



## Cloud7 2x2x2

# Cloud Managed Wi-Fi 7 2x2x2 Indoor Access Point

### Overview

EnGenius Cloud Managed Wi-Fi 7 2x2x2 Access Point ECW526 supports tri-concurrent 802.11be Wi-Fi 7 architecture, delivering supercharged speeds up to 5,800 Mbps on 6 GHz, 2,900 Mbps (5 GHz), and up to 700 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 5,800 Mbps on 6 GHz, 2,900 Mbps (5 GHz) & up to 700 Mbps (2.4 GHz)
- 10 GbE realizes greater throughput and supports 802.3at 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

# Technical Specifications

## Technical Specifications

### Standards

IEEE 802.11be on 2.4 GHz

IEEE 802.11be on 5 GHz

IEEE 802.11be on 6 GHz

IEEE 802.3 u/ab

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

### Antenna

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

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

2 x 6 GHz: 6 dBi(Integrated Omni-Directional)

### Physical Interfaces

1 x 10GE Port (PoE+)

1 x DC Jack

1 x Reset Button

### LED indicators

1 x Multi-color LED

### Power Source

Power-over-Ethernet: 802.3at Input

12VDC /2A Power Adapter

### Maximum Power Consumption

21W

## 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

6GHz: 5925-7125MHz

### Transmit Power

Up to 23 dBm on 2.4 GHz

Up to 22 dBm on 5 GHz

Up to 22 dBm on 6 GHz

(Maximum power is limited by regulatory domain)

### Radio Chains

2 x 2:2

### SU-MIMO

Two(2) spatial stream Single User (SU) MIMO for up to 700 Mbps wireless data rate with VHT40 bandwidth to a 2x2 wireless device under the 2.4GHz radio.

Two(2) spatial stream Single User (SU) MIMO for up to 2,900 Mbps wireless data rate with HE160 to a 2x2 wireless device under the 5GHz radio.

Two(2) spatial stream Single User (SU) MIMO for up to 5,800 Mbps wireless data rate with EHT320 to a 2x2 wireless device under the 6GHz radio.

### MU-MIMO

Two(2) spatial stream MU-MIMO for up to 700 Mbps wireless data rate with VHT40 bandwidth to a 2x2 wireless device under the 2.4GHz radio.

Two(2) spatial stream MU-MIMO for up to 2,900 Mbps wireless data rate with HE160 to a 2x2 wireless device under the 5GHz radio simultaneously.

Two(2) spatial stream MU-MIMO for up to 5,800 Mbps wireless data rate with EHT320 to a 2x2 wireless device under the 6GHz radio simultaneously.

### Supported Data Rates

802.11be:

2.4 GHz: Max 700 (MCS0 to MCS11, NSS = 1 to 4)

5 GHz: Max 2,900 (MCS0 to MSC11, NSS = 1 to 4)

6 GHz: Max 5,800 (MCS0 to MSC13, NSS = 1 to 4)

802.11ax:

2.4 GHz: 9 to 574 (MCS0 to MCS11, NSS = 1 to 4)

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

6 GHz: 18 to 2,400 (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

802.11be/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 extreme high efficiency (EHT) –EHT 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 –HT40 MHz (256-QAM)

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

### Supported Modulation

802.11be: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, 4096-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

