

# **EAP330**

# INDOOR ACCESS POINT



#### INTRODUCTION

4ipnet EAP330 is an enterprise-grade, concurrent dual-band 802.11ac indoor access point, designed specifically for high-density environments such as offices, universities, hotels, and hospitals. Featuring two 3x3 MIMO radios that can support up to 450 and 1300 Mbps data rates in the 2.4 and 5 GHz bands respectively, the EAP330 is ideal for providing wire-like performance that is crucial for businesses. Traffic prioritization ensures that bandwidth hungry applications such as 4K videos can stream perfectly, while enforcing strict quality of service requirements for VoIP and mission critical services.

Given the overcrowding of the 2.4 GHz band by legacy Wi-Fi devices, more and more devices and networks are migrating to the 5 GHz band for increased performance. The wider channels and additional spatial streams offered by 802.11ac allows the EAP330 to meet high capacity demands while providing three-fold performance over 802.11n networks. However, due to the significant proportion of 2.4 GHz-only clients in use today, the EAP330's ability to service clients in both the 2.4 GHz and 5 GHz bands becomes essential for organizations that wish to improve overall wireless experience without sacrificing legacy support.

The EAP330'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 EAP330 can be placed on regular flat surfaces such as tabletops, or mounted on walls and other vertical surfaces. Furthermore, the six 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, and a unique downlink PoE LAN port for power supply to other IP-based devices, the EAP330 offers unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the EAP330 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 EAP330 becomes the ideal choice for all types of businesses, from small coffee shops to large corporations.

# **HIGHLIGHTS**

- Concurrent dual-band 2.4 & 5 GHz
- 802.11ac 3x3 MIMO supporting up to 1.3 Gbps data rate
- Wall mountable IP50 dustproof metal housing
- 802.3at Power over Ethernet (PoE) & 802.3af downlink 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\*1
- Rogue AP detection & Load balancing\*1
- Fast Layer 2/Layer 3 roaming\*1
- \*1: When used in conjunction with 4ipnet WHG Controller



#### **FEATURES**

#### Very High Throughput

The demand for 802.11ac is growing tremendously as enterprises and organizations seek to increase bandwidth and alleviate network congestion. With wider channel widths, an increased number of supported spatial streams, and more advanced modulation techniques, the 11ac-enabled EAP330 provides data rates significantly higher than that of 802.11n access points. Furthermore, each device can transmit the same amount of data in a much shorter period of time, improving overall network capacity and performance while ensuring smooth operation of sensitive network applications.

## Ready for High Density Environments

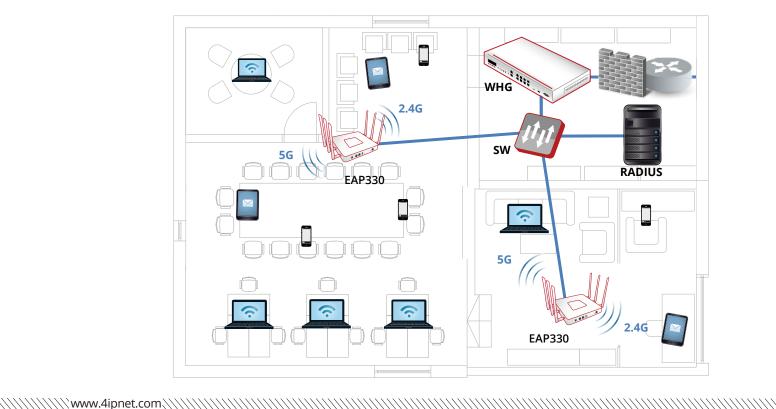
With the ability to operate in the 2.4 and 5 GHz bands, the EAP330 can distribute clients on separate channels, thereby mitigating channel congestion. The EAP330 also implements advanced AP features such as airtime fairness, multicast to unicast conversion and optimal client filtering that improve wireless 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.

## Maximum Deployment Flexibility

Supporting 802.3at PoE, the EAP330 can be placed in locations where traditional power sources are unavailable. In addition, the downlink PoE LAN port allows it to supply power to another AP or IP-based device, eliminating the need for additional cabling and increasing deployment flexibility.

## Enterprise-grade, Standards-based Security

With 802.1X authentication and a backend RADIUS server, the EAP330 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.





