



ECW220



EnGenius Cloud Managed WiFi 6 2x2 Indoor Wireless Access Point

Optimal Performance, Enterprise Features & Cloud Management



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
- 1 GbE realizes high throughput and supports 802.3at for flexible installation up-to 100 meters (328 feet)
- 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

Technical Specifications

ECW220

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: 4dBi

2 x 5 GHz: 5dBi

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

Power Source

Power-over-Ethernet: 802.3at Input

12VDC /1.5A

Maximum Power Consumption

12.8W

Wireless & Radio Specifications

Dual-Radio Concurrent 2.4 GHz & 5 GHz

Operation Modes

Managed 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 22 dBm on 2.4 GHz

Up to 22 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 1,200 (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 300Mbps (MCS0 to MCS15)

802.11ac: 6.5 to 867Mbps (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 under the 2.4GHz radio—VHT40 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

Management

Management 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

WPA2 Personal (SAE)-WPA3 Only

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

Device ECW220

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

Certifications

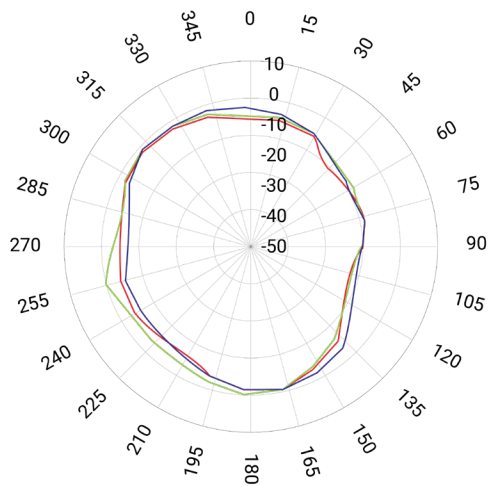
FCC, CE, IC

Warranty

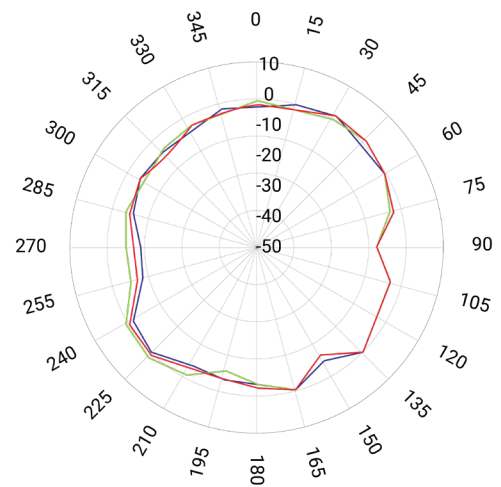
2 Year

Antennas Patterns

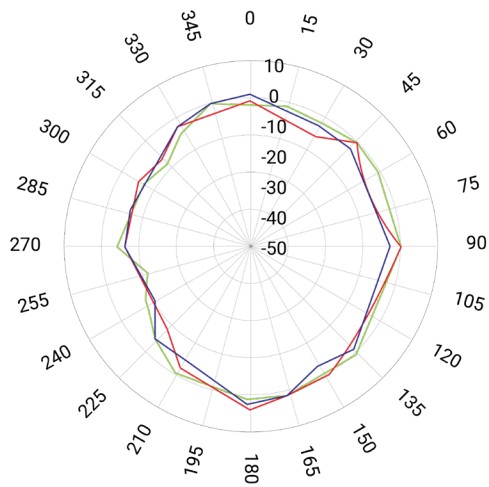
dBi Gain (XY plane)



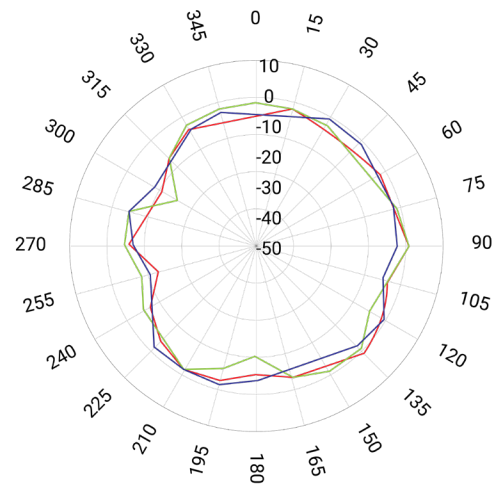
dBi Gain (YZ plane)



dBi Gain (XY plane)



dBi Gain (YZ plane)

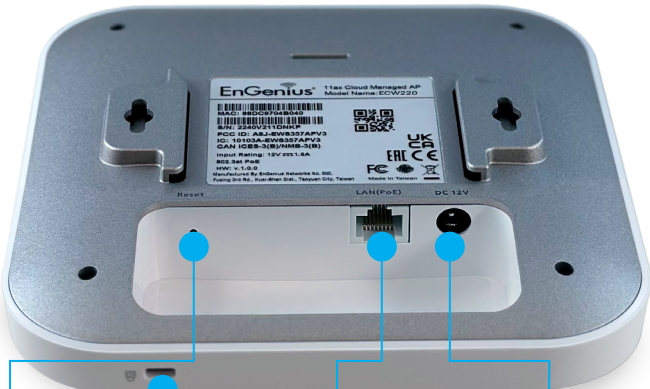


Product Images

LED Indicators



Kensington Security Slot



Reset Button Kensington Security Slot 2.5Gbps LAN (PoE, 802.3at) DC-Jack

Plug & Play with Zero Configuration

Scan & Go



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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.

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