### DFS Certification

FCC/CE/IC

### Max Concurrent User

512

### Client Balancing

Yes

### Auto Channel Selection

Yes

# 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)

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

720g

### Dimensions

190 x 190 x 39.5 mm

### Package Contents

1 – ECW526 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

FCC

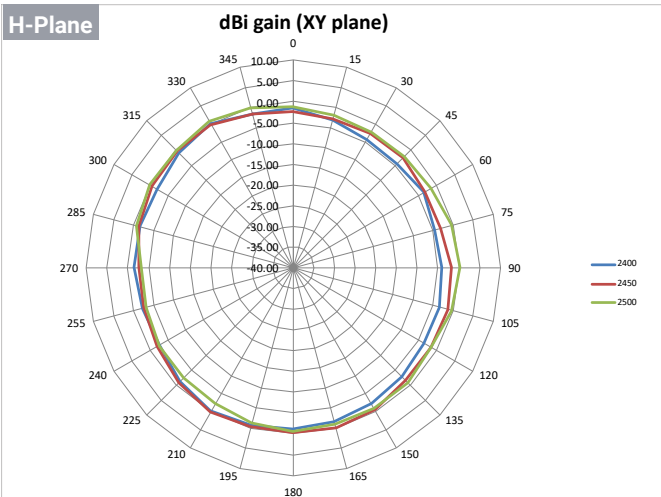
CE

IC

# Antennas Patterns

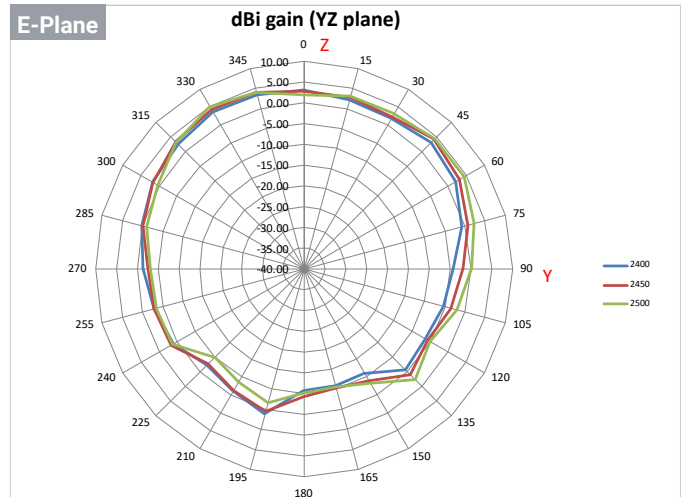
2.4GHz

H-Plane



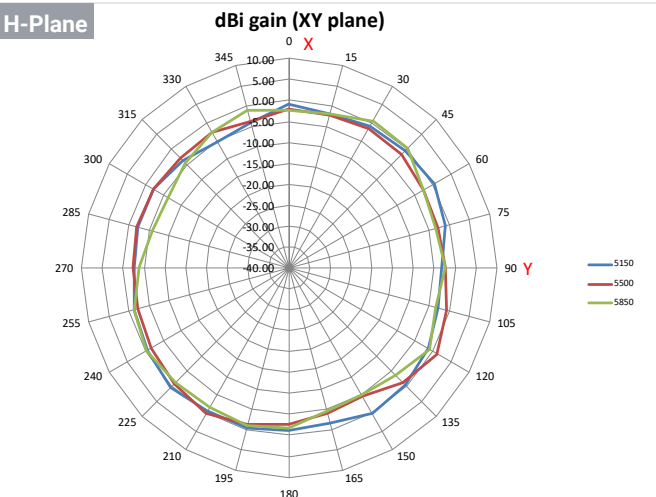
2.4GHz

E-Plane



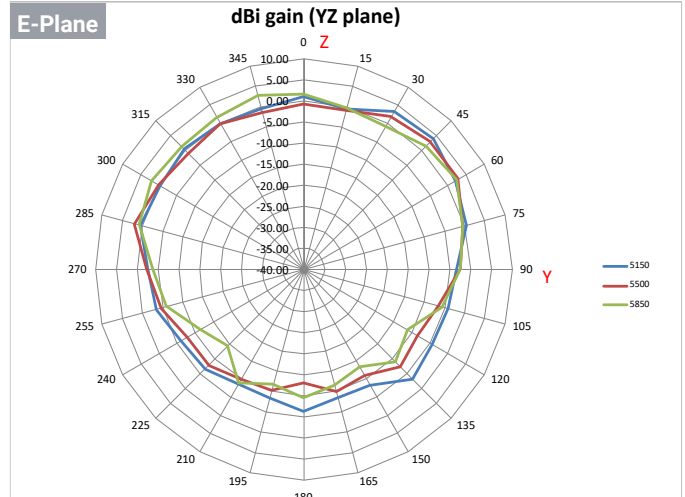
5GHz

H-Plane



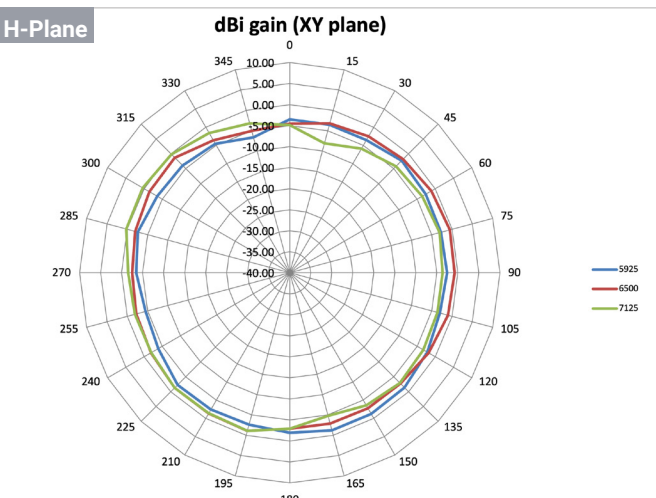
5GHz

E-Plane



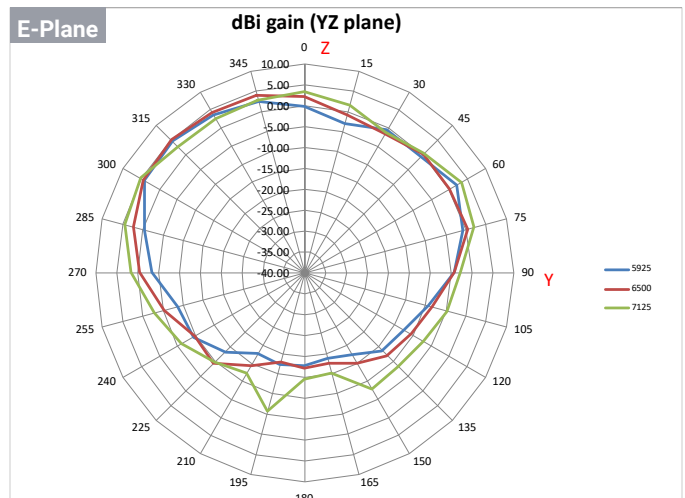
6GHz

H-Plane

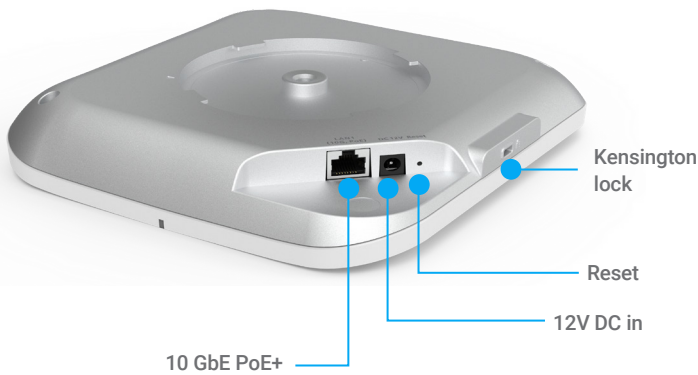
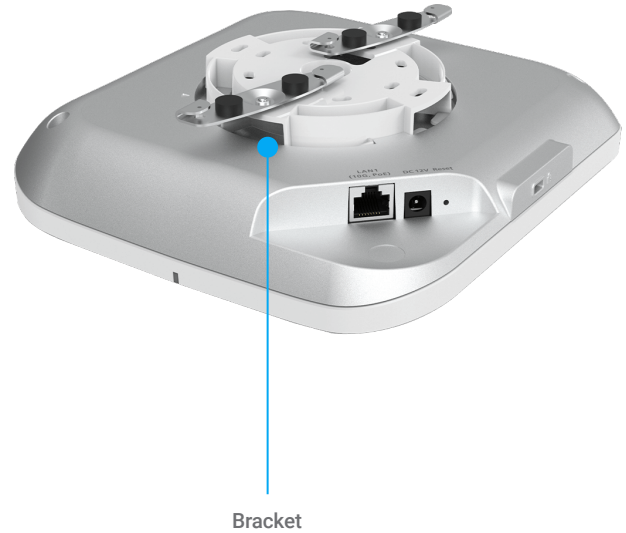


6GHz

E-Plane



## Hardware Overviews



### EnGenius Technologies | Costa Mesa, California, USA

Email: [support@engeniustech.com](mailto:support@engeniustech.com)  
Website: [www.engeniustech.com](http://www.engeniustech.com)  
Local contact: (+1) 714 432 8668

