

EAP701

INDOOR ACCESS POINT



INTRODUCTION

4ipnet EAP701 is an enterprise-grade, 2.4 GHz 802.11n indoor access point, designed specifically to be placed in the wall outlet boxes of office buildings, dormitories, and hotel rooms. Fitting perfectly into outlet boxes, the EAP701 replaces existing Ethernet outlets by adding Wi-Fi capability without sacrificing wired connectivity. Furthermore, the compact size extremely affordable price range makes the EAP701 ideal for per-room installation, allowing network administrators to utilize small coverage cells for maximum wireless performance.

Featuring a 2x2 MIMO radio that can support up to 300 Mbps data rate, the EAP701 is ideal for providing wire-like performance in the 2.4 GHz band. 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 EAP701'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 EAP701'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 EAP701 is accentuated by its built-in chip antenna, which serves to amplify wireless coverage. With multiple exchangeable mounting platforms, the EAP701 can be easily placed in wall outlet boxes or mounted on vertical surfaces such as walls. Combined with PoE (Power over Ethernet) support that eliminates the need for traditional power sources, the EAP701 offers an unparalleled deployment flexibility.

When used with the 4ipnet WHG Controller, the EAP701 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 EAP701 becomes the ideal choice for all types of businesses, from small coffee shops to large hotels and resorts.

HIGHLIGHTS

- Single radio 2.4 GHz
- 802.11n 2x2 MIMO supporting up to 300 Mbps
- In-wall or wall 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
- Fast Layer 2/Layer 3 roaming*1

*1: When used in conjunction with 4ipnet WHG Controller

FEATURES

Converged Wireless & Wired Connectivity

The EAP701 fits perfectly into 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.

Smaller Coverage Cells for Optimal Performance

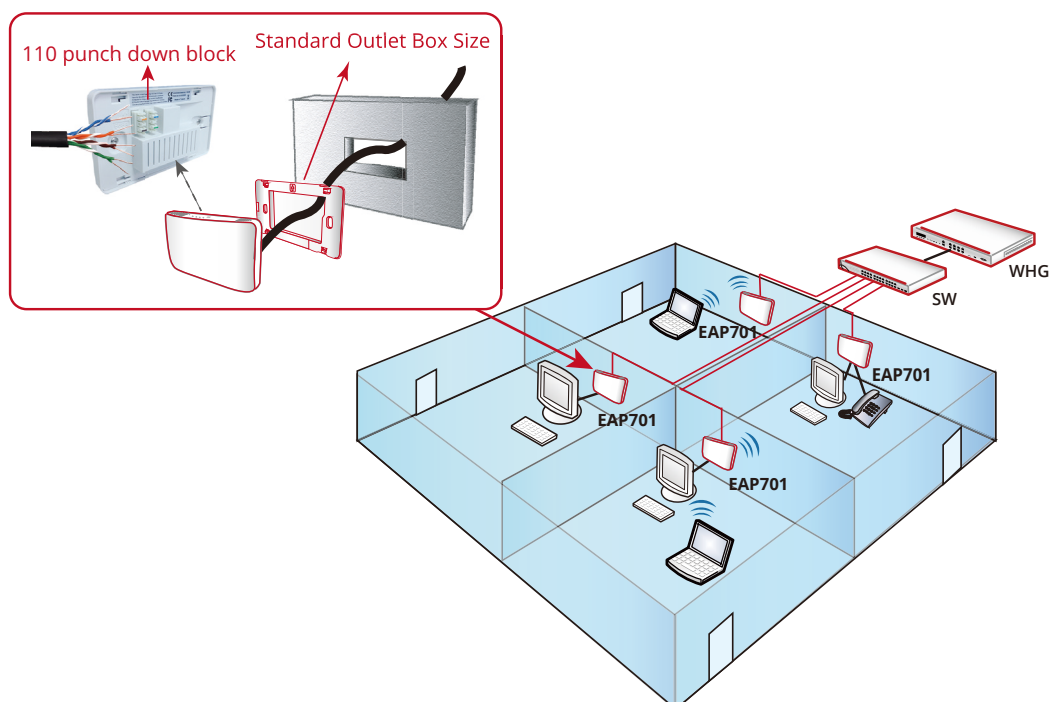
The competitive pricing of the EAP701 allows it to be deployed on a per-room basis in environments such as hotels and enterprises. From the wireless performance perspective, densely deployed access points each with small coverage cells increases overall network throughput, as smaller cells mean fewer devices contending for airtime in the same frequency band. Furthermore, the chance of devices being far away from access points and having poor connectivity is reduced. In other words, high power access points with large coverage cells do not necessarily mean better network performance in indoor environments.

