EnGenius

ECW160

Cloud Managed 11ac Wave 2 2×2 Outdoor Wireless Access Point

Delivers higher speeds and user capacity and supercharges performance faster than 11ac Wave 2 APs

Product Highlights

EnGenius Cloud Managed ECW160 11ac Wave 2, 2x2, IP67, MU-MIMO Dual-Band Outdoor Wireless Access Point reaching speeds to 867Mbps on 5GHz and 400Mbps on 2.4GHz band. Designed to perform in harsh environments, this AP leverages advanced Wi-Fi and Beamforming technology, maximizing performance and reliability while greatly increasing network user capacities.

Features & Benefits

- Dual-radio 2x2 802.11ac/a/b/g/n with MU-MIMO & Beamforming technology
- Supports up-to 867 Mbps in 5-GHz band & 400 Mbps in 2.4-GHz band
- IP67-Rated Weatherproof & Dustproof Housing Withstands Harsh Environments
- GigE PoE-Compatible Port for Easy Placement Where Power Outlets are Scarce
- Four (4) Detachable 5dbi High-Gain, 360° SMA-Type Antennas

Standards

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

Antenna

2 x 2.4 GHz: 6 dBi
2 x 5 GHz: 6 dBi
External Omni-Directional Antenna

Physical Interface

1 x 10/100/1000 Gigabit Ethernet Ports

LED Indicators

1 x Power
1 x LAN

1 x 2.4 GHz
1 x 5 GHz

Power Source

Power-over-Ethernet: 802.3af/at or Proprietary 54V
IEEE 802.11e Compliant Source
Active Ethernet (PoE)

Maximum Power Consumption

12W

Wireless & Radio Specifications Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

Operation Modes

Manage Mode: AP, AP Mesh

Frequency Radio

2.4 GHz: 2400 MHz ~ 2472 MHz
5 GHz: 5150 MHz ~ 5250 MHz, 5250 MHz ~ 5350 MHz, 5470 MHz ~ 5725 MHz, 5725 MHz ~ 5850 MHz

Transmit Power

Up to 23 dBm on 2.4 GHz
Up to 23 dBm on 5 GHz

Tx Beamforming (TxBF)

Radio Chains/Spatial Stream

2×2:2

SU-MIMO

Two (2) spatial streams Single User SU-MIMO for up to 400 Mbps wireless data rate with VHT40 bandwidth to a 2x2 wireless client device under the 2.4GHz radio. Two (2) spatial stream Single User SU-MIMO for up to 867 Mbps wireless data rate with VHT80 to a 2x2 wireless device under the 5GHz radio.

MU-MIMO

Two (2) Spatial Streams MU-MIMO up to 867 Mbps wireless data rate for transmitting to two (2) streams MU-MIMO capable wireless devices under 5GHz simultaneously.

Supported Data Rates (Mbps):

2.4 GHz: Max 400

5 GHz: Max 867

802.11b: 1, 2, 5.5, 11

802.11a/g: 6, 9, 12, 18, 36, 48, 54

802.11n: 6.5 to 300 Mbps (MCS0 to MCS15) (Additional 25% bandwidth when enabling 256-QAM uner HT40)

802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9, NSS = 1 to 2)

Supported Radio Technologies

802.11b: Direct-Sequence Spread Spectrum (DSSS)

802.11a/g/n/ac: Orthogonal Frequency-Division Multiplexing (OFDM)

802.11n/ac: 2×2 MIMO with 2 Streams

Channelization

802.11ac Supports Very High Throughput (VHT)—VHT 20/40/80 MHz

802.11n Supports High Throughput (HT)—HT 20/40 MHz

802.11n Supports Very High Throughput (VHT) Under the 2.4 GHz Radio—VHT 40 MHz (256-QAM)

802.11n/ac Packet Aggregation: AMPDU, ASPDU

Supported Modulation

802.11b: BPSK, QPSK, CCK

802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM

802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

Multiple BSSID

8 SSIDs on both 2.4GHz and 5GHz radios.

VLAN Tagging

Supports 802.1q SSID-to-VLAN Tagging

Cross-Band VLAN Pass-Through

Management VLAN

Spanning Tree

Supports 802.1d Spanning Tree Protocol

QoS (Quality of Service)

Compliant With IEEE 802.11e Standard

WMM

SNMP

v1, v2c, v3

MIB

I/II, Private MIB

Wireless Security

OWE

WPA2 Personal

WPA3 Personal (SAE) - WPA3 Only

WPA3/WPA2 Personal Mixed

WPA2 Enterprise

WPA3 Enterprise Suite B

Hide SSID in Beacons

MAC Address Filtering, Up to 32 MACs per SSID

Wireless STA (Client) Connected List

SSH Tunnel

Client Isolation

Environment & Physical Temperature Range

Operating: -4º~140ºF/-20ºC~60ºC

Storage: -40Fº~176ºF/-40ºC~80ºC

Humidity (non-condensing)

