



ECW270



## EnGenius Cloud Managed Wi-Fi 6 4x4 Outdoor Access Point

Highest-Rated Outdoor Dual-Band 11ax Access Point



The EnGenius cloud managed ECW270 outdoor Wi-Fi 6, 4x4, IP68, MU-MIMO dual-band access point reaches speeds of 2,400 Mbps on 5 GHz and 1,200 Mbps on 2.4 GHz bands. This premium cloud managed AP features the highest rated ruggedized enclosure, two Ethernet ports (1 2.5 Gbps/1 Gbps PSE), 8 antennas, and the latest in Wi-Fi technology for top-notch performance and reliability in the harshest environments like business parks, campuses, and student housing.

### Features & Benefits

- Highest-rated, IP68-rated waterproof & dustproof housing withstands extreme environments
- Detachable four (4) 7 dBi 5 GHz & four (4) 5 dBi 2.4 GHz, Omni 360° N-type antennas
- Supports up to 2,400 Mbps in 5-GHz band & 1,200 Mbps in 2.4-GHz band
- Dual-band 802.11ax & backward-compatible with 11ac/a/b/g/n client devices
- Dedicated radio for Dynamic Channel Selection (DCS) scanning to ensure best performance
- Built-in lightning arrester shields device and antennas from lightning strikes
- 2.5 GigE PoE++ compatible port for easy placement in outdoor spaces
- 1 GigE port with PSE (802.3af/at) to power-up IP-cameras or other compliant devices
- High-powered radios to increase meshing distances on either 2.4 GHz or 5 GHz
- Wide outdoor operation ranges from -4°F ~ +149°F (-20°C ~ +65°C)
- Cloud-manage unlimited number of APs from anywhere with the EnGenius Cloud app
- Real-time AP diagnostics, deep-dive analytics, and remote configurations
- No access point licensing or subscription fees needed

# Technical Specifications

## ECW270

### Standards

IEEE 802.11b/g/n/ax on 2.4GHz

IEEE802.11a/n/ac/ax on 5GHz

### Processor

Qualcomm® Quad-Core CPU ARM Cortex A53s @ 2.2GHz

### Antenna

Four (4) External 7 dBi 5 GHz Detachable N-Type Antennas

Four (4) External 5 dBi 2.4 GHz Detachable N-Type Antennas

### Physical Interface

1 x 10/100/1000/2500 BASE-T, RJ-45 Ethernet Port

1 x 10/100/1000 BASE-T, RJ-45 Ethernet Port (PoE+ PSE out)

### LED Indicators

1 x Power

1 x LAN

1 x LAN 2

1 x 2.4 GHz

1 x 5 GHz

### Power Source

Power-over-Ethernet: 802.3at/bt

Proprietary 48V – 54V

IEEE 802.11e Compliant Source

Active Ethernet (PoE++)

### Maximum Power Consumption

46W

### Surge Protection

1KV

### ESD Protection

Contact: 4KV

Air: 8 KV

## WIRELESS & RADIO SPECIFICATIONS

### Operating Frequency

Dual-Radio Concurrent 2.4GHz & 5 GHz

### Operation Modes

AP, Mesh, AP Mesh

### Frequency Radio

2.4GHz: 2400 MHz ~ 2482 MHz

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

### Transmit Power

2.4GHz: 24 dBm

5GHz: 24 dBm

Maximum power is limited by regulatory domain

### Tx Beamforming (TxBF)

Increasing signal reliability and transmitting distance.

### Radio Chains/Spatial Stream

4x4:4

### SU-MIMO

Four (4) spatial streams SU-MIMO for 2.4GHz and four (4) spatial streams SU-MIMO for 5GHz up to 3,600 Mbps wireless data rate to a single 11ax wireless client device under both 2.4G Hz and 5GHz radio.

### MU-MIMO

Four (4) spatial streams multi-user (MU)-MIMO for up to 2,400 Mbps wireless data rate to transmit to one (1) four streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously

Four (4) spatial streams multi-user (MU)-MIMO for up to 1,200 Mbps wireless data rate to transmit to one (1) four streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

### Supported Data Rates (Mbps)

802.11ax:

- 2.4 GHz: 9 to 1148 (MCS0 to MCS11, NSS = 1 to 2)
- 5 GHz: 18 to 2400 (MCS0 to MSC11, NSS = 1 to 2)

802.11b: 1, 2, 5.5, 11

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

802.11n: 6.5 to 600 Mbps (MCS0 to MCS15)

802.11ac: 6.5 to 1733 Mbps (MCS0 to MCS9, NSS = 1 to 2)

### Supported Radio Technologies

802.11ax: Orthogonal Frequency Division Multiple Access (OFDMA)

