

ECW526

**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

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 MCS11, NSS = 1 to 4)

6 GHz: Max 5,800 (MCS0 to MCS13, 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 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

802.11be/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

802.11ax: 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

Max Concurrent User

512

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)

Compliant 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

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

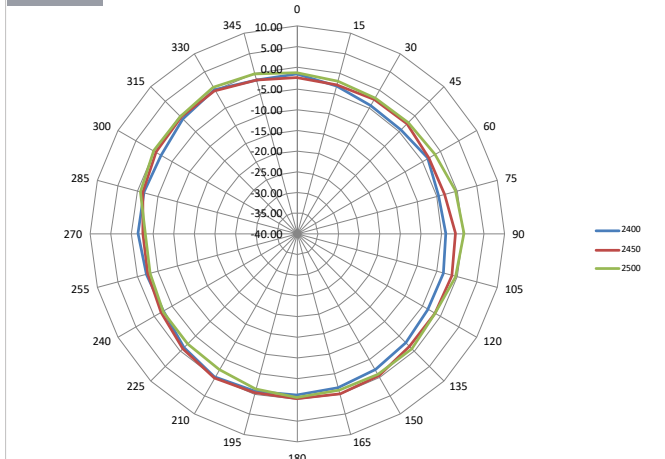
UKCA

Antennas Patterns

2.4GHz

H-Plane

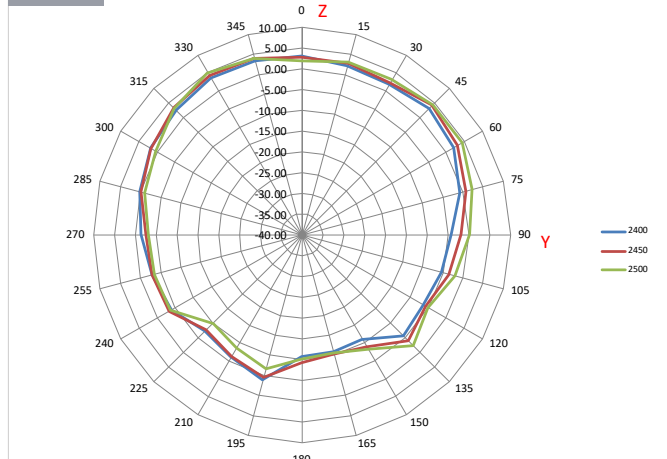
dBi gain (XY plane)



2.4GHz

E-Plane

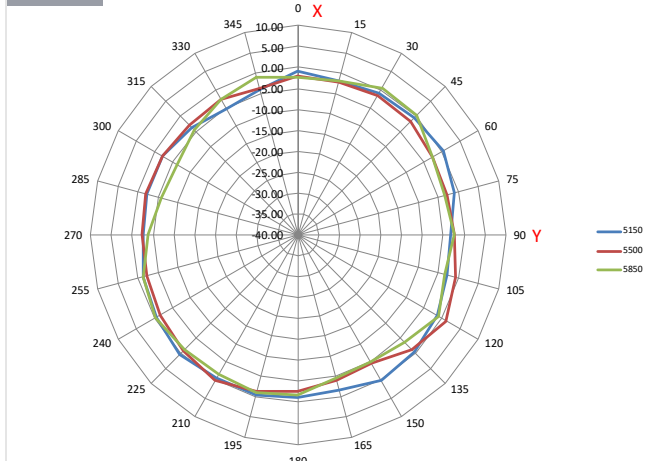
dBi gain (YZ plane)



