

ECW212L



Cloud6 4x4 Lite

Cloud Lite 802.11ax 4x4 Dual Band Indoor Access Point

Overview

EnGenius Cloud Managed Wi-Fi 6 4X4 Access Point ECW212L is a cost-effective model designed for small businesses. It support dual-concurrent 802.11ax architecture, delivering speeds up to 1,148 Mbps on the 2.4GHz and 2,400 Mbps on the 5 GHz band, providing high-performance connectivity. With seamless integration into the EnGenius Cloud platform, it offers easy management and robust security through WPA3, making it an ideal solution for businesses seeking enterprise-grade performance at an affordable price.



Features & Benefits

- **Wi-Fi 6 Technology:** Dual concurrent 802.11ax architecture with backward compatibility for legacy Wi-Fi devices.
- **High-Performance Speeds:** Delivers 2,400 Mbps (5GHz) and 1,148 Mbps (2.4GHz) throughput.
- **Advanced Security:** Integrated WPA3 and WPA2-AES authentication protection.
- **Professional-Grade Antenna:** 5 dBi integrated 4x4 antenna system.
- **Versatile Connectivity:** 2.5GE PoE+ port for power and high-speed networking.
- **Cloud Management:** Free local and remote management via EnGenius Cloud.
- **Flexible Deployment:** Multiple operating modes with AP, STA, and Mesh support.

Technical Specifications

Technical Specifications

Standards

IEEE 802.11ax on 2.4 GHz

IEEE 802.11ax on 5 GHz

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

IEEE 802.3 u/ab

Antenna

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

4 x 5 GHz: 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 Power

1 x LAN

1 x 2.4 GHz

1 x 5 GHz

Power Source

Power-over-Ethernet: 802.3at Input

12VDC /2A Power Adapter

Maximum Power Consumption

17W

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 23 dBm on 2.4 GHz

Up to 23 dBm on 5 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.

MU-MIMO

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)

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 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

Max Concurrent User

128 per radio

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

MIB

I/II, Private MIB

Fast Roaming

802.11r/k

Technical Specifications

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: -40 °F~176 °F (-40 °C~80 °C)

Humidity (non-condensing)

