

EAP320

INDOOR ACCESS POINT



INTRODUCTION

4ipnet EAP320 is an enterprise-grade, concurrent dual-band 802.11n indoor access point, designed specifically for high-density environments such as offices, universities, hotels, and hospitals. Featuring two 2x2 MIMO radios that can each support up to 300 Mbps data rate in the 2.4 and 5 GHz bands, the EAP320 is ideal for providing wire-like performance that is crucial for businesses. Traffic prioritization ensures that bandwidth hungry applications such as HD videos can stream perfectly, while enforcing strict quality of service requirements for VoIP and mission critical services.

In many large audience environments today, the proportion of 2.4 GHz-only clients greatly outweighs clients capable of operating in the 5 GHz band. Furthermore, many organizations wish to optimize the number of physical APs to reduce costs. Under these circumstances, the EAP320's ability to have both radios service clients in the 2.4 GHz band becomes essential for alleviating channel congestion and improving the overall wireless experience.

The EAP320's exterior is a plenum-rated, dust-proof metal housing that is extremely sturdy and flexible to deploy. With a built-in mounting mechanism, the EAP320 can be placed on regular flat surfaces such as tabletops, or mounted on walls and other vertical surfaces. The four external, dual-band antennas are adjustable and removable, allowing wireless coverage to be optimized for each deployment scenario. Combined with PoE (Power over Ethernet) support that eliminates the need for traditional power sources, the EAP320 offers an unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the EAP320 supports a wide-array of value added applications required by enterprises and organizations, such as bandwidth control, user authentication and billing, centralized WLAN management, and much more. Along with stringent yet customizable security policies, the flexible and fully-featured EAP320 becomes the ideal choice for all types of businesses, from small coffee shops to large corporations.

HIGHLIGHTS

- Concurrent dual-band 2.4/5 GHz*¹
- 802.11n 2x2 MIMO supporting up to 300 Mbps per radio
- Wall mountable IP50 dustproof metal housing
- 802.3af Power over Ethernet (PoE) compatible
- Standalone or centrally managed by 4ipnet WHG Controller
- Integrated enterprise-grade, standards-based security
- Up to 16 ESSIDs per radio with 802.1Q VLAN
- Captive portal and Guest provisioning*²
- Rogue AP detection & Load balancing*²
- Fast Layer 2/Layer 3 roaming*²

*1: Both radios can operate in 2.4 GHz or 5 GHz

*2: When used in conjunction with 4ipnet WHG Controller

FEATURES

Maximum Deployment Flexibility

Supporting 802.3af PoE, the EAP320 can be placed in locations where traditional power sources are unavailable, such as high ceilings and walls. In addition, its plenum-rated materials allows it to be placed in ceiling areas safely without having to worry about being a fire hazard, further increasing deployment flexibility.

Enterprise-grade, Standards-based Security

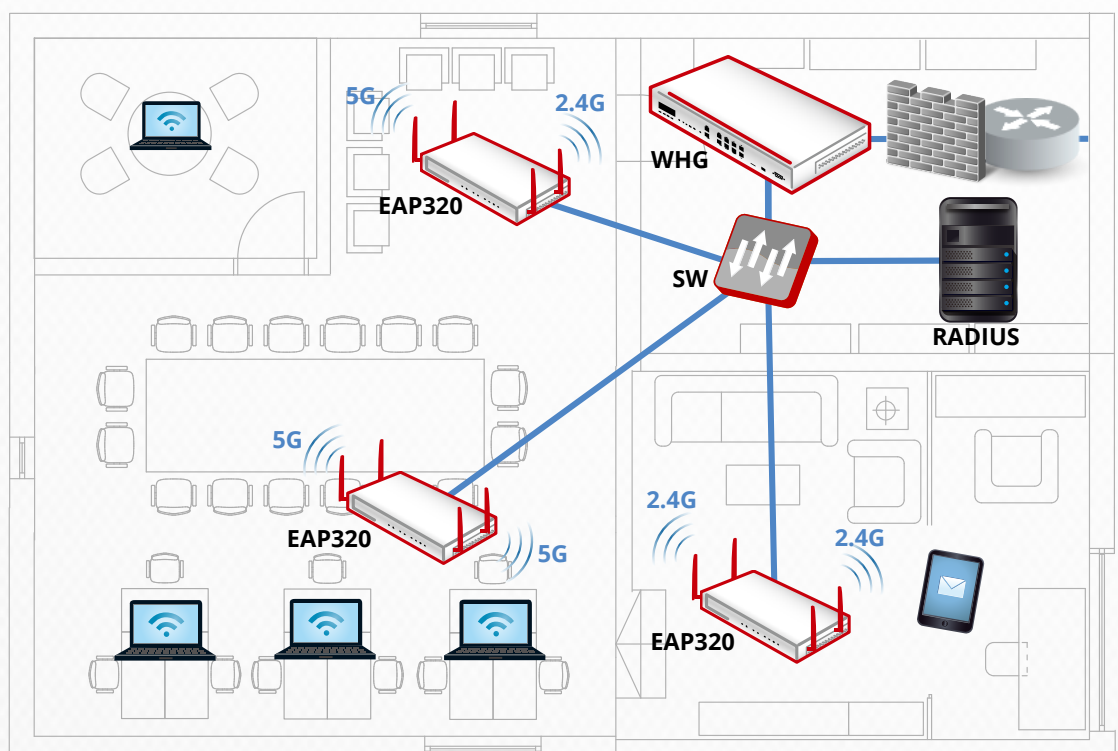
With 802.1X authentication and a backend RADIUS server, the EAP320 can prevent unauthorized users from accessing the corporate intranet. Furthermore, the AP's Layer 2 firewall capability blocks unwanted traffic, reducing network overhead and providing an added layer of security. Finally, the AP can be configured with multiple SSIDs, each utilizing different security standards (e.g. WPA2-Enterprise) and VLAN tags, which enables easy network segmentation to protect corporate resources.

