ECW516L

Cloud7 2x3x3 Lite

Cloud Lite 802.11be 2x3x3 Tri-Band Managed Indoor Wireless Access Point

Overview

EnGenius Cloud Lite 802.11be 2x3x3 Tri-Band Managed Indoor Wireless Access Point ECW516L offers 802.11be technology with speeds of 8,700 Mbps (6 GHz), 4,300 Mbps (5 GHz), and 700 Mbps (2.4 GHz). It is designed for high-capacity environments, runs efficiently, consumes less power, and features enterprise-level management with WPA3/WPA2-PSK (AES) encryption for enhanced security.

Features & Benefits

- Tri- concurrent 802.11be architecture & backward-compatible with 11ax/ac/a/b/g/n client devices
- WPA3 & WPA2-AES authentication support
- 5 dBi integrated 2x2(2.4GHz) and 3x3(5GHz/6GHz) antenna
- Supercharged speeds up to 8,700 Mbps on 6 GHz, 4.300 Mbps (5 GHz) & up to700 Mbps (2.4 GHz)
- 1x 2.5 GE PoE+ port for flexible power options
- Local and remote management over EnGenius Cloud without fees
- Choice of AP, STA and Mesh modes to meet your management & deployment requirements

Technical Specifications

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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

IEEE 802.3 u/ab

Antenna

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

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

3 x 6 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

1 x 6GHz

Power Source

Power-over-Ethernet: 802.3at Input

12VDC /2A Power Adapter

Maximum Power Consumption

20.7W

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 22 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

3 x 3:3

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.

Three(3) spatial stream Single User (SU) MIMO for up to 4,300 Mbps wireless data rate with HE160 to a 3x3 wireless device under the 5GHz radio.

Three(3) spatial stream Single User (SU) MIMO for up to 8,700 Mbps wireless data rate with EHT320 to a 3x3 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.

Three(3) spatial stream MU-MIMO for up to 4,300 Mbps wireless data rate with HE160 to a 3x3 wireless device under the 5GHz radio simultaneously.

Three(3) spatial stream MU-MIMO for up to 8,700 Mbps wireless data rate with EHT320 to a 3x3 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 4,300 (MCS0 to MCS11, NSS = 1 to 4)

6 GHZ: Max 8,700 (MCS0 to MCS13, NSS = 1 to 4)

802.11ax:

