



## Neutron Series dual-band wireless AC1750 managed indoor Access Point

The EWS360AP can operate as a stand-alone Access Point connecting to third-party PoE-capable switches but more control and versatile management of the Access Point is achievable when it is part of an EnGenius Neutron-series wireless network management solution because the AP includes firmware that enables it to be immediately discovered, configured, monitored and managed from a compatible Neutron series PoE+ switch (EWS5912FP, EWS7928FP or EWS7952FP). This capability enables IT managers to deploy and manage up to 50 EWS360APs from a Neutron Series switch allowing for simplified management from one browser-based interface including simultaneous firmware upgrades, clustering, traffic monitoring, bandwidth steering and many other features that can be reset or reconfigured from the convenience of the IT manager's desktop.

Operating in both the 2.4GHz and 5GHz frequency spectrums and supporting 802.11a/b/g/n and ac (draft) standards the EWS360AP features wireless speeds up to 450Mbps on the 2.4GHz radio and up to 1300Mbps on the 5GHz radio, a Gigabit port for connecting to 802.3at-capable PoE switches, and an enhanced receive sensitivity MIMO (Multiple In / Multiple Out) antenna array. As a result, the EWS360AP is ideal for spacious environments such as large homes, small and medium-sized businesses, multiple-floor offices, hotels, hospitals, and other multi-floor buildings.

As the EWS360AP is designed for deployments on ceilings where power outlets may be scarce, it also comes equipped with PoE (Power-over-Ethernet) IEEE 802.3at for use with an 802.3at-capable PoE injector or 802.3at-capable PoE switches, drawing up to 22 watts of power.

Paired with other Neutron-series Access Points and switches, the EWS360AP helps to make managing a network easier with its standardized GUI. To protect sensitive data during wireless transmissions, the EWS360AP offers different industry-standard encryption settings for wireless transmissions, including WEP, WPA-PSK, WPA2-PSK, WPA-PSK Mixed, WPA Enterprise, WPA2 Enterprise, and WPA2 Mixed Enterprise. It also includes MAC address filtering to allow network administrators to offer network access only to verified computers and devices based on their MAC addresses.

### Key Features

- + High transmit power for longer range and enhanced wireless coverage
- + Supports IEEE802.11a/b/g/n and ac (draft) standards. Up to 450 Mbps on 2.4 GHz and up to 1300 Mbps on 5 GHz.
- + For mounting on ceilings or desk-top deployments
- + 6 internal MIMO antennas / Dual-Band / Three Stream
- + Sectorized 3D antenna design
- + Band Steering shifts Dual-band clients to 5 GHz for better throughput performance
- + Fast Handover

## Technical specifications

### Hardware

RF: 2.4GHz and 5GHz frequency bands  
Standard: IEEE 802.11a/b/g/n/ac (draft)  
Radio I: 11b/g/n: 2.412~2.484 GHz  
Radio II: 11a/n: 5.18-5.24 and 5.26-5.32 and 5.5-5.7 and 5.745-5.825 GHz  
Data rate: Up to 450Mbps in the 2.4GHz frequency band; Up to 1300Mbps in the 5GHz band  
Memory: 128MB  
Flash Memory: 16MB

### Antenna

3 x 3dBi 2.4GHz antennas  
3 x 5dBi 5GHz antennas

### Physical interface

1 x RJ-45 Gigabit Ethernet (10/100/1000 Mbps) - PoE capable  
1 x Reset button  
1 x Power connector

### Power requirements

Power supply: 100 to 240 VDC  $\pm$  10%, 50/60 Hz (depends on different countries)  
Active Ethernet (Power-over-Ethernet, IEEE 802.3at)  
Power adapter (United States) 48VDC/0.375A  
Device: 12V/2A

### Modulations

OFDM: BPSK, QPSK, 26-OAM, 64-QAM, DBPSK, DQPSK, CCK

### Operating channels

2.4 GHz: US/Canada 1-11  
5 GHz: Country dependent for the following ranges:  
36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165

