

ECW510L

**Cloud7 2x2 Lite**

Cloud Lite Managed Wi-Fi 7 2x2 Indoor Access Point

Overview

EnGenius Cloud Managed Wi-Fi 7 2x2 Access Point ECW510L supports dual concurrent 802.11be Wi-Fi 7 architecture, delivering supercharged speeds up to 4,300 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

- Dual concurrent 802.11be Wi-Fi 7 architecture & backward compatibility
- Supercharged speeds up to 4,300 Mbps (5 GHz) & up to 700 Mbps (2.4 GHz)
- 2.5 GbE realizes greater throughput and supports 802.3at and 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 registration & 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

General

Standards

IEEE 802.11be on 2.4 GHz
IEEE 802.11be on 5 GHz
Backward compatible with 802.11a/b/g/n/ac/ax
IEEE 802.3 u/ab

Antenna

2 x 2.4 GHz: 3 dBi(Integrated Omni-Directional)
2 x 5 GHz: 3.5 dBi(Integrated Omni-Directional)

Physical Interfaces

1 x 2.5GE 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 /2.5A Power Adapter

Maximum Power Consumption

21.384 W

Wireless & Radio Specifications

Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

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

Transmit Power

Up to 19 dBm on 2.4 GHz
Up to 19 dBm on 5 GHz
(Maximum power is limited by regulatory domain)

Radio Chains

2 x 2:2

SU-MIMO Capability

Two(2) spatial stream Single User (SU) MIMO for up to 700 Mbps wireless data rate with EHT40 bandwidth to a 2x2 wireless device under the 2.4GHz radio.
Two(2) spatial stream Single User (SU) MIMO for up to 4,300 Mbps wireless data rate with EHT240 to a 2x2 wireless device under the 5GHz radio.

MU-MIMO Capability

Two(2) spatial stream MU-MIMO for up to 700 Mbps wireless data rate with EHT40 bandwidth to a 2x2 wireless device under the 2.4GHz radio.
Two(2) spatial stream MU-MIMO for up to 4,300 Mbps wireless data rate with EHT240 to a 2x2 wireless device under the 5GHz radio simultaneously.

Supported Data Rates

802.11be:
2.4 GHz: Max 700 (MCS0 to MCS13, NSS = 1 to 2)
5 GHz: Max 4,300 (MCS0 to MCS13, NSS = 1 to 2)
802.11ax:
2.4 GHz: 9 to 574 (MCS0 to MCS11, NSS = 1 to 2)
5 GHz: 18 to 2,400 (MCS0 to MCS11, 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 300 (MCS0 to MCS15)
802.11ac: 6.5 to 867 (MCS0 to MCS9, NSS = 1 to 2)

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
20/40/80/160/240/320MHz
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/JP

Max Concurrent User

256

Client Balancing

Yes

Auto Channel Selection

Yes

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

Technical Specifications

MIB

I/II, Private MIB

Fast Roaming

802.11k/v/r

Wireless Security

WPA2-PSK

WPA3-PSK

Hide SSID in Beacons

Wireless STA (Client) Connected List

Client Isolation

Client Access Control

Interface

IPv4

Local Web Access

Supports HTTP or HTTPS

Environmental & Physical

Temperature Range

Operating: 32°F~104°F (0 °C~40 °C)

Storage: -4 °F~158 °F (-20 °C~70 °C)

Humidity (non-condensing)

