EAP210
INDOOR ACCESS POINT

INTRODUCTION

4ipnet EAP210 is an enterprise-grade, dual-band 802.11n indoor access point, designed specifically for environments such as offices, universities, hotels, and hospitals. Featuring a 2x2 MIMO radio that can support up to 300 Mbps data rate, the EAP210 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 QoS requirements for VoIP and mission critical services.

With the rising demand for uninterrupted streaming, more and more devices are supporting 5 GHz operation to utilize the wider available bandwidth. Shifting clients to the 5 GHz band alleviates congestion on existing 2.4 GHz networks, improving the overall wireless experience. Nevertheless, given the large proportion of devices today that are 2.4 GHz-only, supporting 2.4 GHz operation is still a necessity. For organizations that wish to optimize the number of physical APs while maintaining the flexibility of servicing either 2.4 or 5 GHz clients, the EAP210 offers the best of both worlds.

The EAP210'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 EAP210 can be placed on regular flat surfaces or mounted on walls. The two 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 EAP210 offers an unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the EAP210 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 EAP210 becomes the ideal choice for all types of businesses, from small coffee shops to large corporations.

HIGHLIGHTS

- Selectable dual-band 2.4/5 GHz
- 802.11n 2x2 MIMO supporting up to 300 Mbps
- 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 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

Maximum Deployment Flexibility

Supporting 802.3af PoE, the EAP210 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 EAP210 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.

Reduced Interference & Improved Performance

By supporting Wi-Fi operation in the 5 GHz frequency band, neighboring access points can operate on non-overlapping 40 MHz channels, providing double the throughput of 20 MHz channels without inducing adjacent channel interference. Furthermore, 5 GHz networks offer more stable performance, as they are less susceptible to interference from other devices that emit RF signals in the 2.4 GHz band, such as bluetooth devices, microwave ovens, and wireless peripherals.
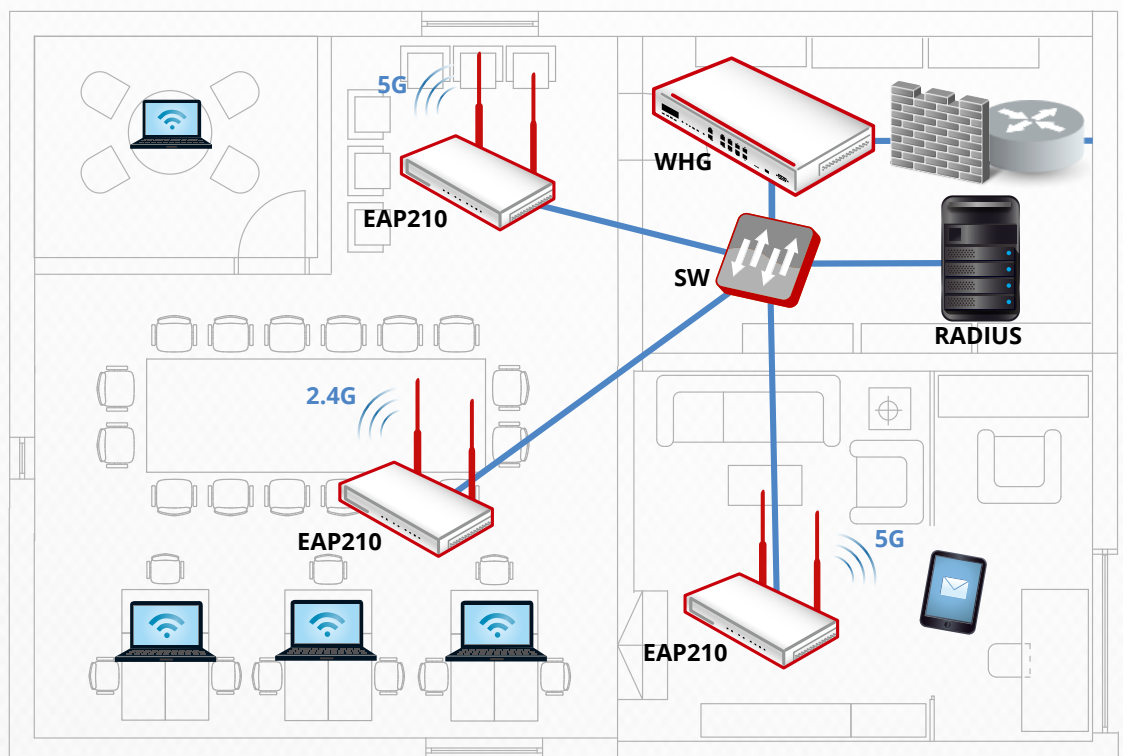
SPECIFICATIONS

