

EAP705

INDOOR ACCESS POINT



INTRODUCTION

4ipnet EAP705 is an enterprise-grade, concurrent dual-band 802.11ac indoor access point, designed specifically to be placed over existing wall outlets of office buildings, dormitories, and hotel rooms. Fitting perfectly onto outlet boxes, the EAP705 replaces existing Ethernet outlets by adding Wi-Fi capability without sacrificing wired connectivity. Furthermore, the compact size extremely affordable price range makes the EAP705 ideal for per-room installation, allowing network administrators to utilize small coverage cells for maximum wireless performance.

Featuring two 2x2 MIMO radios that can support up to 300 and 867 Mbps data rates in the 2.4 and 5 GHz bands respectively, the EAP705 is ideal for providing wire-like performance. Traffic prioritization ensures that bandwidth hungry applications such as HD videos can stream perfectly, while strict QoS requirements can be enforced for VoIP and mission critical services. The EAP705's layer 2 firewall can also prevent unnecessary network packets from entering the wireless medium, keeping the medium free for data transmission and optimizing overall network throughput.

The EAP705's pearl white plastic housing 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 EAP705 is accentuated by its built-in antenna, which serves to amplify wireless coverage. With a mounting platform compatible with both US and EU standard outlet boxes, the EAP705 can be easily placed on walls. Combined with PoE (Power over Ethernet) support that eliminates the need for traditional power sources, the EAP705 offers an unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the EAP705 supports a wide-array of value added applications required by enterprises and organizations, such as bandwidth control, user authentication, centralized WLAN management, and much more. Along with stringent yet customizable security policies, the flexible and fully-featured EAP705 becomes the ideal choice for all types of businesses, from small coffee shops to large hotels and resorts.

HIGHLIGHTS

- Concurrent dual-band 2.4 & 5 GHz
- 802.11ac 2x2 MIMO supporting up to 867 Mbps data rate
- Wall plate mountable with plastic housing
- 802.3af Power over Ethernet (PoE) compatible
- USB port for charging mobile devices
- Standalone or centrally managed by 4ipnet WHG Controller
- Up to 8 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

Converged Wireless & Wired Connectivity

The EAP705 can fit onto existing Ethernet wall outlet boxes, adding Wi-Fi coverage without obstructing previous Ethernet ports. It uniquely combines wireless and wired connectivity by providing two additional wired Ethernet ports for supporting an ever increasing assortment of IP-based devices, such as VoIP phones, network printers, or IPTVs. Not only do the ports provide wired access, but they also reduce the cost of deployment and maintenance by eliminating the need for running additional Ethernet cabling.

Very High Throughput

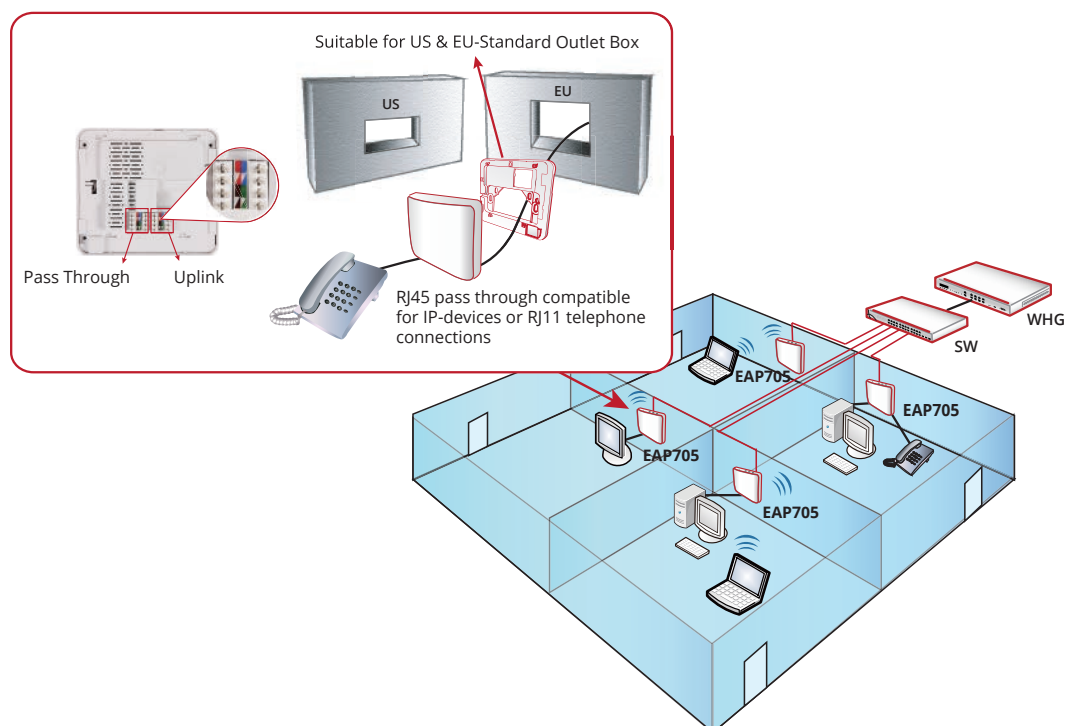
The demand for 802.11ac is growing tremendously as enterprises and organizations seek to increase bandwidth and alleviate network congestion. With wider channel widths and more advanced modulation techniques, the 11ac-enabled EAP705 provides data rates significantly higher than that of 802.11n access 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.