Operating: 90% or less

Storage: 90% or less

Dimensions & Weight

Weight

513.6g

Dimensions

Width: 158 mm

Length: 158 mm

Height: 35.8mm

Package Contents

1 – ECW510L 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 – Product Card

Compliance

Regulatory Compliance

FCC

IC

CE

UKCA

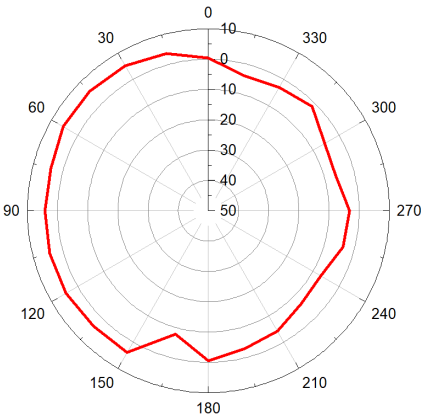
AU

JP

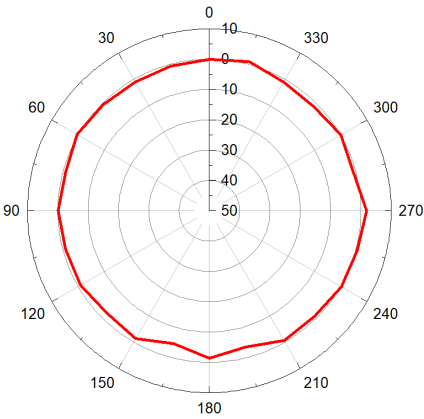
TW

Antennas Patterns

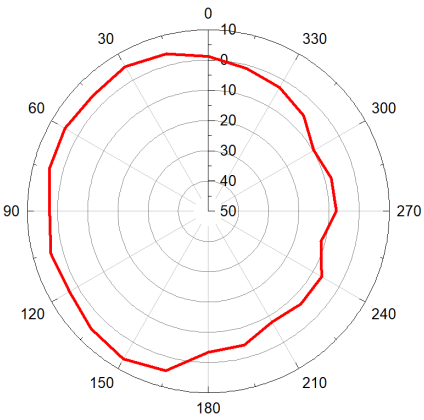
2.4GHz H-Plane



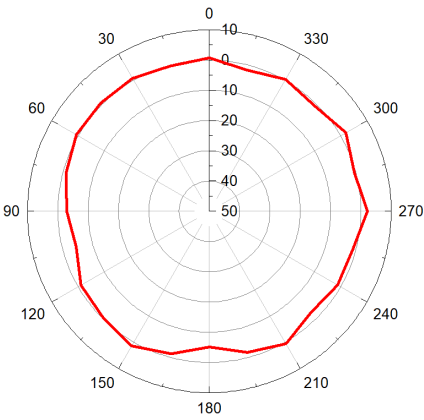
2.4GHz E-Plane



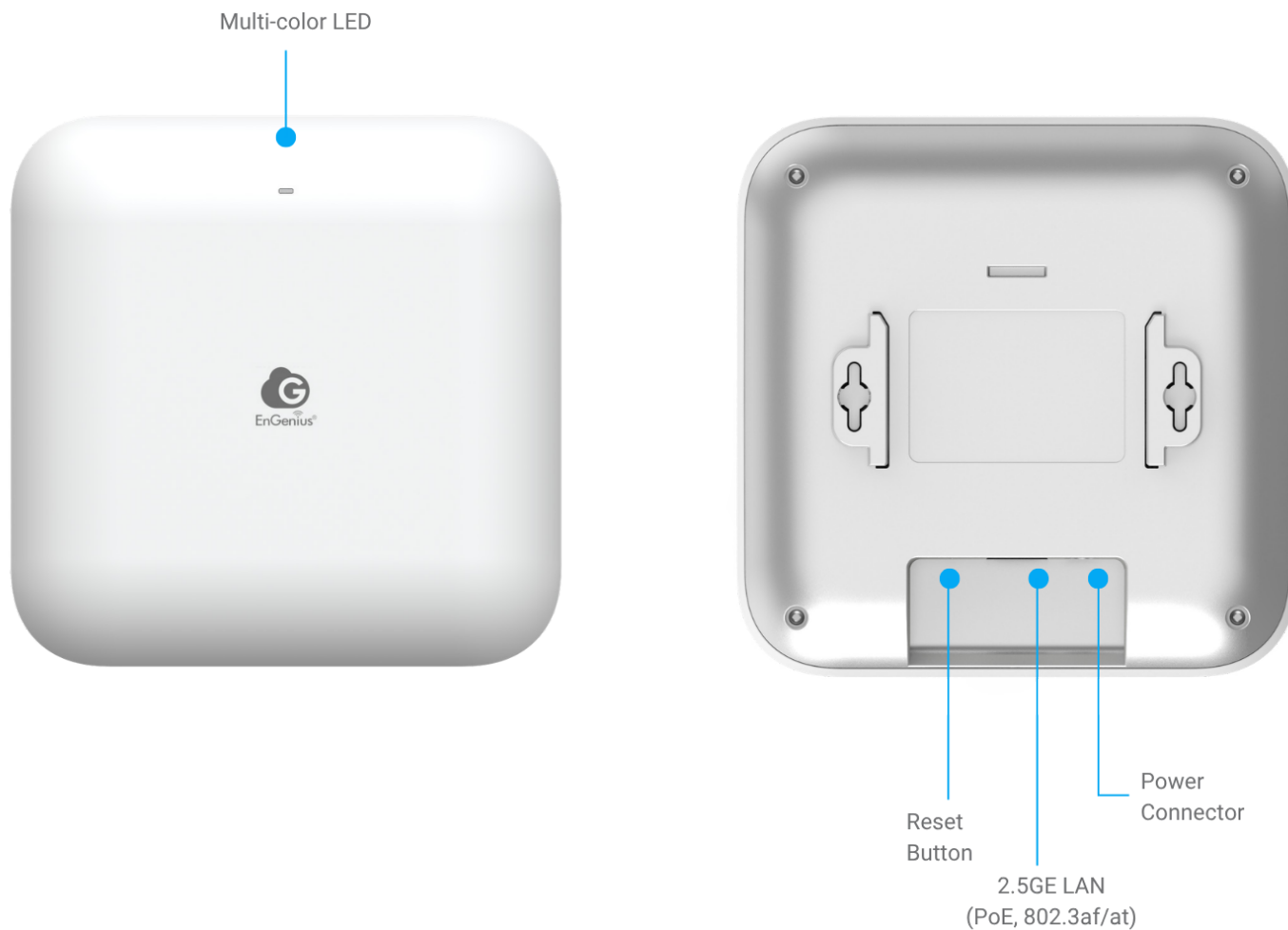
5GHz H-Plane



5GHz E-Plane



Hardware Overview



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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Quick Start Guide