PHYSICAL	
Power	◆ DC Input: 12V / 2A (Power adapter included) ◆ PoE: 802.3af compliant (PoE injector optional)
Dimensions	◆ 19.0 cm (L) x 13.3 cm (W) x 3.3 cm (H)
Weight	◆ 0.82 kg (1.81 lbs)
Interfaces	◆ Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE ◆ Console: 1 x DB9M
LED Indicators	◆ Power ◆ System Status ◆ 1 x Wireless Status ◆ 1 x WES*[1]
Buttons	◆ Restart ◆ 1 x WES*[1]
Environmental Conditions	◆ Operating Temperature: 0°C (32°F) to 50°C (122°F) ◆ Operating Humidity: 10% to 90% non-condensing ◆ IP50 Rating
Power Consumption	◆ 12W max.
Antenna	◆ Type: 2 x External dual-band omnidirectional (included) ◆ Gain: 3 dBi (2.4 GHz), 4 dBi (5 GHz)
Mounting	◆ Wall mount
Kensington Lock	

WI-FI	
Standards	◆ 802.11 a/b/g/n ◆ Selectable dual-band 2.4/5 GHz
Supported Data Rates	◆ 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 – 144.4 Mbps (20 MHz), 13.5 – 300 Mbps (40 MHz)
Radio Chains	◆ 2 x 2
Spatial Streams	◆ 2
Output Power	◆ 2.4 GHz: Up to 27 dBm*[2] ◆ 5 GHz: Up to 23 dBm*[2]
Channelization	◆ 20 MHz ◆ 40 MHz
Frequency Band	◆ 2.412 – 2.484 GHz ◆ 5.180 – 5.825 GHz
Operating Channels	◆ 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	◆ Up to 16
Certifications	◆ FCC (United States), CE (Europe) ◆ RoHS compliant

PERFORMANCE	
Physical Data Rate	◆ Up to 300 Mbps
Concurrent Users	◆ Up to 256

*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	• WEP • WPA/WPA2 Mixed • WPA2-Personal • WPA2-Enterprise (802.1X) • TKIP and AES Encryption

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

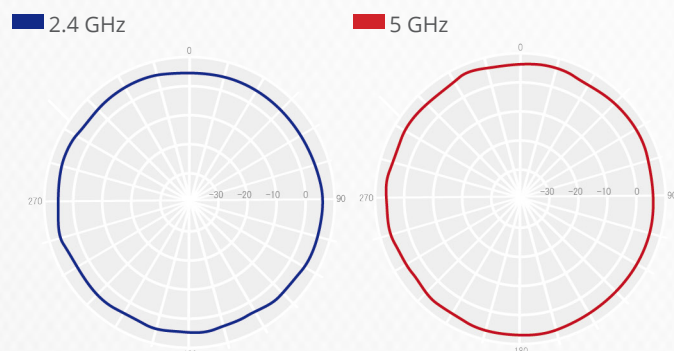| Deployment	• Standalone • Tunneled management by 4ipnet WHG Controller • IPv4 & IPv6 compatible
Configuration	• Web User Interface (HTTP/HTTPS) • SNMP v1, v2c, v3

RECEIVE SENSITIVITY

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-93
	11 Mbps	-87
802.11a	6 Mbps	-89
	54 Mbps	-70
802.11g	6 Mbps	-91
	54 Mbps	-72
802.11n (HT20)	MCS0	-95
	MCS7	-82
	MCS8	-95
	MCS15	-82
802.11n (HT40)	MCS0	-95
	MCS7	-78
	MCS8	-95
	MCS15	-78

SIGNAL COVERAGE PATTERN

H-plane (Horizontal)   2.4 GHz   5 GHz

E-plane (Vertical)   2.4 GHz   5 GHz