Maximum Deployment Flexibility

Supporting 802.3af PoE, the EAP705 can be deployed without traditional power cables and outlets, reducing the total cost of ownership for an organization's wireless network infrastructure. When RJ-45 connectors are not available or inconvenient, Ethernet cables can be directly connected to the EAP705 through its alternate 110 punch-down block. Moreover, the EAP705's RJ-45 pass-through port provides additional connectivity for IP-based devices, further enhancing deployment flexibility.

Enterprise-grade, Standards-based Security

With 802.1X authentication and a backend RADIUS server, the EAP705 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.



SPECIFICATIONS

PHYSICAL

Power	- DC Input: 12V / 1A (Power adapter optional) - PoE: 802.3af compliant (PoE injector optional)
Dimensions	10.7 cm (L) x 12.1 cm (W) x 2.1 cm (H)
Weight	120 g (0.26 lbs)
Interfaces	- Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE - Alternate Uplink*1: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, 110 Punch-down block with 802.3af PoE - LAN: 2 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 - Bypass: 1 x 110 Punch-down block (back) with 1 x RJ-45 (side) - USB: USB 2.0 Charging Port x 1
LED Indicators	- Power 1 x Uplink Status 1 x Wireless Status 1 x WES*2
Buttons	- Reset / Restart 1 x WES*2
Environmental Conditions	- Operating Temperature: 0°C (32°F) to 45°C (113°F) - Operating Humidity: 0% to 90% non-condensing
Power Consumption	12W max.
Antenna	- Type: 4 x Built-in (2 x 2.4 GHz, 2 x 5 GHz) - Gain: 2 dBi (2.4 GHz), 2 dBi (5 GHz)
Mounting	Wall plate (Mounting bracket included)

Tamperproof Mounting Kit Lock

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 – 144 Mbps (20 MHz) 802.11n: 13.5 – 300 Mbps (40 MHz) 802.11ac: 6.5 – 173.4 Mbps (20 MHz) 802.11ac: 13.5 – 400 Mbps (40 MHz) 802.11ac: 29.3 – 866.6 Mbps (80 MHz)
Radio Chains	2 x 2
Spatial Streams	2
Output Power	2.4 GHz: Up to 19 dBm*3 5 GHz: Up to 21 dBm*3
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*4: 36 – 165 (US), 36 – 140 (Europe), 36 – 140 (Japan)
ESSIDs	Up to 8 per radio (16 total)

PERFORMANCE

Physical Data Rate	- Up to 300 Mbps (2.4 GHz) - Up to 867 Mbps (5 GHz)
Concurrent Users	Up to 220 (110 on 2.4 GHz, 110 on 5 GHz)

*1: The uplink and alternate uplink ports can not be used simultaneously

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

*3: Maximum power is limited by local regulatory requirements

*4: Some channels are restricted by local regulatory requirements

QUALITY OF SERVICE

Wireless QoS (802.11e/WMM)

DSCP (802.1p)

Multicast to Unicast Conversion

Optimal Client Filtering

MANAGEMENT

Deployment

- Standalone
- Tunneled management by 4ipnet WHG Controller
- IPv4 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

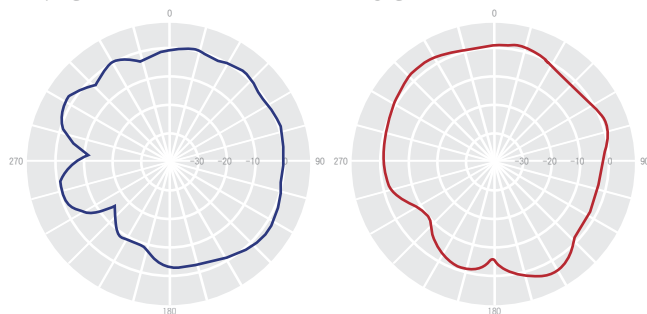
Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-92
	11 Mbps	-87
802.11a	6 Mbps	-89
	54 Mbps	-71
802.11g	6 Mbps	-92
	54 Mbps	-75
802.11n (HT20)	MCS0	-91
	MCS7	-73
	MCS8	-90
	MCS15	-71
802.11n (HT40)	MCS0	-88
	MCS7	-69
	MCS8	-87
	MCS15	-68
802.11ac (VHT20)	MCS0	-88
	MCS8	-64
802.11ac (VHT40)	MCS0	-86
	MCS9	-59
802.11ac (VHT80)	MCS0	-85
	MCS9	-69

SIGNAL COVERAGE PATTERN

H-plane (Horizontal)

■ 2.4 GHz

■ 5 GHz



E-plane (Vertical)

■ 2.4 GHz

■ 5 GHz