802.11b: Direct-sequence spread-spectrum (DSSS)

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

### Channelization

802.11ax supports high efficiency (HE) –HE 20/40/80 MHz

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 under the 2.4GHz radio –VHT40 MHz (256-QAM)

802.11n/ac/ax packet aggregation: A-MPDU, A-SPDU

### Supported Modulation

802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM

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

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

802.11b: BPSK, QPSK, CCK

## MANAGEMENT

### Multiple BSSID

8 SSIDs for 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

WPA3-PSK (SAE)

WPA3 Enterprise

WPA2 Enterprise (AES)

WPA2 AES-PSK

OWE

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: -4°~149°F/-20°C~65°C

Storage: -22°F~-176°F/-30°C~80°C

### Humidity (non-condensing)

Operating: 90% or less

Storage: 90% or less

### Waterproof & Dustproof

IP68-Rated Enclosure

## DIMENSIONS & WEIGHTS

### ECW270 Device

Weight: 4.74 lbs. (2.150 kg)

Width: 8.58" (218 mm)

Length: 11.22" (285 mm)

Height: 2.18" (55.5 mm)

### Packaging

Weight: 9.52 lbs. (4.320 kg)

Width: 12.01" (305 mm)

Length: 14.57" (370 mm)

Height: 5.91" (150 mm)

## Master Carton

Weight: 20.72 lbs. (9.4 Kg)

Width: 12.72" (323 mm)

Length: 15.28" (388 mm)

Height: 13.62" (346 mm)

