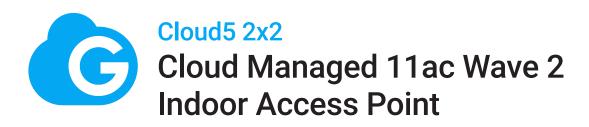


**ECW120** 



# Overview

EnGenius Cloud Managed 11ac Wave 2 Indoor Access Point ECW120 delivers supercharged speeds up to 867 Mbps (5 GHz) & 400 Mbps (2.4 GHz), Wave 2 MU-MIMO, accommodating more clients, and improved connections. Featuring remote management, Gigabit Ethernet PoE port, quick-scan device registration, and EnGenius Cloud App for unlimited AP management. Mesh Wireless Support streamlines setup and optimizes signal quality.



# Features & Benefits

- Supercharged speeds up to 867 Mbps (5 GHz) & up to 400 Mbps (2.4 GHz)
- Wave 2 MU-MIMO to meet Wi-Fi business demands
- Allows more wireless clients & better connections
- Remote managing & monitoring
- Gigabit Ethernet PoE port for flexible power options

- 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

1

# **Technical Specifications**

# Technical Specifications

#### **Standards**

IEEE 802.11b/g/n on 2.4 GHz

IEEE 802.11a/n/ac on 5 GHz

#### Antenna

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

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

#### **Physical Interfaces**

1 x 10/100/1000 Ethernet 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 Mesh

#### **Power Source**

Power-over-Ethernet: 802.3af Input

12VDC /1A Power Adapter

### **Maximum Power Consumption**

12W

### 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  $\sim$  5250 MHz, 5250 MHz  $\sim$  5350 MHz, 5470 MHz  $\sim$  5725 MHz, 5725 MHz  $\sim$  5850 MHz

### 5725 MHz ~ 5850 MHz

Up to 23 dBm on 2.4 GHz

Up to 23 dBm on 5 GHz

(Maximum power is limited by regulatory domain)

### **Radio Chains**

 $2 \times 2:2$ 

### **SU-MIMO**

Two(2) spatial stream Single User (SU) MIMO for up to 400 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 867 Mbps wireless data rate with VHT80 to a 2x2 wireless device under the 5GHz radio.

### **MU-MIMO**

Two (2) Spatial Stream MU-MIMO up to 867 Mbps wireless data rate for transmitting to two (2) streams MU-MIMO capable wireless devices under 5GHz simultaneously.

### **Supported Data Rates**

2.4 GHz: Max 400 (MCS0 to MCS11, NSS = 1 to 2)

5 GHz: Max 867 (MCS0 to MSC11, NSS = 1 to 2)

802.11b: 1, 2, 5.5, 11

802.11a/g: 6, 9, 12, 18, 36, 48, 54

802.11 n: 6.5 to 300 Mbps (MCS0 to MCS15) (Additional 25% bandwidth when enabling 256-QAM uner HT40)

802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9, NSS = 1 to 2)

### **Supported Radio Technologies**

802.11a/g/n/ac: Orthogonal Frequency-Division Multiplexing (OFDM)

802.11b: Direct-Sequence Spread Spectrum (DSSS)

802.11n/ac: 2×2 MIMO with 2 Streams

#### Channelization

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 (HT) Under the 2.4 GHz Radio—HT 40 MHz(256-QAM)

802.11n/ac Packet Aggregation: A-MPDU, A-SPDU

### **Supported Modulation**

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

### 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)

Complaint 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

# **Technical Specifications**

# 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

362.8 g

### **Dimensions**

161.5 x 161.5 x 41.6 mm

### **Package Contents**

- 1 ECW120 Cloud Managed Indoor Access Point
- 1 T-Rail Mounting Kit
- 1 Ceiling and Wall Mount Screw Kit
- 1 Mounting Bracket
- 1 Quick Installation Guide

### Compliance

### **Regulatory Compliance**

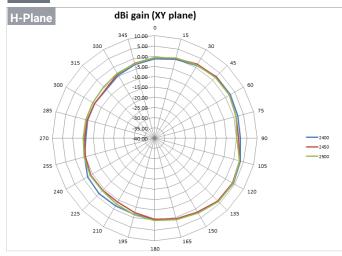
FCC

CE

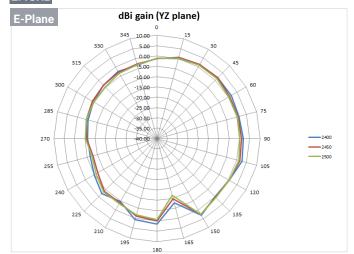
IC

# **Antennas Patterns**

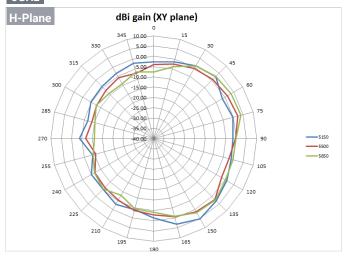
# 2.4GHz



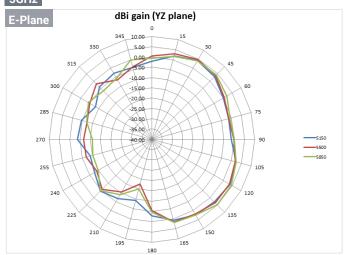
# 2.4GHz



# 5GHz

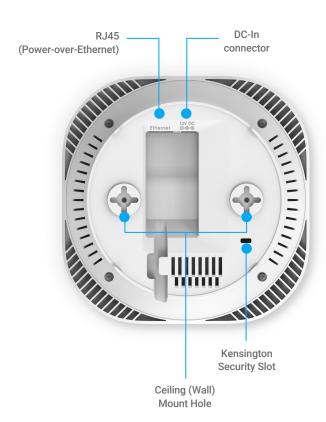


# 5GHz



# **Hardware Overviews**





EnGenius Technologies | Costa Mesa, California, USA

Emaill: <a href="mailto:support@engeniustech.com">support@engeniustech.com</a>
Website: <a href="mailto:www.engeniustech.com">www.engeniustech.com</a>
Local contact: (+1) 714 432 8668

EnGenius Networks Singapore Pte Ltd. | Singapore

Emaill: techsupport@engeniustech.com.sg
Website: www.engeniustech.com.sg
Local contact: (+65) 6227 1088

EnGenius Technologies Canada | Ontario, Canada

Email: <a href="mailto:support@engeniustech.com">support@engeniustech.com</a>
Website: <a href="mailto:www.engeniustech.com">www.engeniustech.com</a>
Local contact: (+1) 905 940 8181

EnGenius Networks Dubai | Dubai, UAE

Emaill: support@engenius-me.com
Website: www.engenius-me.com
Local contact: (+971) 4 339 1227

EnGenius Networks Europe B.V. | Eindhoven, Netherlands

Email: support@engeniusnetworks.eu Website: www.engeniusnetworks.eu Local contact: (+31) 40 8200 887

恩碩科技股份有限公司 | Taiwan, R.O.C.

Email: <a href="mailto:sales@engeniustech.com.tw">sales@engeniustech.com.tw</a>
Website: <a href="mailto:www.engeniustech.com.tw">www.engeniustech.com.tw</a>
Local contact: (+886) 933 250 628

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 1.0 07062023

