



### Key features

- Dual-band 11ac speeds to 867Mbps on 5GHz & speeds to 300Mbps on 2.4GHz band
- Internal high gain antenna
- Band steering shifts dual-band clients to 5GHz improving performance & expanding user capacities
- IP55-rated waterproof & dustproof casing withstands harsh environments

EnGenius Neutron EWS650AP 11ac outdoor access point is a high-powered dual band outdoor managed wireless access point with expanded capacity and fast 11ac wireless speeds to 867Mbps on 5GHz and to 300Mbps on the 2.4GHz band. It can function as a stand-alone access point or part of a scalable Neutron WLAN management solution. The access point features a high transmit RF power of 27dBm on 2.4GHz and 26dBm on the 5GHz frequency band, for greater wireless coverage outdoors.

### High-speed performance for today's demanding applications

Outdoor 11ac wireless speeds to 867Mbps on 5GHz & speeds to 300Mbps on the 2.4GHz band support demanding, high bandwidth applications for multiple users.

### Achieve a lower Total Cost of Ownership (TCO) per deployment

Enjoy NO access point licensing fees, annual subscriptions or tech support charges; you'll save a tremendous amount of time and cost in network management.

### Operate as a stand-alone access point or part of a scalable WLAN management solution

Deploy as a stand alone access point for or as a part of a scalable Neutron WLAN solution managed via a WLAN controller switch or centrally managed via ezMaster software.

### Unlimited flexibility and scalability

Scale your network as your needs grow, manage a few or over 1,000 Neutron devices on networks in different locations and 10 - 10,000 concurrent users with or without an on-site controller.

### **Implement as a Cloud-based, remote or locally managed platform**

EzMaster's flexible deployment options offer greater manageability regardless of network size, location, infrastructure, scale and ISP.

### **Visibly rich reporting and analytics**

EzMaster provides complete network visibility in areas such as traffic flow, demand, network topology and more.

### **Captive Portal - Corporate branded, regulated, secure Internet access for customers**

Ideal for retail stores, coffee shops, hotels and other organizations that offer Internet access to customers.



**Technical specifications***Standard*

IEEE 802.11b/g/n on 2.4GHz  
IEEE 802.11a/n/ac on 5GHz  
IEEE 802.3at

*Antenna*

5dBi internal omni-directional antennas

*Physical interface*

2\* 10/100/1000 Gigabit Ethernet ports  
- LAN1: Supports 802.3at PoE input  
- LAN2: Data pass through  
1\* Reset button  
1\* Power connector

*Physical security*

Kensington security slot

*LED indicators*

1\* Power  
1\* WLAN (Wireless connection)  
1\* LAN

*Power source*

External power adapter on PoE injector  
DC IN, 48 V/0.8A  
IEEE 802.3at compliant source  
Active Ethernet (PoE)

*Mounting*

Wall mount  
Pole mount

*Memory capacity*

Memory: 128MB  
Flash memory 16MB

*Wireless & radio specifications*

Dual band

*Operation modes*

Access point

*Peak power*

Up to 23W

*Transmit power*

Up to 27dBi on 2.4GHz  
Up to 26dBi on 5GHz  
Max transmit power is limited by regulatory power

*Radio chains/Spatial streams*

2x2:2

*Supported data rates (Mbps)*

2.4GHz: Max 300  
5GHz: Max 867  
802.11b: 1, 2, 5.5, 11  
802.11g: 6, 9, 12, 18, 24, 36, 48, 54  
802.11n: 6.5 to 300 (MCS0 to MCS15)  
802.11ac: 6.5 to 867 (MCS0 to MCS9, NSS=1~3)

*Supported radio technology*

802.11b: Direct-Sequence Spread-Spectrum (DSSS)  
802.11a/g/n/ac: Orthogonal frequency-division Multiplexing (OFDM)

*Channelization*

802.11ac with 20/40/80MHz channel width  
802.11n with 20/40MHz channel width  
802.11a/b/g with 20MHz channel width

*Supported modulation*

802.11b: BPSK, QPSK, CCK  
802.a/g/n: BPSK, QPSK, 16-QAM, 64-QAM  
802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

*Management*

Multiple BSSID  
Supports up to 16 SSIDs, 8 SSIDs per radio

*VLAN tagging*

Supports 802.1q SSID-to-VLAN tagging  
VLAN pass through  
Spanning tree

## QoS

Compliant with IEEE 802.11e standard  
WMM

## SNMP

v1, v2c, v3

## MIB

I/II, private MIB

## Management features

Deployment options

Stand alone (Individually managed)

Managed mode (with Neutron-series switch/  
ezMaster)

## Auto-channel selection

Wireless STA (client) connection list

Guest network

Mobility: PMKSA support for fast roaming

Backup/restore settings

Auto reboot

Client statistics

E-Mail alert

## Configuration

Web interface (HTTP)

CLI (Telnet)

## Control features

Managed mode (by Neutron switch/ezMaster)

CLI supported

Band steering

Auto reboot

One-click firmware upgrade

Firmware upgrade: Web interface or CLI (FTP/HTTP)

## Security

WEP encryption (64/128/152 bit)

WPA/WPA2 enterprise (PSK using TKIP or AES)

Hide SSID in beacons

MAC address filtering, up to 50 MACS per SSID

Https support

SSH support

Client isolation

## Environment & mechanical

### Temperature range

Operating: -4°F to 140°F, -20°C to 60°C

Storage: -22°F to 176°F, -30°C to 80 °C

Humidity (Non-condensing)

Operating: (90% or less

Storage: 90% or less

### Ingress protection marking

IP55-Rated enclosure

### Certifications

FCC, IC

### Dimensions and weight

EWS650AP device

Weight: 1.89 lbs.

Width: 7.13" (181 mm)

Length: 11.97" (304 mm)

Height: 1.81" (46 mm)

### Packaging

Weight: 3.43 lbs. (1.55 kg)

Width: 15.87" (403 mm)

Length: 21.18" (538 mm)

Height: 14.61" (371 mm)

### Master carton

Weight: 36.46 lbs. (16.54 kg)

Width: 7.48" (190 mm)

Length: 12.99" (330 mm)

Height: 4.06" (103 mm)

No. of boxes per carton: 10

### Package contents

EWS650AP 11ac outdoor access point

48 V/0.8A power adapter

PoE injector

Pole mount ring

Mounting screw set

Quick installation guide