EAP760
INDOOR ACCESS POINT

INTRODUCTION

4ipnet EAP760 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 EAP760 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 EAP760 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 EAP760'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 EAP760's exterior is composed of pearl-white plastic, which can be easily installed on walls using its magnetic mounting kit. Furthermore, the three 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 EAP760 offers unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the EAP760 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 EAP760 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 plastic 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 EAP760 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.

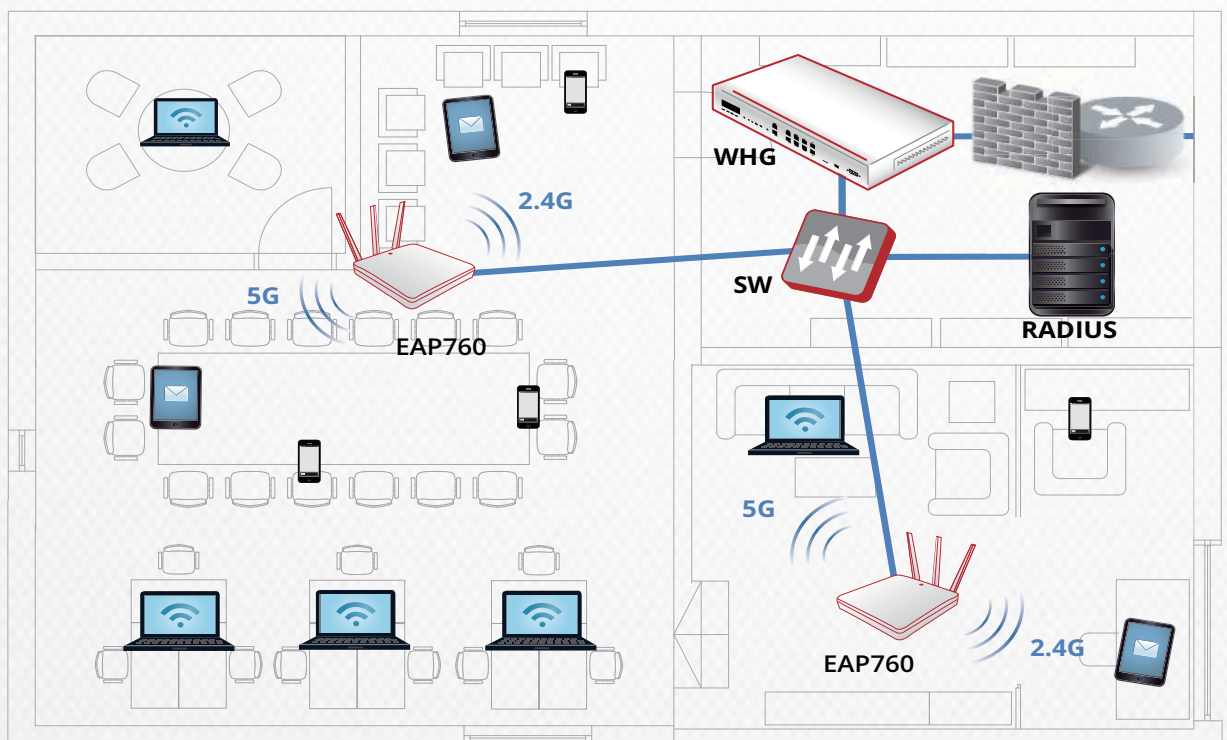### Ready for High Density Environments

With the ability to operate in the 2.4 and 5 GHz bands, the EAP760 can distribute clients on separate channels, thereby mitigating channel congestion. The EAP760 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 EAP760 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 EAP760 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	◆ 18.3 cm (L) x 18.3 cm (W) x 3.6 cm (H)
Weight	◆ 0.52 kg (1.15 lbs)
Interfaces	◆ Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE ◆ LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 ◆ 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]
Environmental Conditions	◆ Operating Temperature: 0°C (32°F) to 50°C (122°F) ◆ Operating Humidity: 0% to 90% non-condensing
Power Consumption	◆ 22W max.
Antenna	◆ Type: 3 x External dual-band omnidirectional (included) ◆ Gain: 2 dBi (2.4 GHz), 2 dBi (5 GHz)
Mounting	◆ Wall mount (Mounting panel included)

WI-FI

Standards	◆ 802.11 a/b/g/n/ac ◆ Concurrent dual-band 2.4/5 GHz
Supported Data Rates	◆ 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) ◆ 802.11n: 13.5 – 450 Mbps (40 MHz) ◆ 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
Output Power	◆ 2.4 GHz: Up to 27 dBm*[2] ◆ 5 GHz: Up to 27 dBm*[2]
Channelization	◆ 20 MHz ◆ 40 MHz ◆ 80 MHz
Frequency Band	◆ 2.412 – 2.472 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 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	◆ Up to 384 (256 on 2.4 GHz, 128 on 5 GHz)

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

SECURITY

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

VLAN Tagging (802.1Q)

Station Isolation

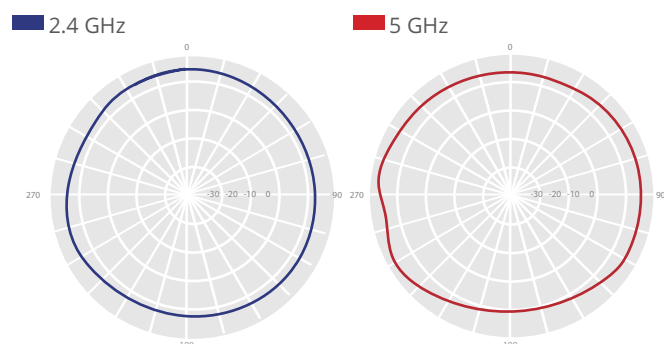**DHCP Snooping**

Layer-2 Firewall

MOBILITY/ROAMING

802.1X Preauthentication

Layer 2/Layer 3 Fast Roaming

RECEIVE SENSITIVITY

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-93
	11 Mbps	-90
802.11a	6 Mbps	-90
	54 Mbps	-72
802.11g	6 Mbps	-90
	54 Mbps	-74
802.11n (HT20)	MCS0	-86
	MCS7	-69
	MCS8	-84
	MCS15	-65
802.11n (HT40)	MCS0	-83
	MCS7	-66
	MCS8	-81
	MCS15	-62
802.11ac (VHT20)	MCS0	-90
	MCS8	-67
802.11ac (VHT40)	MCS0	-87
	MCS9	-61
802.11ac (VHT80)	MCS0	-84
	MCS9	-58

SIGNAL COVERAGE PATTERN

H-plane (Horizontal)

■ 2.4 GHz   ■ 5 GHz

E-plane (Vertical)

■ 2.4 GHz   ■ 5 GHz