



The **4ipnet EAP747 Wall Jack Access Point** is an on-the-wall as well as a ceiling-mounted Wi-Fi IEEE 802.11a/b/g/n access point, designed to **blend into a working or a living environment** practically and elegantly with its simplistic yet chic design.



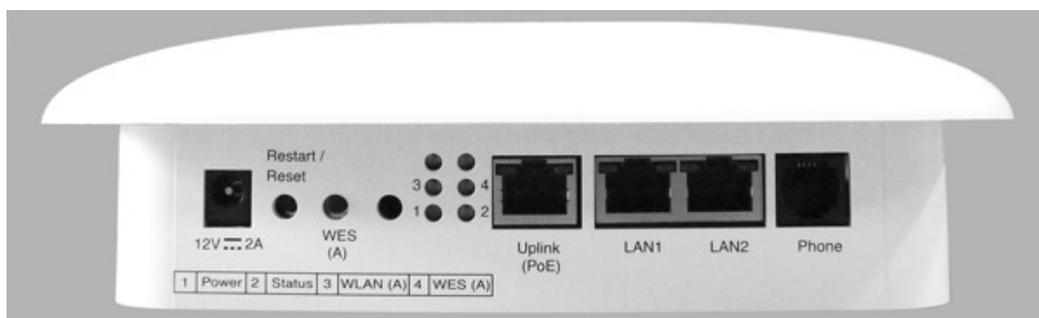
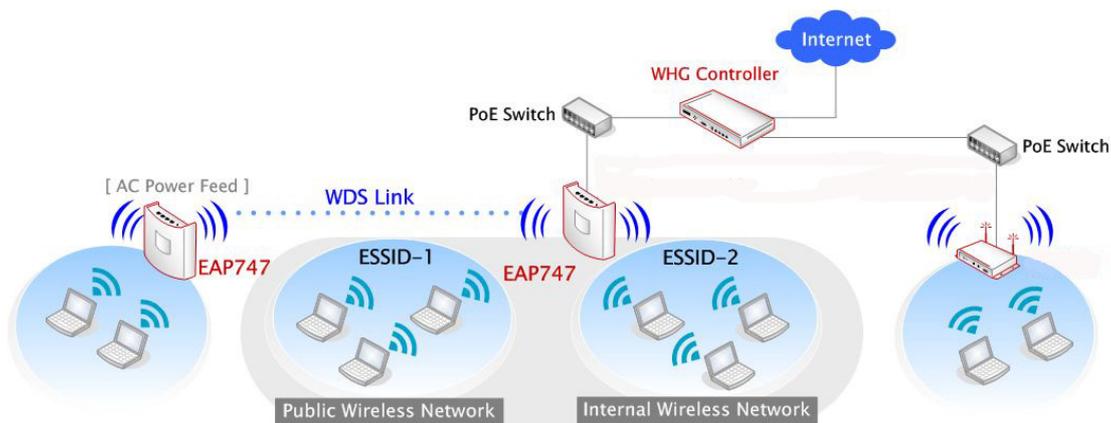
EAP747 supports Tunnel-based AP Management, and comes with all standards demanded by enterprise applications, including business-grade security (802.1X, WPA and WPA2), and multiple ESSIDs with VLAN tags to separate the traffics of different departments. Beyond common expectations, EAP747's real surprise is the patent-pending **4ipWES (Press-n-Connect)** technology. Bridging multiple EAP747s is at the touch of a button

with **4ipWES**, which enables a quick and automatic **WDS Easy Setup** by pressing the WES button on EAP747. Extending wireless network coverage is a breeze.

EAP747 offers a valuable feature "Channel Analysis" where an IT operator can effortlessly carry out a real-time wireless environment analysis before deploying an EAP747. With just some clicks of the buttons, device activity, possible wireless interference, as well as channel density are clearly displayed. Admin is thus able to bear the result in mind, picking up the right channel for his/her access point. In this way, AP deployment becomes rather time-efficient.

Supporting up to 300Mbps wireless speed with its 802.11n 2x2 MIMO solution, and all gigabit Ethernet interface, EAP747 is perfect for bandwidth-hungry applications such as video surveillance, multi-media streaming over wireless. The QoS - WMM ensures the quality of voice/video when multiple applications are transmitting media and data over the air simultaneously.

