







Cloud Managed 11ac Wave 2 Indoor Wireless Access Point

Delivers higher speeds and user capacity and supercharges performance faster than 11ac Wave 1 APs

Product Highlights

EnGenius Cloud Managed ECW120 Beamforming Wi-Fi 802.11ac Wave 2 Indoor Access Point delivers 1.3 Gbps speeds and higher user capacity. It supercharges performance up to 30% faster than legacy 11ac Wave 1 APs. This dual-band AP with MU-MIMO and Beamforming features meshing, supports PoE, and improves connection reliability for business-class Wi-Fi.

Features & Benefits

- Dual-radio 2x2 802.11ac/a/b/g/n with MU-MIMO & Beamforming technology
- Supports up-to 867 Mbps in 5-GHz band & 400 Mbps in 2.4-GHz band
- Compliance with 802.3af & 48V PoE input for flexible installation up-to 328 feet
- Quick-Scan Device Register & Configuration and Remote Monitoring & Troubleshooting
- Cloud Manage unlimited number of AP's from Anywhere with the EnGenius Cloud App

Standards

IEEE 802.11b/	g/n on 2.4 GHz
---------------	----------------

IEEE 802.11a/n/ac Wave 2 on 5 GHz

Antenna

1 x 2.4 GHz: 5 dBi

1 x 5 GHz: 5 dBi

Integrated Omni-Directional Antenna

Physical Interface

1 x 10/100/1000 BASE-T, RJ-45 Ethernet Port

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 (ECW120)
Power Source
Power-over-Ethernet: 802.3af Input
IEEE 802.11e Compliant Source
12VDC /2A
Maximum Power Consumption
12W
Operating Frequency
Dual-Radio Concurrent 2.4 GHz & 5 GHz
Wireless & Radio Specifications Operating Frequency
Dual-Radio Concurrent 2.4 GHz & 5 GHz
Operation Modes
Manage Mode: AP, AP Mesh
Frequency Radio
2.4 GHz: 2400 MHz ~ 2472 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	

Tx Beamforming (TxBF)

Radio Chains/Spatial Stream	
2×2:2	

SU-MIMO

Two (2) spatial streams Single User SU-MIMO for up to 400 Mbps wireless data rate with VHT40 bandwidth to a 2x2 wireless client 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 Streams 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 (Mbps):

2.4 GHz: Max 400

5 GHz: Max 867

802.11b: 1, 2, 5.5, 11

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

802.11n: 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

802.11b: Direct-Sequence Spread Spectrum (DSSS)

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

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/ac Packet Aggregation: AMPDU, ASPDU

802.11n Supports Very High Throughput (VHT) Under the 2.4 GHz Radio-VHT 40 MHz (256-QAM)

Supported Modulation

802.11b: BPSK, QPSK, CCK

802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM

802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

Multiple BSSID

8 SSIDs on both 2.4GHz and 5GHz radios.

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
Wireless Security
OWE
WPA2 Personal
WPA3 Personal (SAE) - WPA3 Only
WPA3/WPA2 Personal Mixed
WPA2 Enterprise
WPA3 Enterprise Suite B
Hide SSID in Beacons
MAC Address Filtering, Up to 32 MACs per SSID
Wireless STA (Client) Connected List
SSH Tunnel
Client Isolation

Environment & 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: 0.80 lbs. (362 g)

Diameter: 6.36" (161.5 mm)

Height: 1.64" (41.5 mm)

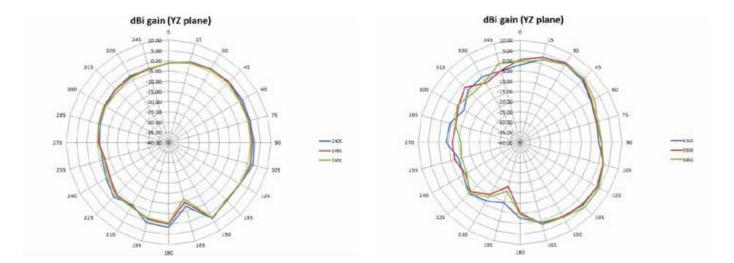
Package Contents

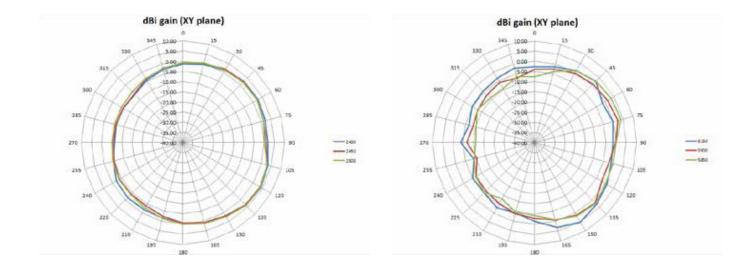
2 Year	
Warranty	
1 – Quick Installation Guide	
1 – Mounting Bracket	
1 – Ceiling and Wall Mount Screw Kit	
1 – T-Rail Mounting Kit	
1 – ECW120 Cloud Managed Indoor Access Point	

Certifications

IC

CE	
FCC	
IC	





ECW120 Indoor Access Point



EnGenius Technologies | 1580 Scenic Ave. Costa Mesa, CA 92626

Email: partners@engeniustech.com | Website: engeniustech.com Version: 1.00 07/2021

Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. For United States of America: Copyright ©2021 EnGenius Technologies, Inc. All rights reserved. Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range may vary depending on distance between devices or traffic and bandwidth load in the network.