Maximum Deployment Flexibility

Supporting 802.3af PoE, the EAP701 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 EAP701 through its alternate 110 punch-down block. In addition, the EAP701's plenum-rated materials allow it to be placed in walls 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 EAP701 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	<ul style="list-style-type: none"> DC Input: 5V / 2A (Power adapter optional) PoE: 802.3af compliant (PoE injector optional)
Dimensions	<ul style="list-style-type: none"> 12.0 cm (L) x 7.0 cm (W) x 2.6 cm (H)
Weight	<ul style="list-style-type: none"> 99 g (0.22 lbs)
Interfaces	<ul style="list-style-type: none"> 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 10/100Base-T Ethernet, Auto MDIX, RJ-45
LED Indicators	<ul style="list-style-type: none"> Power 1 x Uplink Status 1 x Wireless Status 1 x WES*2
Buttons	<ul style="list-style-type: none"> Reset / Restart 1 x WES*2
Environmental Conditions	<ul style="list-style-type: none"> Operating Temperature: 0°C (32°F) to 45°C (113°F) Operating Humidity: 5% to 95% non-condensing UL94-5VA Rating
Power Consumption	<ul style="list-style-type: none"> 7W max.
Antenna	<ul style="list-style-type: none"> Type: 2 x Built-in chip Gain: 3 dBi (2.4 GHz)
Mounting	<ul style="list-style-type: none"> In-wall (Mounting plate included) Wall mount (Mounting bracket included)
Tamperproof Mounting Kit Fastener	

WI-FI	
Standards	<ul style="list-style-type: none"> 802.11b/g/n Single-band 2.4 GHz
Supported Data Rates	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 2 x 2
Spatial Streams	<ul style="list-style-type: none"> 2
Output Power	<ul style="list-style-type: none"> 2.4 GHz: Up to 15 dBm*3
Channelization	<ul style="list-style-type: none"> 20 MHz 40 MHz
Frequency Band	<ul style="list-style-type: none"> 2.412 – 2.472 GHz
Operating Channels	<ul style="list-style-type: none"> 2.4 GHz: 1 – 11 (US), 1 – 13 (Europe), 1 – 13 (Japan)
ESSIDs	<ul style="list-style-type: none"> Up to 8
Certifications	<ul style="list-style-type: none"> FCC (United States), CE (Europe) RoHS compliant

MANAGEMENT	
Deployment	<ul style="list-style-type: none"> Standalone Tunneled management by 4ipnet WHG Controller IPv4 compatible
Configuration	<ul style="list-style-type: none"> Web User Interface (HTTP/HTTPS) SNMP v1, v2c

*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

PERFORMANCE

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

SECURITY

Wireless Security	<ul style="list-style-type: none"> • WEP • WPA/WPA2 Mixed • WPA2-Personal • WPA2-Enterprise (802.1X) • TKIP and AES Encryption
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VLAN Tagging (802.1Q)

Station Isolation

DHCP Snooping

Layer 2 Firewall

QUALITY OF SERVICE

Wireless QoS (802.11e/WMM)

MOBILITY/ROAMING

802.1X Preauthentication

Layer 2/Layer 3 Fast Roaming

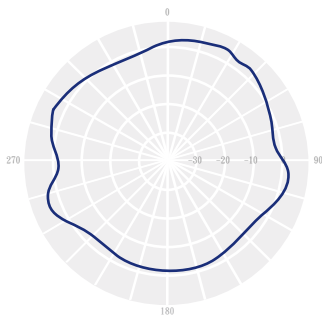
RECEIVE SENSITIVITY

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-94
	11 Mbps	-88
802.11g	6 Mbps	-88
	54 Mbps	-72
802.11n (HT20)	MCS0	-87
	MCS7	-70
	MCS8	-82
	MCS15	-65
802.11n (HT40)	MCS0	-85
	MCS7	-68
	MCS8	-81
	MCS15	-63

SIGNAL COVERAGE PATTERN

H-plane (Horizontal)

■ 2.4 GHz



E-plane (Vertical)

■ 2.4 GHz

