



Cloud Managed Wi-Fi 6 2x2 Indoor Wireless Access Point

2x2 Indoor Wireless Access Point features newest Wi-Fi technology that advances Wi-Fi capabilities

Product Highlights

EnGenius Cloud Managed ECW220 Wi-Fi 6 (802.11ax) 2x2 Indoor Wireless Access Point features 802.11ax technology, such as OFDMA, MU-MIMO, and spatial reuse, to expand the capabilities of Wi-Fi. The low-profile AP consumes less power & provides maximum speeds of 574 Mbps (2.4 GHz frequency) and 1,200 Mbps (5 GHz frequency).

Features & Benefits

- Dual concurrent 802.11ax architecture & backward-compatible with 11ac/a/b/g/n client devices; 2x2 antenna
- Supports up to 1,200 Mbps in 5-GHz frequency band & 574 Mbps in 2.4-GHz frequency band
- Uplink and downlink of OFDMA improves transmission to APs and client devices
- Target wake time for power-saving of client & IoT devices
- Uplink & downlink of MU-MIMO for optimal signal & reception reliability for up to 2 devices

Standards

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

Antenna

2 x 2.4 GHz: 3 dBi
 2 x 5 GHz: 3 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

Power Source

Power-over-Ethernet: 802.3af Input
 12VDC /1.5A



LED Indicators

1 x Power
 1 x LAN
 1 x 2.4 GHz
 1 x 5 GHz

Maximum Power Consumption

12.8W

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 20 dBm on 2.4 GHz
 Up to 20 dBm on 5 GHz
 (Maximum power is limited by regulatory domain)

Tx Beamforming (TxBF)

Radio Chains/Spatial Stream

2x2:2

SU-MIMO

Two (2) spatial streams Single User SU-MIMO for up to 574 Mbps wireless data rate with HE40 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 1,200 Mbps wireless data rate for transmitting to two (2) streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Two (2) spatial streams MU-MIMO up to 574 Mbps wireless data rate for transmitting to two (2) streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

Supported Data Rates (Mbps):

802.11ax:

2.4 GHz: 9 to 287 (MCS0 to MCS11, NSS = 1 to 2)

5 GHz: 18 to 1200 (MCS0 to MSC11, NSS = 1 to 2)

802.11b: 1, 2, 5.5, 11

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

802.11n: 6.5 to 300 Mbps (MCS0 to MCS15)

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

Supported Radio Technologies

802.11ax: Orthogonal Frequency Division Multiple Access(OFDMA)

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

802.11b: Direct-sequence spread-spectrum (DSSS)

Channelization

802.11ax supports high efficiency (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 Very High Throughput (VHT) Under the 2.4 GHz Radio–VHT 40 MHz (256-QAM)

802.11n/ac Packet Aggregation: AMPDU, ASPDU

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

Management 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)

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

Hide SSID in Beacons

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

Outdoor Rating: IP67-Rated Enclosure

Dimensions & Weight

Weight: 0.85 lbs. (382 g)

Length: 6.30" (160 mm)

Width: 6.30" (160 mm)

Height: 1.31" (33.2 mm)

Package Contents

1 – ECW220 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 – Quick Installation Guide

Warranty

2 Year

Certifications

CE

FCC

IC