# **SPECIFICATIONS**

PHYSICAL		
Power	DC Input: 12V / 2.5A or 12V / 4A (Power adapter optional)	
	PoE: 802.3at compliant (PoE injector optional)	
Dimensions	• 21.0 cm (L) x 20.0 cm (W) x 3.4 cm (H)	
Weight	+ 0.59 kg (1.3 lbs)	
	Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE	
	<ul> <li>LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45</li> </ul>	
Interfaces	802.3af downlink PoE on LAN port	
	* USB: 1 x USB 2.0*4	
	+ Console: 1 x RJ-45	
LED Indicator	Power / Status / WES	
Buttons	Reset / Restart	
	+ 2 x WES*1	
	Operating Temperature: 0°C (32°F) to 50°C (122°F)	
Environmental Conditions	Operating Humidity: 0% to 90% non-condensing	
	IP50 Rating	
Power Consumption	+ 22W max.	
Antonna	Type: 6x External dual-band omnidirectional (included)	
Antenna	Gain: 5 dBi (2.4 GHz), 5.5 dBi (5 GHz)	
Mounting	Wall mount (Mounting kit included)	
Kensington Lock	-	
WI-FI		
	+ 802.11 a/b/g/n/ac	
Standards	Concurrent dual-band 2.4 & 5 GHz	
	+ 802.11b: 1, 2, 5.5, 11 Mbps	
	* 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps	
	+ 802.11n: 6.5 – 216.7 Mbps (20 MHz)	
Supported Data Rates	+ 802.11n: 13.5 – 450 Mbps (40 MHz)	
The state of the s	+ 802.11ac: 6.5 – 260.1 Mbps (20 MHz)	
	+ 802.11ac: 13.5 – 600 Mbps (40 MHz)	
	+ 802.11ac: 29.3 – 1300 Mbps (80 MHz)	
Radio Chains	+ 3 x 3	
Spatial Streams	+ 3	
spacial screams	2.4 GHz: Up to 28 dBm* <sup>2</sup>	
Output Power	5 GHz: Up to 28 dBm* <sup>2</sup>	
Channelization	20 MHz	
	+ 40 MHz	
	• 80 MHz	
	+ 2,412 – 2,472 GHz	
Frequency Band	• 5.180 – 5.825 GHz	
	2.4 GHz: 1 – 11 (US), 1 – 13 (Europe), 1 – 13 (Japan)	
Operating Channels	+ 5 GHz* <sup>3</sup> : 36 – 165 (US), 36 – 140 (Europe), 36 – 140 (Japan)	
ESSIDs	Up to 16 per radio (32 total)	
Certifications		
	FCC (United States), CE (Europe)	
PERFORMANCE		
Physical Data Rate	+ Up to 450 Mbps (2.4 GHz)	
	+ Up to 1.3 Gbps (5 GHz)	
Concurrent Users	<ul> <li>Up to 384 (256 on 2.4 GHz, 128 on 5 GHz)</li> </ul>	

<sup>\*1:</sup> 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

<sup>\*4:</sup> Reserved for future use



QUALITY OF SERVICE	
Wireless QoS (802.11e/WMM)	
DSCP (802.1p)	
Airtime Fairness	
Band Steering	
Multicast to Unicast Conversion	
Optimal Client Filtering	

MANAGEMENT	
Deployment	<ul> <li>Standalone</li> <li>Tunneled management by 4ipnet WHG Controller</li> <li>IPv4 &amp; IPv6 compatible</li> </ul>
Configuration	<ul><li>Web User Interface (HTTP/ HTTPS)</li><li>SNMP v1, v2c, v3</li></ul>

SECURITY	
	* WEP
	<ul> <li>WPA/WPA2 Mixed</li> </ul>
Wireless Security	<ul> <li>WPA2-Personal</li> </ul>
	<ul> <li>WPA2-Enterprise (802.1X)</li> </ul>
	TKIP and AES Encryption
VLAN Tagging (802.1Q)	

Station Isolation
DHCP Snooping
Layer-2 Firewall

MOBILITY/ROAMING	
802.1X Preauthentication	
Layer 2/Layer 3 Fast Roaming	

VE SENSITIVITY	_	
Operating Mode	Data Rate	Receive Sensitivity (dBm)
002.116	1 Mbps	-93
802.11b	11 Mbps	-90
002.44-	6 Mbps	-90
802.11a	54 Mbps	-72
002.11-	6 Mbps	-90
802.11g	54 Mbps	-74
	MCS0	-86
002 44 (UT20)	MCS7	-69
802.11n (HT20)	MCS8	-84
	MCS15	-65
	MCS0	-83
002.44 (UT40)	MCS7	-66
802.11n (HT40)	MCS8	-81
	MCS15	-62
902 11ac (//IIT20)	MCS0	-90
802.11ac (VHT20)	MCS8	-67
802.11ac (VHT40)	MCS0	-87
002.11ac (V11140)	MCS9	-61
802.11ac (VHT80)	MCS0	-84
002.11ac (VI1100)	MCS9	-58

