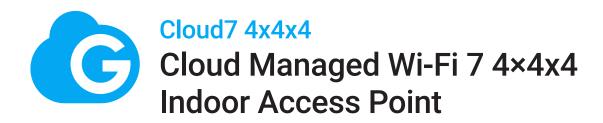


**ECW536** 



### **Overview**

EnGenius Cloud Managed Wi-Fi 7 4x4x4 Access Point ECW536 supports tri-concurrent 802.11be Wi-Fi 7 architecture, delivering supercharged speeds up to11,600 Mbps on 6 GHz, 5,800 Mbps (5 GHz), and up to 1,400 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 802.11be Wi-Fi 7 architecture & backward-compatible
- Supercharged speeds up to 11,600 Mbps on 6 GHz, 5,800 Mbps (5 GHz) & up to1,400 Mbps (2.4 GHz)
- 10 GbE realizes greater throughput and supports 802.3bt and 60W PoE injector 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

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# **Technical Specifications**

### Technical Specifications

#### **Standards**

IEEE 802.11be on 2.4 GHz

IEEE 802.11be on 5 GHz

IEEE 802.11be on 6 GHz

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

#### 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 10GE Port (PoE++)

1 x 10GE Port

1 x DC Jack

1 x Reset Button

#### LED indicators

1 x Multi-color LED

#### **Power Source**

Power-over-Ethernet: 802.3bt Input

12VDC /3A Power Adapter

### **Maximum Power Consumption**

35W

### 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  $\sim$  5250 MHz, 5250 MHz  $\sim$  5350 MHz, 5470 MHz  $\sim$  5725 MHz, 5725 MHz  $\sim$  5850 MHz

6GHz: 5925-7125MHz

### Transmit Power

Up to 25 dBm on 2.4 GHz

Up to 24 dBm on 5 GHz

Up to 24 dBm on 6 GHz

(Maximum power is limited by regulatory domain)

#### **Radio Chains**

4 × 4:4

### SU-MIMO

Four(4) spatial stream Single User (SU) MIMO for up to 1,400 Mbps wireless data rate with VHT40 bandwidth to a 4x4 wireless device under the 2.4GHz radio.

Four(4) spatial stream Single User (SU) MIMO for up to 58,00 Mbps wireless data rate with HE160 to a 4x4 wireless device under the 5GHz radio.

Four(4) spatial stream Single User (SU) MIMO for up to 11,600 Mbps wireless data rate with HE320 to a 4x4 wireless device under the 6GHz radio.

#### **MU-MIMO**

Four(4) spatial stream MU-MIMO for up to 1,400 Mbps wireless data rate with VHT40 bandwidth to a 4x4 wireless device under the 2.4GHz radio.

Four(4) spatial stream MU-MIMO for up to 5,800 Mbps wireless data rate with HE160 to a 4x4 wireless device under the 5GHz radio simultaneously.

Four(4) spatial stream MU-MIMO for up to 11,600 Mbps wireless data rate with HE320 to a 4x4 wireless device under the 6GHz radio simultaneously.

#### **Supported Data Rates**

802.11be:

2.4 GHz: Max 1,400 (MCS0 to MCS11, NSS = 1 to 4)

5 GHz: Max 5,800 (MCS0 to MSC11, NSS = 1 to 4)

6 GHZ: Max 11,600 (MCS0 to MSC13, NSS = 1 to 4)

802.11ax:

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

5 GHz: 18 to 2,400 (MCS0 to MSC11, NSS = 1 to 4)

6 GHZ: 18 to 4,800 (MCS0 to MSC13, 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**

802.11be/ax: Orthogonal Frequency Division Multiple Access(OFDMA)

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

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

### Channelization

802.11be supports high efficiency throughput (HE) —HE 20/40/80/160/320 MHz

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  $-\mathrm{HT40}~\mathrm{MHz}$  (256-QAM)

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

### **Supported Modulation**

 $802.11ax: \, BPSK, \, QPSK, \, 16\text{-}QAM, \, 64\text{-}QAM, \, 256\text{-}QAM, \, 1024\text{-}QAM, \, 4096\text{-}QAM$ 

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

### **Max Concurrent User**

512 Per radio

# **Technical Specifications**

### Management Features

### Multiple BSSID

8 SSIDs on both 2.4GHz and 5GHz 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)

Complaint With IEEE 802.11e Standard

 $\mathsf{WMM}$ 

### **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

### **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

TBD

### **Dimensions**

230 x 230 x 37 mm

### **Package Contents**

- 1 ECW536 Cloud Managed Indoor Access Point
- 1 Ceiling Mount Base
- 1 Ceiling and Wall Mount Screw Kit
- 1 T-rail Mount kit
- 1 Product Card

### Compliance

### **Regulatory Compliance**

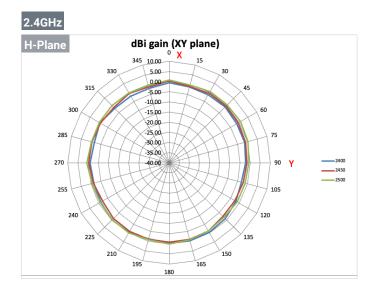
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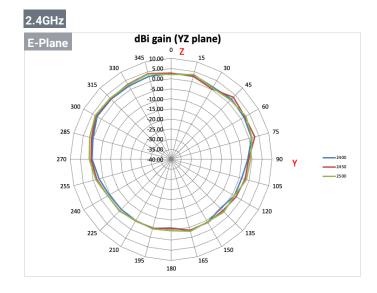
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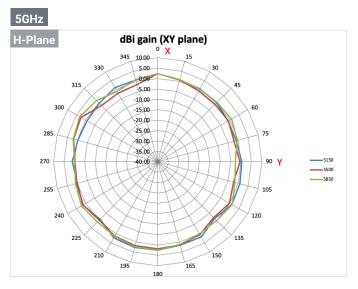
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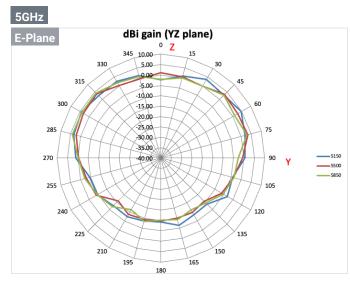
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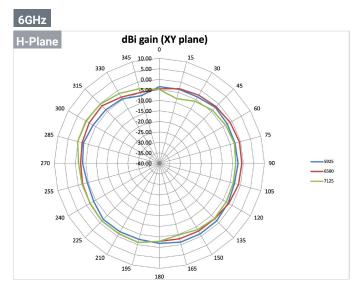
## **Antennas Patterns**

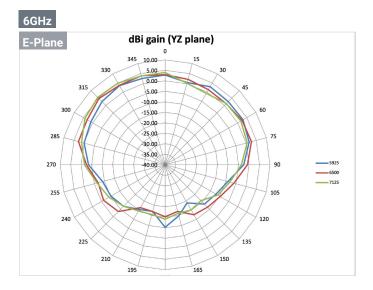












### **Hardware Overviews**







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