4ipnet®

datasheet

EAP717
INDOOR ACCESS POINT

INTRODUCTION

4ipnet EAP717 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 EAP717 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 EAP717 offers the best of both worlds.

The EAP717's exterior is a UL94-5VA rated, pearl white plastic housing that is elegant and flexible to deploy. The simplistic yet classy design is perfect for blending into everyday working or living environments. Furthermore, the camouflaged appearance of the EAP717 is accentuated by its two dual-band internal antennas, which serve to amplify wireless coverage. With a patented mounting mechanism, the EAP717 can be easily mounted on walls or ceilings. Combined with PoE (Power over Ethernet) support that eliminates the need for traditional power sources, the EAP717 offers an unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the EAP717 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 EAP717 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
- Ceiling mountable UL94-5VA fire-retardant plastic housing
- 802.3af Power over Ethernet (PoE) compatible
- Standalone or centrally managed by 4ipnet WHG Controller
- Integrated enterprise-grade, standards-based security
- Up to 8 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

Centralized Point of Connectivity

In many indoor environments there is often only one source of cabling, with RJ-45 Ethernet and RJ-11 telephone outlets being collocated next to each other to prevent messy wiring and to preserve the interior decor. By supporting RJ-11 pass-through, the EAP717 makes it easy to connect to RJ-45 cabling and provide wireless connectivity while not obstructing existing telephone lines. Furthermore, with two additional Ethernet ports, IP devices such as VoIP phones or IPTVs can be directly connected to the EAP717 without an additional switch. In hotel rooms, office buildings, and other indoor environments, the EAP717 can greatly reduce deployment complexity by acting as a central point of connectivity for both wireless clients and wired peripheral devices.

Maximum Deployment Flexibility

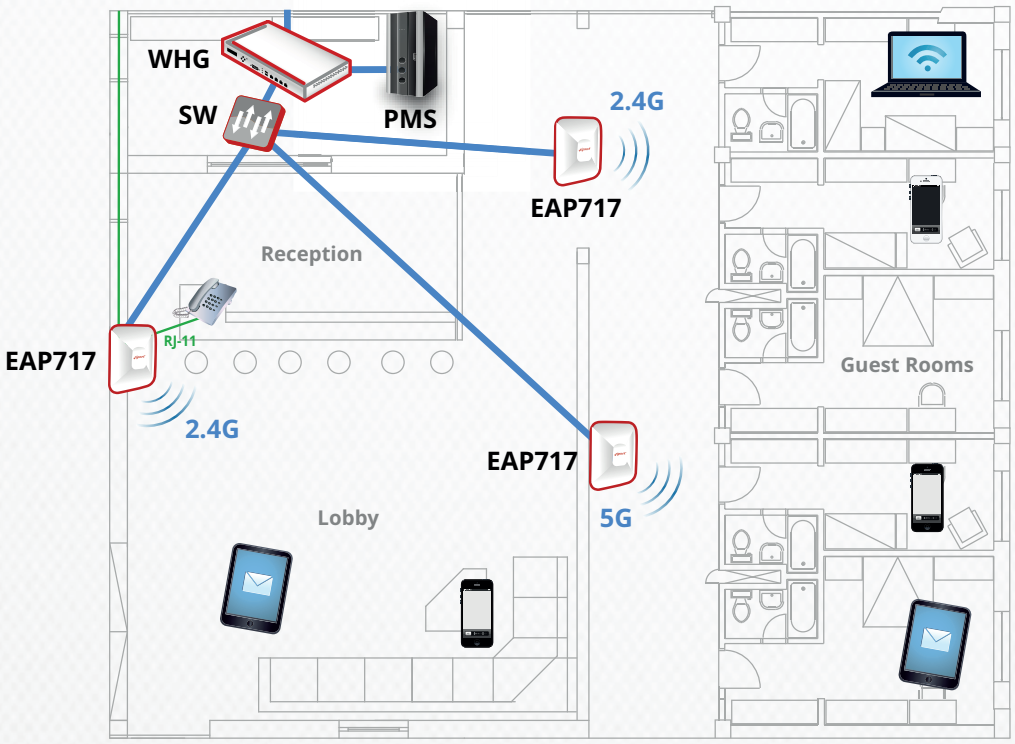
Supporting 802.3af PoE, the EAP717 can be placed in locations where traditional power sources are unavailable, such as high ceilings and walls. In addition, its plenum-rated materials allows it to be placed in ceiling areas safely without having to worry about being a fire hazard, further increasing deployment flexibility.

