

ECW336

**Cloud6E 4x4x4**

## Cloud Managed Wi-Fi 6E 4x4 Indoor Access Point

### Overview

EnGenius Cloud Managed Wi-Fi 6 4x4x4 Access Point ECW336 supports tri-concurrent 802.11ax Wi-Fi 6 architecture, delivering supercharged speeds up to 4,800 Mbps on 6 GHz, 2,400 Mbps (5 GHz), and up to 1,200 Mbps (2.4 GHz). With WPA3 & WPA2-AES authentication support, remote monitoring & troubleshooting, and Mesh Wireless Support for optimized signal quality, it's easy to set up and manage an unlimited number of APs with the EnGenius Cloud App.



### Features & Benefits

- Tri- concurrent 802.11ax Wi-Fi 6 architecture & backward-compatible
- Supercharged speeds up to 4,800 Mbps on 6 GHz, 2,400 Mbps (5 GHz) & up to 1,200 Mbps (2.4 GHz)
- 5 GbE realizes greater throughput and supports 802.3at & 48V PoE input for flexible installation over 100 meters (328 feet)
- WPA3 & WPA2-AES authentication support
- Cloud Managed with AP & Mesh mode
- Quick-scan device register & configuration and remote monitoring & troubleshooting
- Cloud manage an unlimited number of APs from anywhere with the EnGenius Cloud App
- Mesh Wireless Support simplifies setup, optimizes signals & self-heals

# Technical Specifications

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### Standards

IEEE 802.11ax on 2.4 GHz

IEEE 802.11ax on 5 GHz

IEEE 802.11ax on 6 GHz

IEEE 802.3 u/ab

Backward compatible with 802.11a/b/g/n/ac

### Antenna

4 x 2.4 GHz: 5 dBi(Integrated Omni-Directional)

4 x 5 GHz: 6 dBi(Integrated Omni-Directional)

4 x 6 GHz: 5 dBi(Integrated Omni-Directional)

### Physical Interfaces

1 x 5GE Port (PoE+)

1 x DC Jack

1 x Reset Button

### LED indicators

1 x Power

1 x LAN

1 x 2.4 GHz

1 x 5 GHz

1 x 6 GHz

### Power Source

Power-over-Ethernet: 802.3bt Input

12VDC /3A Power Adapter

### Maximum Power Consumption

22.5W

## Wireless & Radio Specifications

### Operating Frequency

Tri-Radio Concurrent 2.4 GHz & 5 GHz & 6GHz

### Operation Modes

Managed mode: AP, AP Mesh, Mesh

### Frequency Radio

2.4 GHz: 2400 MHz ~ 2482 MHz

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

6 GHz: 5925MHz ~ 6425MHz, 6525MHz ~ 6875MHz

### Transmit Power

Up to 23 dBm on 2.4 GHz

Up to 23 dBm on 5 GHz

Up to 23 dBm on 6 GHz

(Maximum power is limited by regulatory domain)

### Radio Chains

4 x 4:4

### SU-MIMO

Four (4) spatial stream Single User (SU) MIMO for up to 1148 Mbps wireless data rate with HE40 bandwidth to a 4x4 wireless client device under the 2.4GHz radio.

Four (4) spatial stream Single User (SU) MIMO for up to 2400 Mbps wireless data rate with HE80 to a 4x4 wireless device under the 5GHz radio.

Four (4) spatial stream Single User (SU) MIMO for up to 4800 Mbps wireless data rate with HE160 to a 4x4 wireless device under the 6GHz radio.

### MU-MIMO

Four (4) spatial streams Multiple (MU)-MIMO up to 4800 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 6GHz simultaneously.