### EnGenius Networks Singapore Pte Ltd. | Singapore

Email: [techsupport@engeniustech.com.sg](mailto:techsupport@engeniustech.com.sg)  
Website: [www.engeniustech.com/apac/](http://www.engeniustech.com/apac/)  
Local contact: (+65) 6227 1088

### EnGenius Technologies Canada | Ontario, Canada

Email: [support@engeniustech.com](mailto:support@engeniustech.com)  
Website: [www.engeniustech.com](http://www.engeniustech.com)  
Local contact: (+1) 905 940 8181

### EnGenius Networks Dubai | Dubai, UAE

Email: [support@engeniustech.com](mailto:support@engeniustech.com)  
Website: [www.engeniustech.com/apac/](http://www.engeniustech.com/apac/)  
Local contact: (+971) 4 339 1227

### EnGenius Networks Europe B.V. | Eindhoven, Netherlands

Email: [support@engeniustech.com](mailto:support@engeniustech.com)  
Website: [www.engeniustech.com/eu/](http://www.engeniustech.com/eu/)  
Local contact: (+31) 40 8200 887

### 恩碩科技股份有限公司 | Taiwan, R.O.C.

Email: [sales@engeniustech.com.tw](mailto:sales@engeniustech.com.tw)  
Website: [www.engeniustech.com/tw/](http://www.engeniustech.com/tw/)  
Local contact: (+886) 933 250 628

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