## Management

Operation modes  
Access Point, Mesh AP (available soon)

## Multiple BSSID

Supports up to 8 BSSIDs per radio

## LAN

IP (check validity and DHCP server IP range) MAC

## Spanning Tree

Supports 802.1d Spanning Tree Protocol

## Wireless

Wireless mode: 11a/11b/11g/11n/11ac (draft)  
Channel selection (settings vary by country)  
Channel bandwidth (Auto, 20 MHz, 40 MHz)

## Transmission rate

2.4GHz: 11n only, 11b/b/n mix, 11b only, 11b/g, 11g only  
5GHz: 11n only, 11a/n mix, 11a only

## QoS

WMM (Wireless Multimedia)

## Wireless Management features (with Neutron Series switch)

- Access Point Auto discovery and provisioning
- Access Point Auto IP assignment
- Access Point cluster management
- Remote Access Point rebooting
- Access Point device name editing
- Access Point radio settings
- Band Steering
- Traffic Shaping
- Fast Handover
- Fast Roaming
- Access Point Client Limiting
- Mesh Network\*
- Wireless Security (WEP, WPA/WPA2 Enterprise, WPA/WPA2 PSK)
- Guest Network
- Access Point status monitoring
- Wireless Client monitoring
- Wireless Traffic & Usage statistics
- Real-time Throughput monitoring
- Visual Topology view
- Floor Plan view
- Map view
- Secure Control messaging
- SSL Certificate
- Local MAC Address database
- Remote MAC Address database (RADIUS)
- Unified configuration import / export
- Bulk Firmware upgrade capability
- Intelligent diagnostics

## **Management (cont.)**

### *Tx Power control*

Adjust transmit power by dBm

### *Configuration:*

Web-based configuration (http)

### *Firmware upgrade:*

Via web browser, settings are reserved after upgrade

### *Administrator settings*

Administrator Username and Password Change

### *Reset settings*

Reboot (press and hold for 2 seconds).

Reset to factory default (press and hold for 10 seconds)

### *System monitoring*

Status Statistic and Event Log

### *SNMP:*

V1, V2c, V3

### *MIB:*

MIB I, MIB II (RFC1213) and private MIB

### *Traffic shaping*

Incoming and outgoing wireless traffic shaping

### *Auto-channel selection*

Automatically selecting least congested channel

### *Bandwidth measurement*

IP range and bandwidth management

### *Auto reboot*

Reboot Access Point by minute, hour, day, or week

### *Back up and restore*

Save and restore settings through Web interface

### *CLI:*

Supports Command Line Interface

### *Diagnosis:*

IP pinging statistics

### *Log:*

SysLog and Local Log support

### *LED Control:*

On/Off

### *AP Detection:*

Scanning for available EnGenius APs

### *Wireless security*

WPA/WPA2 Personal (WPA-PSK using TKIP or AES)

WPA/WPA2 Enterprise (WPA-EAP using TKIP)

802.1X RADIUS Authenticator: MD5/TLS/TTLS, PEAP

SSID broadcast enable/disable

MAC Address Filtering, Up to 50 field

L2 Isolation (Access Point mode)

### *QoS (Quality of Service)*

Wireless Multimedia (WMM)

## **Environmental & physical**

### *Temperature range*

Operating: 0 to 50°C (32° to 122°F)

Operating humidity: 0 to 90°

Storage temperature: -20°C to 60°C (-4F° to 140°F)

### *Humidity (non-condensing)*

Operating: 90% or less

Storage: 90% or less

### *Certifications*

FCC, IC

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range may vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environment, and mix of devices in the network. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. For United States of America: Copyright ©2013 EnGenius Technologies, Inc. All rights reserved.

### **Package content**

EWS360AP Dual Band AC1750 Indoor Access Point

12V/2A Power Adapter

T-Rail Mounting Kit

Ceiling Mount and Wall Screw Kit

Mounting Bracket

RJ-45 Ethernet Cable

Quick Installation Guide