Four (4) spatial streams Multiple (MU)-MIMO up to 2,400 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Four (4) spatial streams Multiple (MU)-MIMO up to 1,148 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

### Supported Data Rates

802.11ax:

2.4 GHz: 9 to 1,148 (MCS0 to MCS11, NSS = 1 to 4)

5 GHz: 18 to 2,400 (MCS0 to MCS11, NSS = 1 to 4)

6 GHz: 18 to 4,800 (MCS0 to MCS13, NSS = 1 to 4)

802.11b: 1, 2, 5.5, 11

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

802.11n: 6.5 to 600 (MCS0 to MCS31)

802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4)

### Supported Radio Technologies

802.11ax: Orthogonal Frequency Division Multiple Access(OFDMA)

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

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

### Channelization

802.11ax supports high efficiency throughput (HE) –HE 20/40/80/160 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 high throughput under the 2.4GHz radio –HT40 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

### DFS Certification

FCC/CE/IC

### Max Concurrent User

512 Per radio

### Client Balancing

Yes

### Auto Channel Selection

Yes

# Technical Specifications

## Management Features

### Multiple BSSID

8 SSIDs on both 2.4GHz, 5GHz & 6GHz bands

### 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)

Compliance With IEEE 802.11e Standard

WMM

### SNMP

v1, v2c, v3

### MIB

I/II, Private MIB

### Fast Roaming

802.11r/k

### Wireless Security

WPA2-PSK

WPA2-Enterprise

WPA3-PSK

WPA3-Enterprise

Hide SSID in Beacons

Wireless STA (Client) Connected List

Client Isolation

Client Access Control

### Interface

IPv4, IPv6

### Local Web Access

Supports HTTP or HTTPS

## Environmental & Physical

### Temperature Range

Operating: 32°F~104°F (0 °C~40 °C)

Storage: -40 °F~176 °F (-40 °C~80 °C)

### Humidity (non-condensing)

Operating: 90% or less

Storage: 90% or less

## Dimensions & Weight

### Weight

630g

### Dimensions

205 x 205 x 33.2 mm

### Package Contents

1 – ECW336 Cloud Managed Indoor Access Point

1 – Ceiling Mount Base (9/16" Trail)

1 – Ceiling Mount Base (15/16" Trail)

1 – Ceiling and Wall Mount Screw Kit

1 – Quick Installation Guide

## Compliance

### Regulatory Compliance

FCC

CE

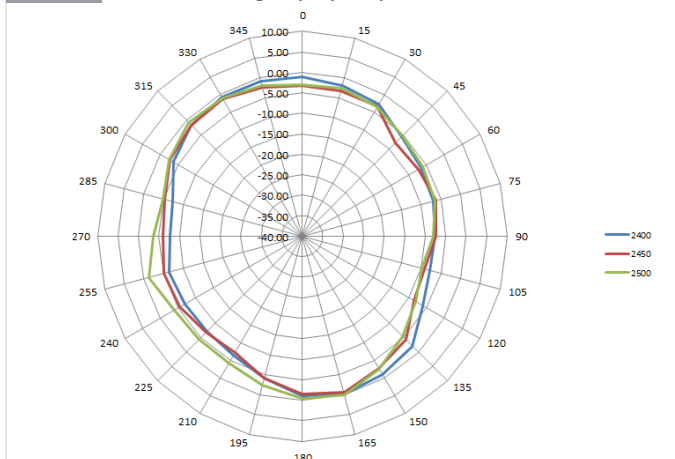
IC

# Antennas Patterns

2.4GHz

H-Plane

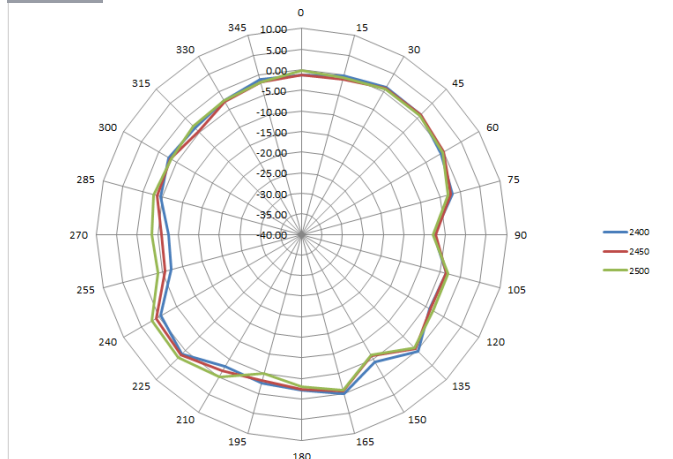
dBi gain (XY plane)