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

5 GHz: 18 to 1,800 (MCS0 to MCS11, NSS = 1 to 4)

6 GHZ: 18 to 3,600 (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

Max Concurrent User

128 per radio

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

WPA3-PSK

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

TBD

Dimensions

205 x 205 x 33 mm

Package Contents

1 – ECW516L 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

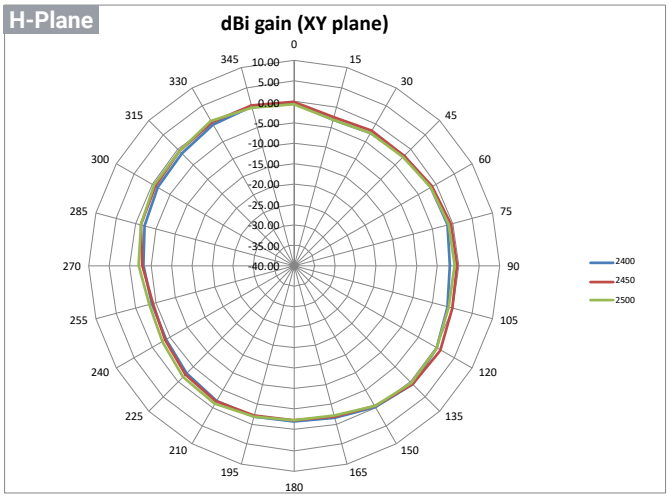
UK PSTI

AU

Antennas Patterns

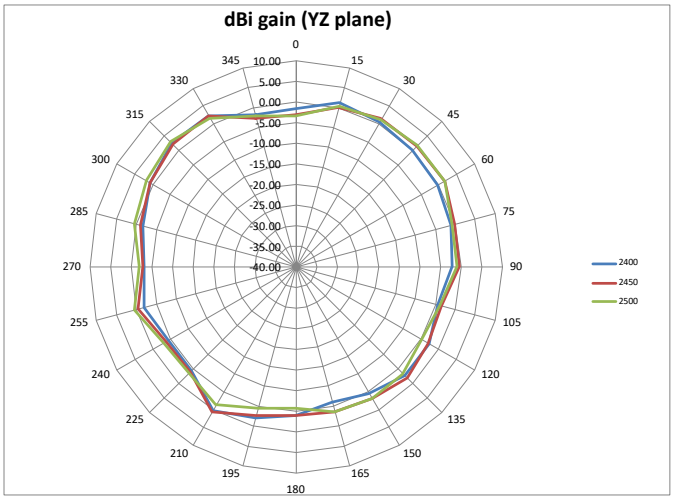
2.4GHz

H-Plane



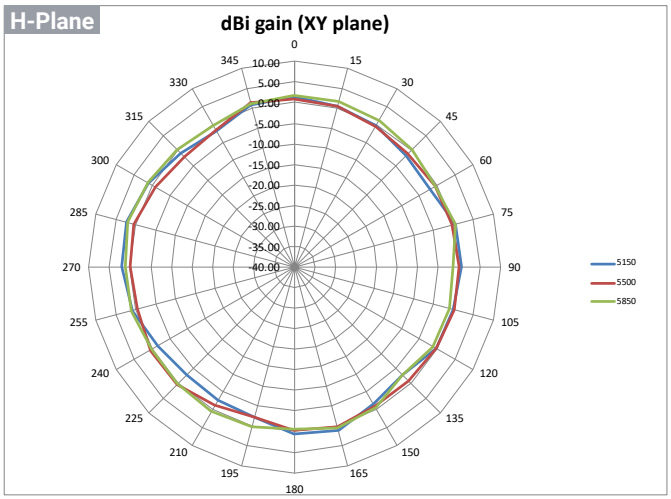
2.4GHz

E-Plane



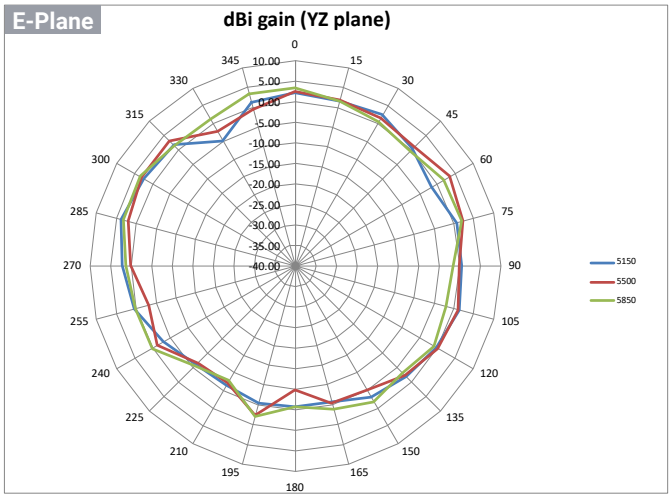
5GHz

H-Plane



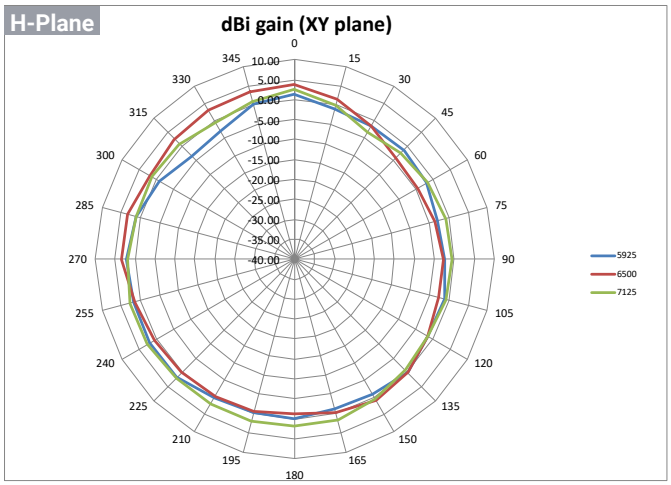
5GHz

E-Plane



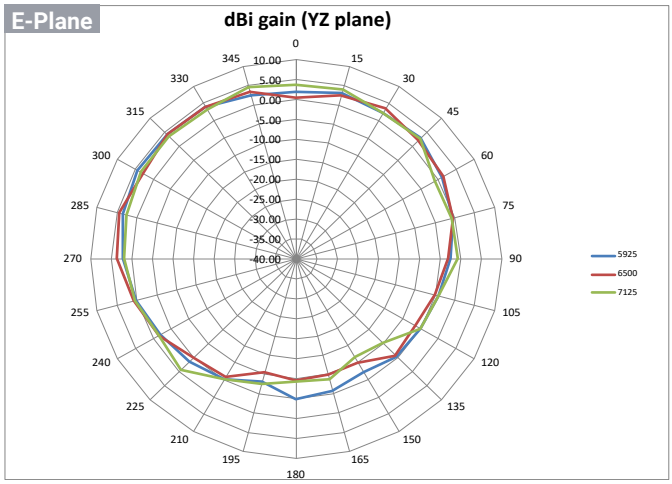
6GHz

H-Plane

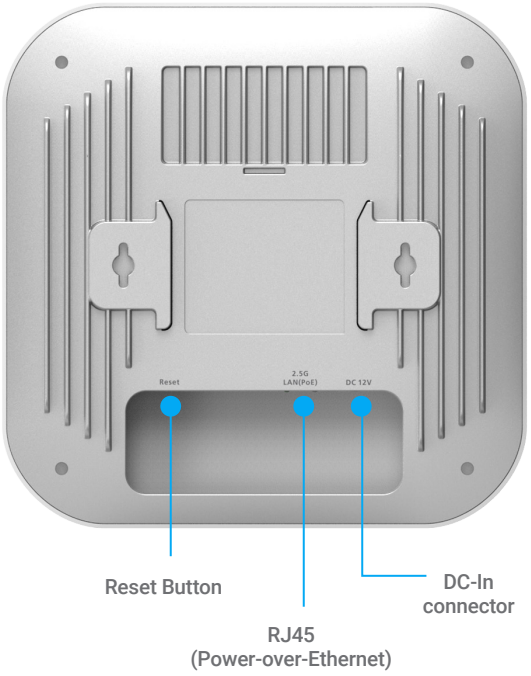


6GHz

E-Plane



Hardware Overviews



EnGenius Technologies | Costa Mesa, California, USA
Emaill: support@engeniustech.com
Website: www.engeniustech.com
Local contact: (+1) 714 432 8668

EnGenius Technologies Canada | Ontario, Canada
Email: support@engeniustech.com
Website: www.engeniustech.com
Local contact: (+1) 905 940 8181

EnGenius Networks Europe B.V. | Eindhoven, Netherlands
Email: support@engeniusnetworks.eu
Website: www.engeniustech.com/eu/
Local contact: (+31) 40 8200 887

EnGenius Networks Singapore Pte Ltd. | Singapore
Emaill: techsupport@engeniustech.com.sg
Website: www.engeniustech.com/apac/
Local contact: (+65) 6227 1088

EnGenius Networks Dubai | Dubai, UAE
Emaill: support@engenius-me.com
Website: www.engeniustech.com/apac/
Local contact: (+971) 4 339 1227

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

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Version 1.0 10/ 21/ 2024