Operating: 90% or less

Storage: 90% or less

Dimensions & Weight

Weight

570g

Dimensions

205 x 205 x 33 mm

Package Contents

1 – ECW212L 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

CE

IC

UKCA

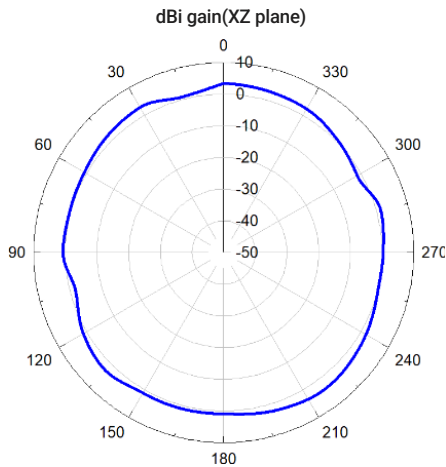
UK PSTI

AU

Antennas Patterns

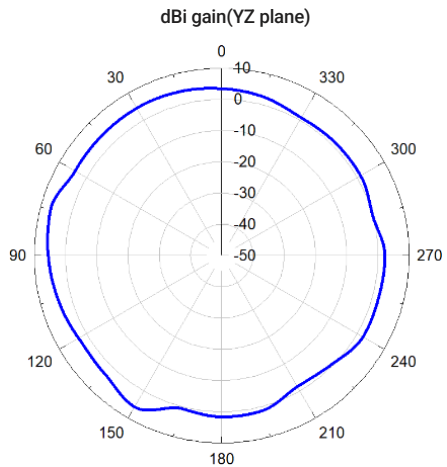
2.4GHz

H-Plane



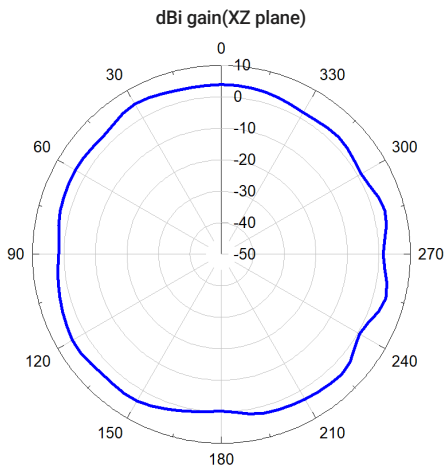
2.4GHz

E-Plane



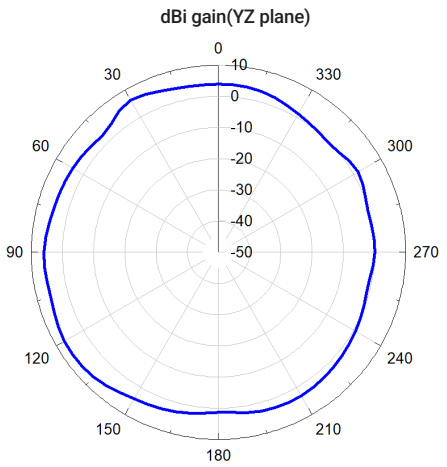
5GHz

H-Plane



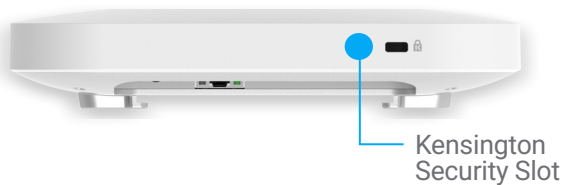
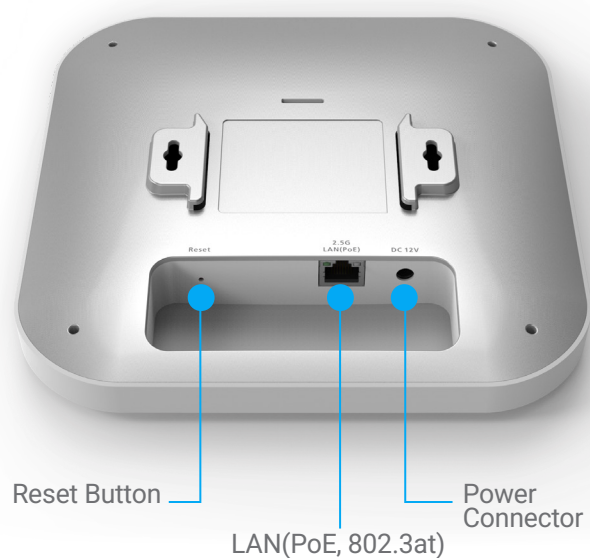
5GHz

E-Plane



Hardware Overviews

LAN Port LED
Power LED
2.4GHz LED
5GHz LED



EnGenius Technologies | California, USA | Ontario, Canada

Email: support@engeniustech.com
Website: www.engeniustech.com
Local contact (USA): (+1) 714 432 8668
Local contact (Canada): (+1) 905 940 8181

EnGenius Networks Europe B.V. | Eindhoven, Netherlands

Email: support@engeniustech.com
Website: 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
Website: www.engeniustech.com/tw
Local contact: (+886) 933 250 628

EnGenius Networks Japan 株式会社 | Tokyo, Japan

Email: jp.support@engeniustech.com
Website: www.engeniustech.com/jp
Local contact: (+81) 3 6809 6608

EnGenius Networks Singapore Pte Ltd. | Singapore

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

EnGenius Networks Private Limited | Hyderabad, India

Email: indiasales@engeniustech.com
Website: www.engeniustech.com/in/
Local contact: (+91) 9845514455

EnGenius Networks Dubai | Dubai, UAE

Email: support-me@engeniustech.com
Website: www.engeniustech.com/apac
Local contact: (+971) 4 339 1227

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.
Version 1.2 21/ 04/ 2025

EnGenius®