2.4GHz

E-Plane

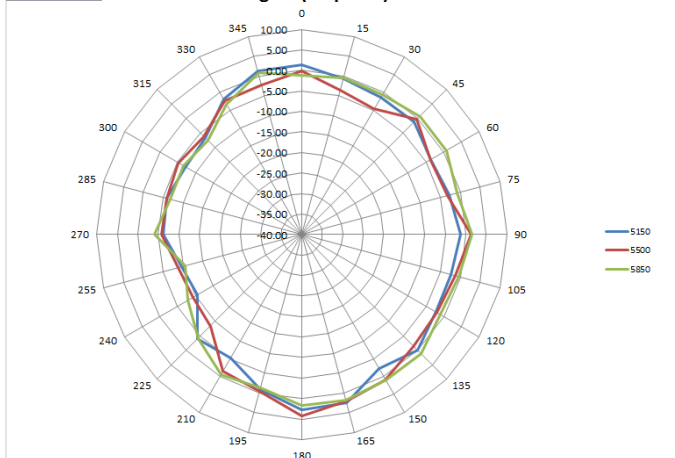
dBi gain (YZ plane)



5GHz

H-Plane

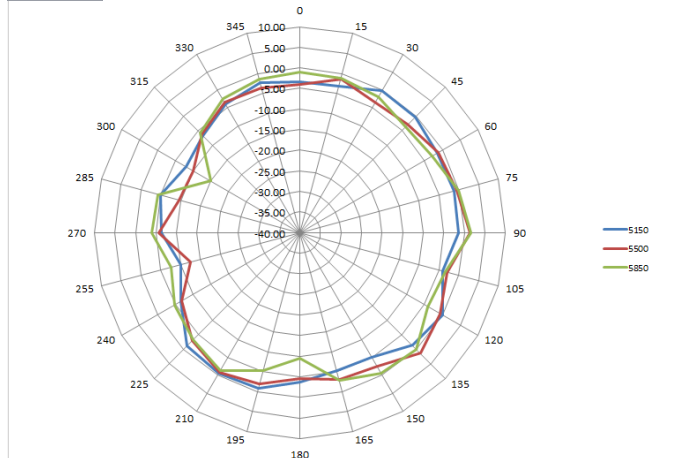
dBi gain (XY plane)



5GHz

E-Plane

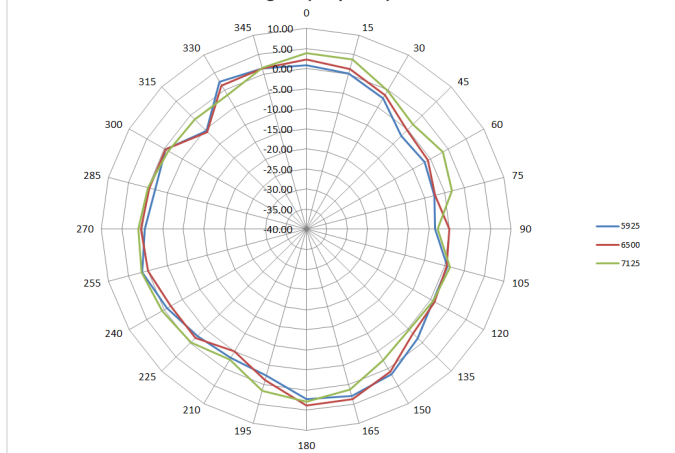
dBi gain (YZ plane)



6GHz

H-Plane

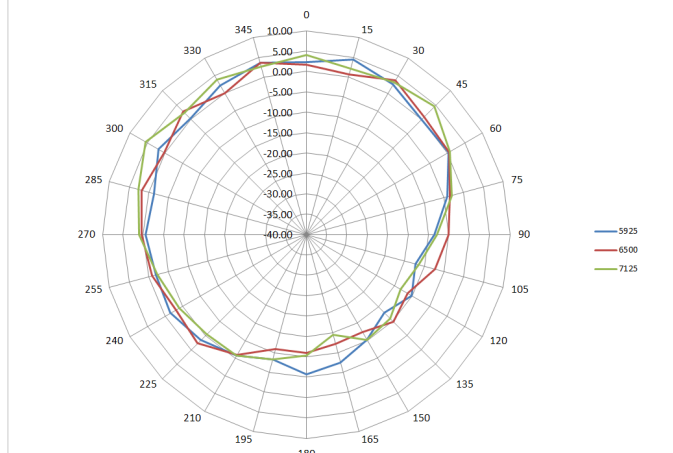
dBi gain (XY plane)