## No. of Boxes Per Carton

2 units

## Package Contents

1 – ECW270 Cloud Managed Outdoor Access Point

1 - Pole-Mounting Brackets

1 - Wall-Mount Screw Set

4 - 2.4 GHz 5dBi N-Type Antennas

4 – 5 GHz 7dBi N-Type Antennas

1 - Quick Installation Guide

## Certifications

FCC, CE, IC

## Warranty

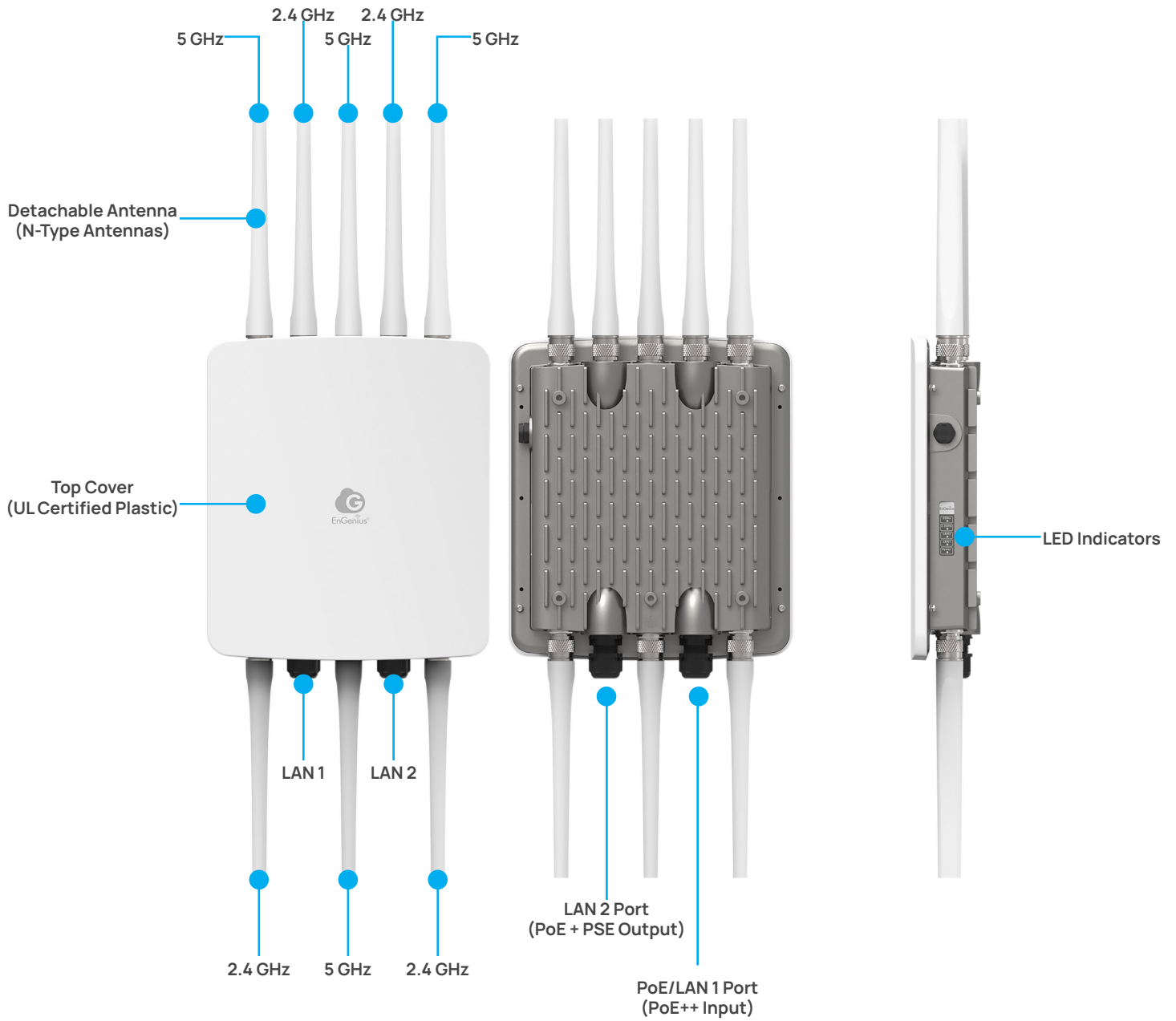
2 Year

## Plug & Play with Zero Configuration

# Scan & Go

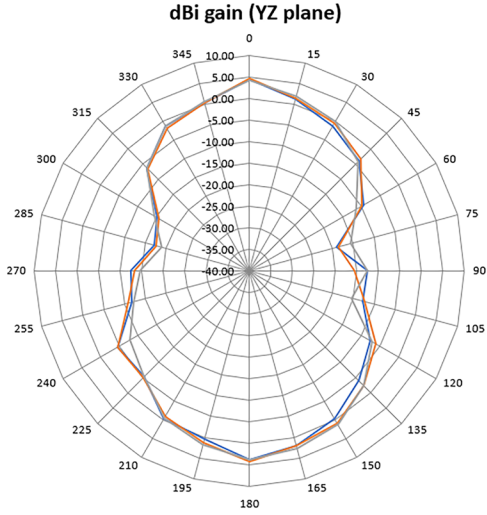


## Product Images

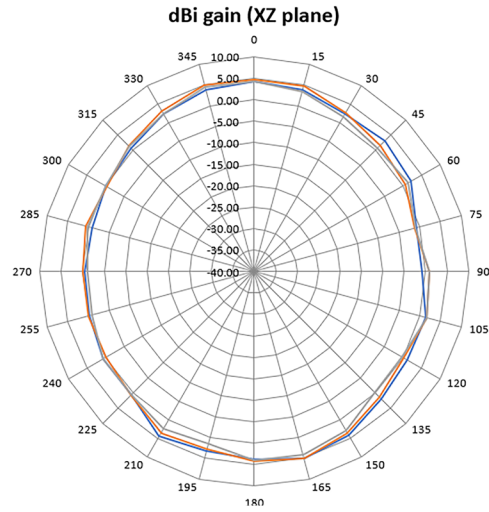


# Radio Patterns

## 2.4 GHz

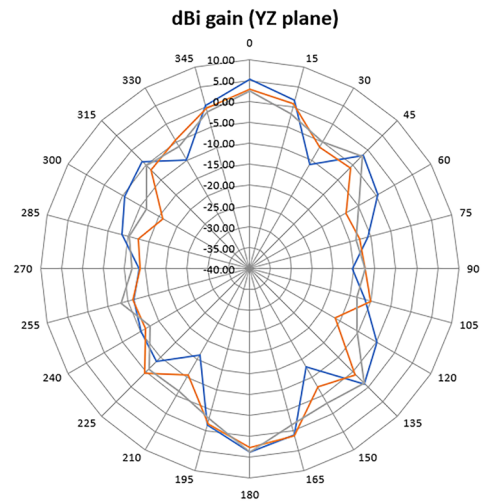


E-Plane

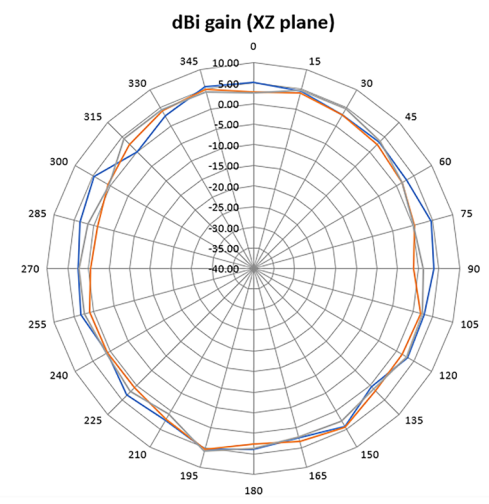


H-Plane

## 5 GHz



E-Plane



H-Plane