5GHz

H-Plane

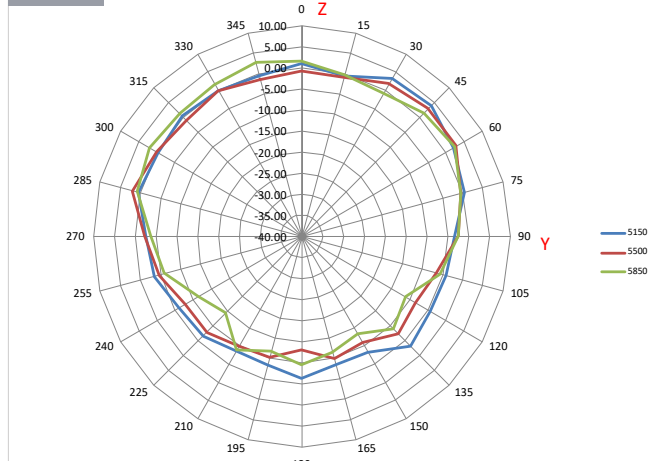
dBi gain (XY plane)



5GHz

E-Plane

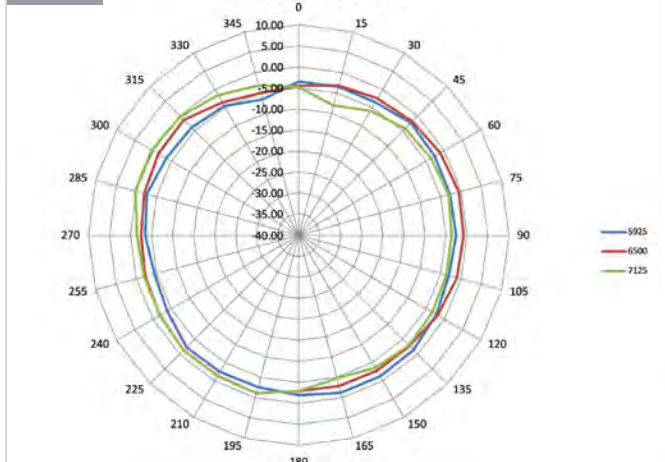
dBi gain (YZ plane)



6GHz

H-Plane

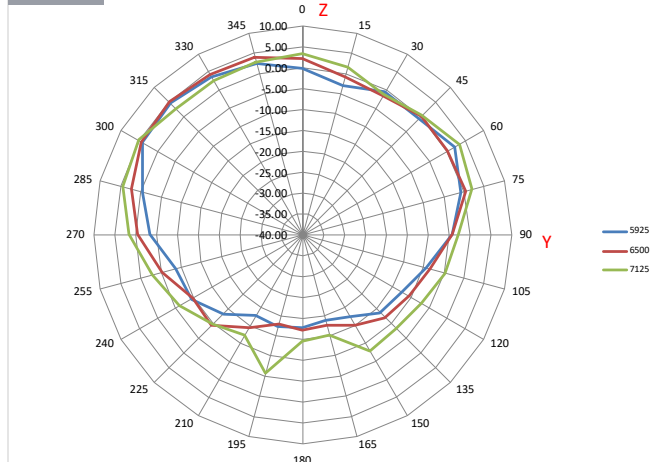
dBi gain (XY plane)



6GHz

E-Plane

dBi gain (YZ plane)



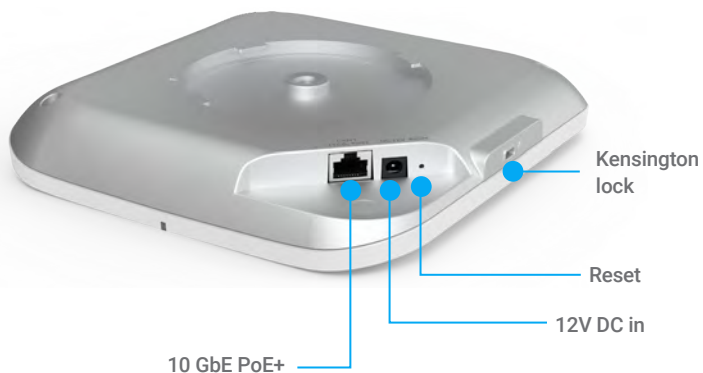
Hardware Overviews



LED



Bracket



10 GbE PoE+

Kensington
lock

Reset

12V DC in

Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense. Prior to installing any surveillance equipment, it is your responsibility to ensure the installation is in compliance with local, state and federal video and audio surveillance and privacy laws.

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