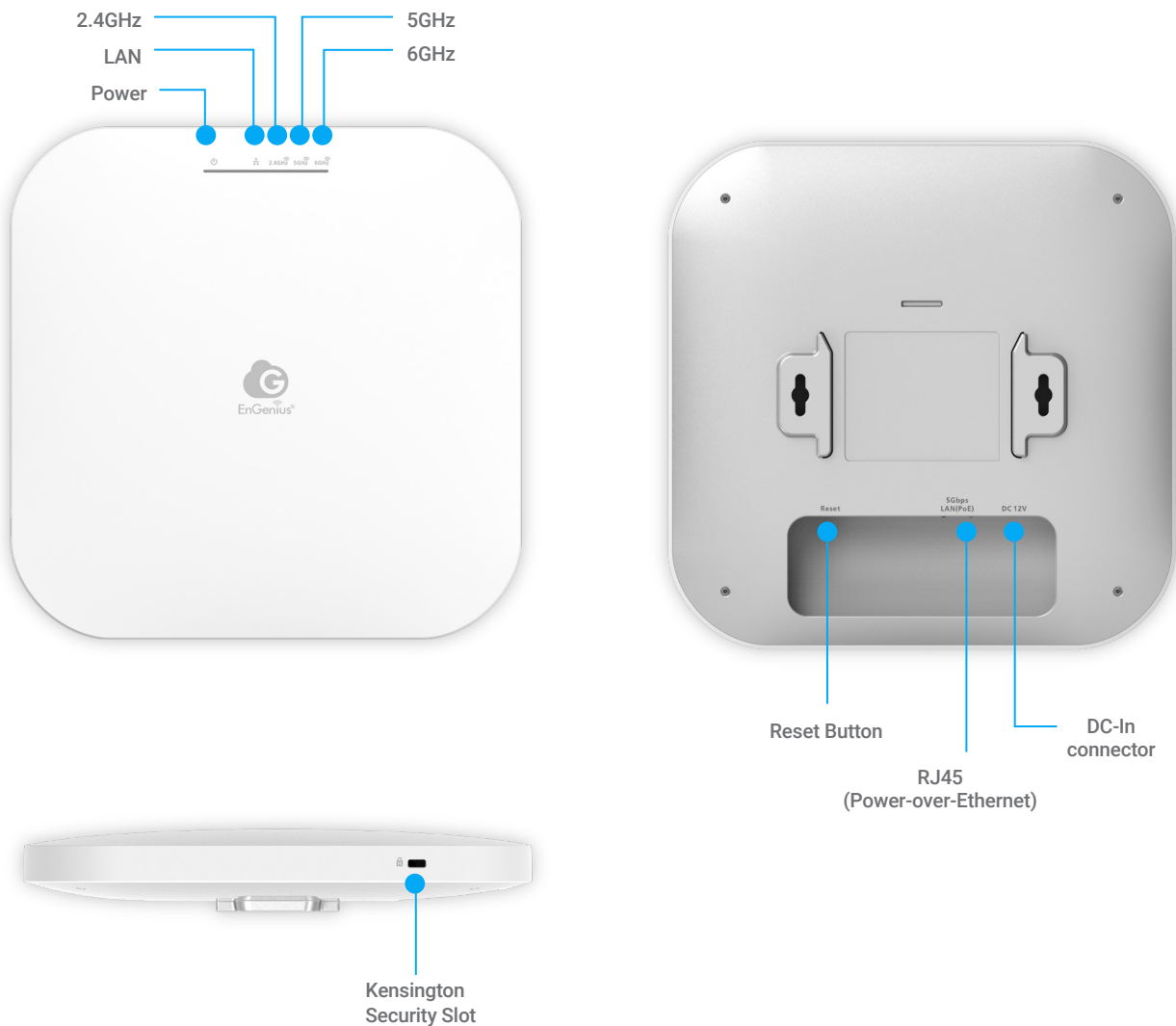
6GHz

E-Plane

dBi gain (YZ plane)



## Hardware Overviews



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