4ipWES Wireless Coverage Extension

Wireless Distribution System (WDS) allows for easy extension of wireless coverage by connecting multiple APs, which can be useful in locations where wired cables are difficult to deploy. 4ipWES (4ipnet Wireless Easy Setup) turns the setup process into a quick press and connect, where WDS links can be established with the simple push of a button.

Ready for High Density Environments

With the ability for both radios to operate in the 2.4 GHz band, the EAP320 can distribute 2.4 GHz-only clients on separate channels, thereby mitigating channel congestion. The EAP320 also implements advanced AP features such as airtime fairness that improves wireless performance in high density environments, ensuring uninterrupted access to mission critical resources and delay sensitive applications. Wireless QoS with standards-based 802.11e/WMM (Wi-Fi Multimedia) further guarantees a wire-like experience.



SPECIFICATIONS

PHYSICAL	
Power	<ul style="list-style-type: none"> DC Input: 12V / 2A (Power adapter included) PoE: 802.3af compliant (PoE injector optional)
Dimensions	<ul style="list-style-type: none"> 22.0 cm (L) x 12.7 cm (W) x 4.5 cm (H)
Weight	<ul style="list-style-type: none"> 0.94 kg (2.07 lbs)
Interfaces	<ul style="list-style-type: none"> Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE LAN: 2 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 Console: 1 x DB9M
LED Indicators	<ul style="list-style-type: none"> Power System Status 2 x Wireless Status 2 x WES*1
Buttons	<ul style="list-style-type: none"> Reset / Restart 2 x WES*1
Environmental Conditions	<ul style="list-style-type: none"> Operating Temperature: -30°C (-22°F) to 70°C (158°F) Operating Humidity: 10% to 80% non-condensing IP50 Rating
Power Consumption	<ul style="list-style-type: none"> 11W max.
Antenna	<ul style="list-style-type: none"> Type: 4 x External dual-band omnidirectional (included) Gain: 3 dBi (2.4 GHz), 4 dBi (5 GHz)
Mounting	<ul style="list-style-type: none"> Wall mount
Kensington Lock	

WI-FI	
Standards	<ul style="list-style-type: none"> 802.11 a/b/g/n Concurrent dual-band 2.4/5 GHz
Supported Data Rates	<ul style="list-style-type: none"> 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: 6.5 – 130 Mbps (20 MHz), 13.5 – 300 Mbps (40 MHz)
Radio Chains	<ul style="list-style-type: none"> 2 x 2
Spatial Streams	<ul style="list-style-type: none"> 2
Output Power	<ul style="list-style-type: none"> 2.4 GHz: Up to 24 dBm*2 5 GHz: Up to 24 dBm*2
Channelization	<ul style="list-style-type: none"> 20 MHz 40 MHz
Frequency Band	<ul style="list-style-type: none"> 2.412 – 2.472 GHz 5.180 – 5.825 GHz
Operating Channels	<ul style="list-style-type: none"> 2.4 GHz: 1 – 11 (US), 1 – 13 (Europe), 1 – 13 (Japan) 5 GHz*3: 36 – 165 (US), 36 – 140 (Europe), 36 – 140 (Japan)
ESSIDs	<ul style="list-style-type: none"> Up to 16 per radio (32 total)
Certifications	<ul style="list-style-type: none"> FCC (United States), CE (Europe) Radio Equipment Conformity Certification (Japan) RoHS compliant

PERFORMANCE	
Physical Data Rate	<ul style="list-style-type: none"> Up to 300 Mbps per radio
Concurrent Users	<ul style="list-style-type: none"> Up to 256 per radio (512 total)

*1: WES (Wireless Easy Setup) - Simple button-enabled establishment of WDS links

*2: Maximum power is limited by local regulatory requirements

*3: Some channels are restricted by local regulatory requirements

SECURITY

Wireless Security	<ul style="list-style-type: none">• WEP• WPA/WPA2 Mixed• WPA2-Personal• WPA2-Enterprise (802.1X)• TKIP and AES Encryption
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VLAN Tagging (802.1Q)

Station Isolation

DHCP Snooping

Layer-2 Firewall

QUALITY OF SERVICE

Wireless QoS (802.11e/WMM)

DSCP (802.1p)

Airtime Fairness

MOBILITY/ROAMING

802.1X Preauthentication

Layer 2/Layer 3 Fast Roaming

MANAGEMENT

Deployment	<ul style="list-style-type: none">• Standalone• Tunneled management by 4ipnet WHG Controller• IPv4 & IPv6 compatible
Configuration	<ul style="list-style-type: none">• Web User Interface (HTTP/HTTPS)• SNMP v1, v2c, v3

RECEIVE SENSITIVITY

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-95
	11 Mbps	-90
802.11a	6 Mbps	-95
	54 Mbps	-81
802.11g	6 Mbps	-95
	54 Mbps	-81
802.11n (HT20)	MCS0	-95
	MCS7	-77
	MCS8	-93
	MCS15	-73
802.11n (HT40)	MCS0	-91
	MCS7	-74
	MCS8	-89
	MCS15	-70

SIGNAL COVERAGE PATTERN

