="vertical-align: top;"> <b>2.4 GHz</b> <ul style="list-style-type: none"> <li>• 802.11b/g <ul style="list-style-type: none"> <li>◦ 20 MHz: 3</li> </ul> </li> <li>• 802.11n <ul style="list-style-type: none"> <li>◦ 20 MHz: 3</li> </ul> </li> </ul> </td> <td style="vertical-align: top;"> <b>5 GHz</b> <ul style="list-style-type: none"> <li>• 802.11a <ul style="list-style-type: none"> <li>◦ 20 MHz: 9</li> </ul> </li> <li>• 802.11n <ul style="list-style-type: none"> <li>◦ 20 MHz: 9</li> <li>◦ 40 MHz: 4</li> </ul> </li> </ul> </td> </tr> </table>	<b>2.4 GHz</b> <ul style="list-style-type: none"> <li>• 802.11b/g <ul style="list-style-type: none"> <li>◦ 20 MHz: 3</li> </ul> </li> <li>• 802.11n <ul style="list-style-type: none"> <li>◦ 20 MHz: 3</li> </ul> </li> </ul>	<b>5 GHz</b> <ul style="list-style-type: none"> <li>• 802.11a <ul style="list-style-type: none"> <li>◦ 20 MHz: 9</li> </ul> </li> <li>• 802.11n <ul style="list-style-type: none"> <li>◦ 20 MHz: 9</li> <li>◦ 40 MHz: 4</li> </ul> </li> </ul>		
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Wireless isolation	Wireless isolation between clients				
External antennas	None				

Specifications	Description
<b>Internal antennas</b>	Internal Fixed PiFA Antenna
<b>Antenna gain in dBi</b>	Maximum antenna gain of 3.4 dBi on 2.4 GHz Maximum antenna gain of 4.5 dBi on 5 GHz
<b>Wireless distribution system (WDS)</b>	Yes
<b>802.11i</b>	Yes
<b>Multiple SSIDs</b>	8
<b>Wireless VLAN map</b>	Yes
<b>WLAN security</b>	Yes
<b>Wi-Fi Multimedia (WMM)</b>	Yes, with unscheduled automatic power save
<b>Operating Modes</b>	
<b>Access point</b>	Access Point mode, WDS Bridging, Workgroup Bridge mode
<b>Environmental</b>	
<b>Power options</b>	IEEE 802.3af/at Ethernet switch Cisco Power Injector - SB-PWR-INJ2-xx AC Adapter - included 12v1.5A PoE Peak power: 7.42W
<b>Compliance</b>	Safety: <ul style="list-style-type: none"> <li>• UL 60950-1</li> <li>• CAN/CSA-C22.2 No. 60950-1</li> <li>• IEC 60950-1</li> <li>• EN 60950-1</li> </ul> Radio approvals: <ul style="list-style-type: none"> <li>• FCC Part 15.247, 15.407</li> <li>• RSS-210 (Canada)</li> <li>• EN 300.328, EN 301.893 (Europe)</li> <li>• AS/NZS 4268.2003 (Australia and New Zealand)</li> </ul> EMI and susceptibility (Class B): <ul style="list-style-type: none"> <li>• FCC Part 15.107 and 15.109</li> <li>• ICES-003 (Canada)</li> <li>• EN 301.489-1 and -17 (Europe)</li> </ul>
<b>Operating temperature</b>	0° to 40°C (32° to 104°F)
<b>Storage temperature</b>	-20° to 70°C (-4° to 158°F)
<b>Operating humidity</b>	10% to 85% noncondensing
<b>Storage humidity</b>	5% to 90% noncondensing
<b>System memory</b>	128-MB RAM 128-MB Flash
<b>Package Contents</b>	
<ul style="list-style-type: none"> <li>• Cisco WAP131 Wireless-N Dual Radio Access Point</li> <li>• AC Power Adapter</li> <li>• User guide on CD-ROM</li> <li>• Quick-start guide</li> <li>• Ethernet network cable</li> </ul>	
<b>Minimum Requirements</b>	
<ul style="list-style-type: none"> <li>• Switch or router with PoE support, PoE injector, or AC Power Adapter</li> <li>• Web-based configuration: Java-enabled web browser</li> </ul>	
<b>Warranty</b>	
Access point	Limited lifetime

**Table 2.** Cisco WAP131 Wireless-N Access Point RF Performance Table

	Maximum Transmit Power (dBm) Per Chain	Receiver Sensitivity (dBm) Per Chain
<b>2.4 GHz - 802.11b</b>		
1 Mbps	18.0 +/- 1.5	-93.0
11 Mbps	18.0 +/- 1.5	-90.0
<b>2.4 GHz - 802.11g</b>		
6 Mbps	18.0 +/- 1.5	-94.0
54 Mbps	16.0 +/- 1.5	-75.0
<b>2.4 GHz - 802.11n HT20</b>		
MCS0/8	18.0 +/- 1.5	-92.0
MCS7/15	15.0 +/- 1.5	-73.0
<b>2.4 GHz - 802.11n HT40</b>		
MCS0/8	16.0 +/- 1.5	-89.0
MCS7/15	14.0 +/- 1.5	-70.0
<b>5 GHz - 802.11a</b>		
6 Mbps	18.0 +/- 1.5	-91.0
54 Mbps	14.0 +/- 1.5	-71.0
<b>5 GHz - 802.11n HT20</b>		
MCS0/8	17.0 +/- 1.5	-90.0
MCS7/15	13.0 +/- 1.5	-71.0
<b>5 GHz - 802.11n HT40</b>		
MCS0/8	15.0 +/- 1.5	-86.0
MCS7/15	12.0 +/- 1.5	-67.0

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

## Ordering Information

Table 3 gives ordering information for the Cisco WAP131 Wireless-N Dual Radio Access Point with PoE

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Part Number	Description
<b>WAP131</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE
<b>WAP131-A-K9-NA</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (U.S., Canada, Mexico)
<b>WAP131-A-K9-BR</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (Brazil)
<b>WAP131-A-K9-AR</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (Argentina)
<b>WAP131-A-K9-AU</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (Australia/New Zealand)
<b>WAP131-E-K9-EU</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (Europe)
<b>WAP131-E-K9-UK</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (United Kingdom)
<b>WAP131-C-K9-KR</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (Korea)
<b>WAP131-C-K9-CN</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (China)
<b>WAP131-C-K9-G5</b>	Cisco WAP131 Wireless-N Dual Radio Access Point with PoE (APAC)
<b>SB-PWR-INJ2-xx</b>	Cisco Gigabit Power over Ethernet Injector-30W

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## 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 at <http://www.cisco.com/go/warranty>.

### Services for Small Business

Reduce downtime with fast, expert technical support and flexible hardware coverage. Cisco Services improve network availability and help you get the most value from your Cisco products. Service plans for your Cisco Small Business products provide more support than a product warranty. A warranty protects you against product defects, and a majority of support calls are unrelated to faulty materials or manufacturing. Most callers ask about product features, technical problems, or how to expand their network.

Cisco offers an unlimited number of calls and no restrictions on call duration, so you can get the help you need, and the most from your Cisco product.

For more information on Cisco Services, see <http://www.cisco.com/go/sbs>.

### For More Information

For more information on Cisco Small Business products and solutions, visit <http://www.cisco.com/smallbusiness> or <http://www.cisco.com/go/wap100>.




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