Enterprise-grade, Standards-based Security

With 802.1X authentication and a backend RADIUS server, the EAP717 can prevent unauthorized users from accessing the corporate intranet. Furthermore, 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.

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 wireless devices that emit RF signals in the 2.4 GHz band.



SPECIFICATIONS

PHYSICAL	
Power	• DC Input: 5V / 2A (Power adapter optional) • PoE: 802.3af compliant (PoE injector optional)
Dimensions	• 14.0 cm (L) x 14.0 cm (W) x 3.8 cm (H)
Weight	• 0.45 kg (1.00 lbs)
Interfaces	• Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE • LAN: 2 x 10/100Base-T Ethernet, Auto MDIX, RJ-45 • Console: 1 x RJ-45 • Phone: 1 x RJ-11 pass-through
LED Indicators	• Power • System Status • 1 x Wireless Status • 1 x WES[1]
Buttons	• Reset / Restart • 1 x WES[1]
Environmental Conditions	• Operating Temperature: 0°C (32°F) to 70°C (158°F) • Operating Humidity: 10% to 80% non-condensing • UL94-5VA Rating
Power Consumption	• 7W max.
Antenna	• Type: 2 x Built-in dual-band PIFA • Gain: 3.5 dBi (2.4 GHz), 4.5 dBi (5 GHz)
Mounting	• Wall/ceiling mount (Mounting panel included)
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 18 dBm[2] • 5 GHz: Up to 17 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 8
Certifications	• FCC (United States), CE (Europe) • RoHS compliant

PERFORMANCE	
Physical Data Rate	• Up to 300 Mbps
Concurrent Users	• Up to 128

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)

MOBILITY/ROAMING

802.1X Preauthentication
Layer 2/Layer 3 Fast Roaming

MANAGEMENT

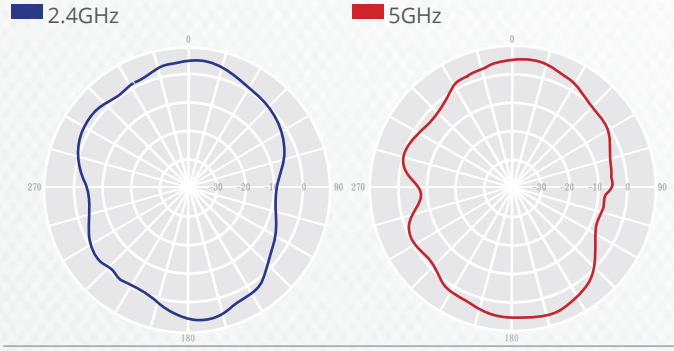
Deployment	• Standalone • Tunneled management by 4ipnet WHG Controller • IPv4 compatible
Configuration	• Web User Interface (HTTP/HTTPS) • SNMP v1, v2c

RECEIVE SENSITIVITY

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-93
	11 Mbps	-90
802.11a	6 Mbps	-92
	54 Mbps	-77
802.11g	6 Mbps	-89
	54 Mbps	-74
802.11n (HT20)	MCS0	-90
	MCS7	-73
	MCS8	-86
	MCS15	-68
802.11n (HT40)	MCS0	-90
	MCS7	-71
	MCS8	-85
	MCS15	-66

SIGNAL COVERAGE PATTERN

H-plane (Horizontal)



E-plane (Vertical)