Operating: 90% or less

Storage: 90% or less

Outdoor Rating: IP67-Rated Enclosure

Dimensions & Weight

Weight: 0.65 lbs. (295 g)

Width: 4.37" (111.2 mm)

Length: 6.83" (173.6 mm)

Height" 1.19" (30.29 mm)

Package Contents

1 – ECW160 Cloud Managed Outdoor Access Point

1 – Pole-Mounting Brackets

1 – Wall-Mount Screw Set

2 – 2.4GHz 5dBi SMA Antennas

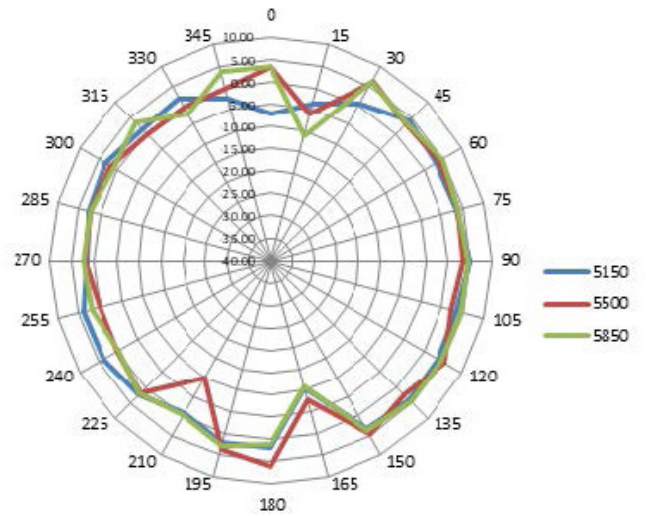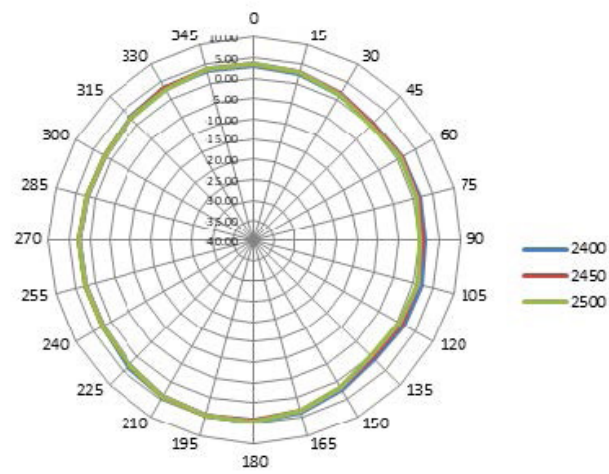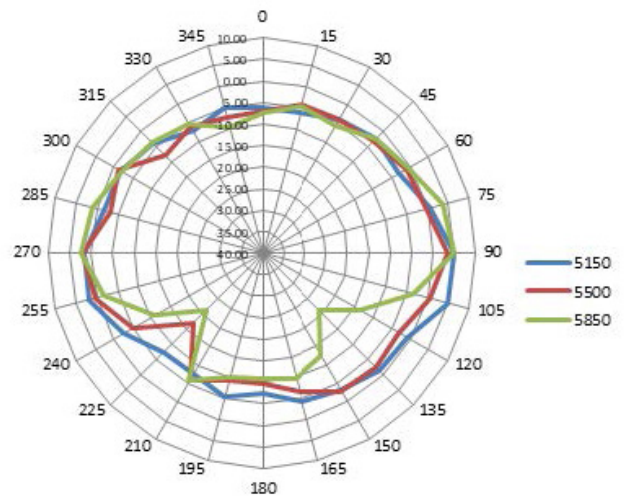2 – 5GHz 5dBi SMA Antennas
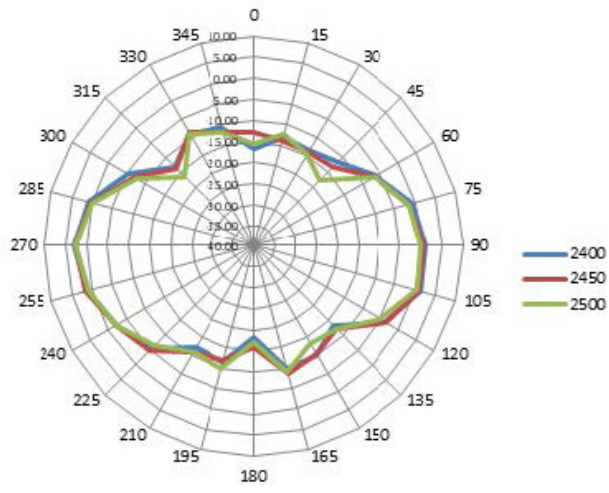
1 – Quick Installation Guide

Warranty

2 Year

Certifications

CE

FCC

IC

ECW160 Outdoor Access Point

**Detachable Antenna
(SMA Type)**

**Top Cover
(UL Certified Plastic)**

**Gigabit Ethernet Port
(Proprietary 48V PoE Input)**

Scan & Go

Mounting Holes

LED Indicaters

Bottom