EAP747's higher throughput, security and durability make it a perfect choice of wireless connectivity for your business.



## FEATURES & BENEFITS

### Built-in 2x2 MIMO Dual-band patch antenna & 802.11a/b/g/n Wireless Standard

- Built-in dual band patch antennas allowing customer to select 2.4GHz or 5GHz band for operation depending on customer deployment needs for specific environment
- Equipped with a high-speed IEEE 802.11a/b/g/n wireless network interface, transmission rates up to 300Mbps

### \*\*Channel Analysis

- Clear channel visibility into the 2.4GHz band
- Channel usage analysis (2.4GHz)
- Channel interference detection (2.4GHz)
- Helping admin set up an EAP747 with more suitable parameters
- Detection of external interfering sources

### IGMP Snooping

- Minimizes unnecessary multicast or broadcast messages being transmitted over the air.
- A perfect solution to wireless environments with a high density of users.
- Facilitates video and voice data streaming

### Ethernet LAN Port Mapping

- To tag Ethernet LAN traffic with a various VLAN IDs so that the traffic can be directed to different virtual zones (Service Zones).
- Reduces the number of layer 2 switches.

### WDS for Extending Wireless Coverage

- Creates structural WDS (bridge) links connecting to other WDS-capable APs
- WDS links can serve as EAP747's LAN connections to replace Ethernet ports, or simply bridge the wired side and the wireless side as a single network

### Supporting QoS & 802.11e WMM

- Supports IEEE 802.1p/IEEE 802.1Q Quality of Service (QoS) tagging features
- Supports IEEE 802.11e Wireless Multi-Media to fulfill bandwidth thirsty triple-play (voice, audio and video) applications

### Business-class WLAN Security & Client Authentications

- Advanced security options: 64/128/152 bits WEP, WPA/WPA2 with IEEE 802.1X or PSK (Pre-Shared Key)
- Wireless LAN segmentation, Disable SSID Broadcast and the option of station-isolation
- 4ipWES (Press-n-Connect) with push button enables quick/auto WDS link
- Ability to be configurable to filter out unauthorized wireless clients with build-in MAC-based access control list or via a back-end RADIUS server by sending an authentication request

### Multiple Virtual APs & Capability of Client Isolation

- One EAP747 can emulate up to 8 Virtual APs (VAP), each with its own ESSID; that is, one AP can have 8 ESSIDs
- Each VAP appears to clients as an independent AP and its traffic can be associated with a VLAN ID
- Supports client isolation, isolated from each other under one AP

### Gigabit Ethernet port with PoE

- The IEEE 802.3af Power over Ethernet (PoE) compliant design eliminates the need for power sockets, allows installation of this device in areas where power outlets are not readily available to improve deployment flexibility, and provides standard based compatibility with other device
- Provides 10/100/1000 Gigabit Ethernet port, matching the wire and wireless throughput

### Tunneled AP Management

- EAP747 can physically be deployed at any location with an IP network. Its WLAN can be logically incorporated into a remote 4ipnet Secure WLAN Controller that manages it through the internal network via secure tunnels
- With Tunneled AP Management, wireless clients associated to EAP747 can enjoy the network service provided by the remote 4ipnet Secure WLAN Controller

## Wireless Radio

- Wireless Interface: 1 x IEEE 802.11 a/b/g/n
- Frequency band: 2.4 GHz or 5 GHz
- Wireless architecture:
  - (1) AP mode
  - (2) WDS mode (Repeater / Bridge)
- Modulation:
  - (1) OFDM (64-QAM, 16-QAM, QPSK, BPSK)
  - (2) DSSS (CCK, DBPSK, DQPSK)
- Channels:
  - (1) USA (Channel 1~11)
  - (2) Japan (Channel 1~14)
  - (3) Europe (Channel 1~13)
- Data rate with auto fallback:
  - (1) 802.11a: 6 ~ 54 Mbps
  - (2) 802.11b: 1 ~ 11 Mbps
  - (3) 802.11g: 6 ~ 54 Mbps
  - (4) 802.11n: 6.5 ~ 300Mbps
- Transmit Power:
  - (1) 802.11a: Up to 22dBm
  - (2) 802.11b: Up to 22dBm
  - (3) 802.11g: Up to 24dBm
  - (4) 802.11an: Up to 22dBm
  - (5) 802.11gn: Up to 22dBm
- Receiver Sensitivity:
  - (1) 802.11a: -95dBm@6Mbps
  - (2) 802.11b: -95dBm@1Mbps
  - (3) 802.11g: -95dBm@6Mbps
  - (4) 802.11n: 802.11an HT20: -95dBm@MCS0
  - (5) 802.11an HT40: -91dBm@MCS0
  - (6) 802.11gn HT20: -95dBm@MCS0
  - (7) 802.11gn HT20: -90dBm@MCS0
- IGMP Snooping
- Proxy ARP

