

# Enterprise Access Point EAP750

(abgn))

& 4ipWES

www.4ipnet.com

Embedded with two 802.11a/b/g/n concurrent dual-band MIMO radios in white color **UL94-5VA** rating plastic housing with ceiling/wall mountable design, the high capacity and

high speed (up to 2 x 300Mbps) and durable **4ipnet EAP750 Concurrent Dual-band Enterprise Access Point** is designed for wireless connectivity in enterprise or industrial environments of all dimensions. EAP750 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, EAP750's real surprise is the patent-pending **4ipWES (Press-n-Connect)** 

technology. Bridging multiple EAP750s is at the touch of a button with **4ipWES**, which enables a quick and automatic **Wireless Easy Setup** by pressing the WES button on EAP750. Extending wireless network coverage is a breeze.

Additionally, EAP750 offers a valuable feature "Channel Analysis" where an IT operator can effortlessly carry out a real-time wireless environment analysis before deploying an EAP750. 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 2 x 300Mbps wireless speed with its 802.11n 2x2 MIMO solution, and a gigabit Ethernet interface, EAP750 is perfect for bandwidth-hungry applications such as video surveillance, multi-media streaming over wireless. With two dual band radios EAP750 is ideal for servicing high density wireless clients on 2.4GHz and 5GHz frequencies at the same time. EAP750's higher throughput, security and durability make it a perfect choice of wireless connectivity for your business



## FEATURES & BENEFITS

Concurrent Dual-band 2 x 2 MIMO Field Replaceable Antenna Compatible with 802.11a/b/g/n

- The antenna diversity design enhances the connection reliability to improve data transmission capability
- Four detachable antennas for optimal wireless coverage and field replaceable to meet customer demands for specific environment
- Equipped with dual high-speed IEEE 802.11 a/b/g/n wireless network interface, transmission rates up to 2 x 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 EAP750 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 EAP750'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 EAP750 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

Ceiling / Wall mountable White Color Housing

• Enclosed by UL94-5VA rating plastic housing in a white color ceiling/wall mountable design, durable and non-fire hazard for the environment

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**

- EAP750 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 EAP750 can enjoy the network service provided by the remote 4ipnet Secure WLAN Controller

## S P E C I F I C A T I O N S

### Wireless Radio

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- ► Wireless Interface: 2 x IEEE 802.11 a/b/g/n
- > Frequency band: 2.4 GHz and 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 802.11i pre-auth (PMKSA cache)

#### Security

- > WEP (64/128/152 bits)
- ► EAP-TLS + Dynamic WEP
- ► EAP-TTLS + 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

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► Firmware upgrade

 Capable of performing RADIUS Accounting and Accounting Update

4ipnet<sup>®</sup> EAP750

- 4ipWES (Press-n-Connect) button for Wireless 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): 16
- > Number of associated clients: 256
- > 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
- > Push buttons: 1 x Reset, 1 x WES
- ► LED Indicators: 1 x Power, 1 x Status, 2 x WLAN, 2 x WES
- Kensington Lock
- Antennas: 4 x Dual band Antennas, 2dBi at 2.4GHz and 5GHz bands
- Plastic chassis in white color complies with UL94-5VA fire retardant standard

#### **Physical and Power**

- Power adaptor (optional)
   (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"

CD-ROM (User's Manual and QIG) x 1

Detachable Dual-Band Antenna x 4

\*\* Specifications subject to change without notice

v100.120709

> Quick Installation Guide (QIG) x 1

- (182 mm x 182 mm x 60 mm)
- ➤ Weight: 1.2 lbs (0.52 kg)

#### Environment

Certifications

► FCC. CE

RoHS compliant

➤ 4ipnet EAP750 x 1

> Ethernet Cable x 1

Package Contents

- Operation Temperature: -30 ~ + 70 °C (-22~158°F)
- Storage Temperature: -40 ~ + 85 °C (-40~185 °F)
   Operation Humidity: 10% ~ 80% (Non-condensing)

► Storage Humidity: 5% ~ 90% (Non-condensing)