## QoS-WMM

- DiffServ/TOS
- IEEE 802.1p/COS
- IEEE 802.1Q Tag VLAN priority control
- IEEE 802.11e WMM

## Handover & Roaming

- IEEE 802.11f IAPP
- IEEE 802.11i pre-auth (PMKSA cache)

## Security

- WEP (64/128/152 bits)
- EAP-TLS + Dynamic WEP
- EAP-TLS + Dynamic WEP
- PEAP/MS-PEAP + Dynamic WEP
- WPA (PSK + TKIP)
- WPA (802.1X certification + TKIP)
- 802.11i WPA2 (PSK + CCMP/AES)
- 802.11i WPA2 (802.1X certification + CCMP/AES)
- Setting for TKIP/CCMP/AES key's refreshing period
- Hidden ESSID support
- MAC Address filtering (MAC ACL)
- MAC authentication with RADIUS servers
- Maximum number of registered RADIUS servers: 2

## System Management

- Web-based administration
- SNMP v1/v2c
- Provides Event Log
- SYSLOG information support
- Statistics
- Configuration backup and restore
- One-button-click to restore factory default setting
- Firmware upgrade
- Capable of performing RADIUS Accounting and Accounting Update

- 4ipWES (Press-n-Connect) button for WDS Easy Setup
- Support Tunneled AP Management with 4ipnet Secure WLAN Controllers
- IPv6\*
- Ethernet LAN Port Mapping (with a 4ipnet controller)
- Channel Analysis in the 2.4GHz Band

## Built-in Servers & Client Interfaces to Other Services

- DHCP client
- DNS client
- SYSLOG client
- RADIUS client
- SNMP v1/v2c client

## Wireless Signal Management

- Number of ESSIDs (Virtual APs): 8
- Number of associated clients per AP: 128
- Setting for maximum number of associated clients
- Network policy based on ESSID

## Hardware Specifications

- Uplink Port: 1 × 10/100/1000 Base-T pass-through Ethernet with IEEE 802.3af PoE
- LAN Port: 2 × 10/100/1000 Base-T Ethernet
- Phone Socket: 1 x pass-through RJ11
- Push buttons: 1 x Reset, 1 x WES
- LED Indicators: 1 x Power, 1 x Status, 1 x WLAN, 1 x WES
- Kensington Lock
- Built-in Dual band Antenna x 2
  - (1) 2dBi at 2.4GHz
  - (2) 5dBi at 5GHz

## Physical and Power

- Power adaptor
  - (1) AC Input: 100~240 VAC, 50~60 Hz
  - (2) DC Output: 12V / 2A
- Alternative Power:
  - (1) 802.3af PoE (PSE not included)
- Form factor: Ceiling Wall Mountable
- Dimensions (W x D x H): 7.2" x 7.2" x 2.4" (182 mm x 182 mm x 60 mm)
- Weight: 1.2 lbs (0.52 kg)

## Environment

- Operation Temperature: 0 ~ +70 °C (32 ~158 °F)
- Storage Temperature: -40 ~ +85 °C (-40~185 °F)
- Operation Humidity: 10% ~ 80% (Non-condensing)
- Storage Humidity: 5% ~ 90% (Non-condensing)

## Certifications

- FCC, CE
- RoHS compliant

## Package Contents

- 4ipnet EAP747 x 1
- CD-ROM (User's Manual and QIG) x 1
- Quick Installation Guide (QIG) x 1
- Ethernet Cable x 1
- Mounting Kit x 1

\* So far EAP747 only supports IPv6 for web services

\*\* Specifications subject to change without notice