EnGenius

Datasheet

ECW220S

EnGenius Cloud Managed Security Access Point

Optimal Performance, Enterprise Security & Cloud Management

Product Highlights

EnGenius ECW220S Cloud Managed Wi-Fi 6 2x2 security access point features a 24/7 intelligent wireless security system while providing maximum Wi-Fi performance. The security AP also provides zero-wait DFS to avoid connection disruption, built-in RF spectrum analysis to identify the most efficient channels, and sensors to detect nearby Bluetooth devices.

AirGuard™

Features & Benefits

- Wi-Fi 6 technology for high-performance Wi-Fi in high-density, multi-device environments
- 2x2 antennas to support up to 1,200 Mbps in 5 GHz & 574 Mbps in 2.4 GHz
- 1 GbE throughput and 802.3at support for flexible installation over 100 meters (328 feet)
- Wireless intrusion detection system (WIDS) for threat detection
- Wireless intrusion protection system (WIPS) for attack remediation
- Zero-wait DFS to avoid client disruption when radar is detected on DFS channels
- Dedicated scanning radios for 24/7 wireless security monitoring
- RF spectrum analysis for identifying clean channels and ensuring all SSIDs are legitimate
- Bluetooth 5 low energy for BLE device detection and location-based extended advertising

Standards

IEEE 802.11b/g/n on 2.4 GHz

IEEE 802.11ax on 5 GHz

(Backward compatible with 802.11b/g/n/ac)

2.4 GHz Bluetooth 5 Low Energy (BLE) Radio

Antenna

2 x 2.4 GHz: 4dBi

2 x 5 GHz: 5dBi

Scanning Radio

1 x 2.4 GHz

1 x 5 GHz

Integrated Omni-Directional Antenna

BLE: 6 dBi

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

1x Scanning Radio

1x Bluetooth 5 Low Energy

Power Source

Power-over-Ethernet: 802.3at Input

12VDC /1.5A

Maximum Power Consumption

12.8W

Wireless & Radio Specifications Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

Operation Modes

Managed mode: AP and 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

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)

Increasing signal reliability and transmitting distance.

Radio Chains/Spatial Stream

2×2:2

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 trans-mitting 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 trans-mitting 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 under the 2.4GHz radio –VHT40 MHz (256-QAM)

802.11n/ac/ax packet aggregation: A-MPDU, A-SPDU

Dynamic Frequency Selection (DFS) Certified

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

WPA3 Enterprise

WPA3-PSK (SAE)

WPA3/WPA2-PSK Mixed

WPA2 Enterprise (AES)

WPA2 AES-PSK

Hide SSID in Beacons

MAC Address Filtering, Up to 32 MACs per SSID

Wireless STA (Client) Connected List

SSH Tunnel

Client Isolation

Wireless Monitoring

WIPS/WIDS Dedicated Dual-Band Radios

Rogue AP & Device Detection

RF Spectrum Analysis

Zero-Wait DFS

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: 0.86 lbs. (392 g)

Length: 6.30" (160 mm)

Width: 6.30" (160 mm)

Height: 1.31" (33.2 mm)

Package Contents

1 – ECW220S 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

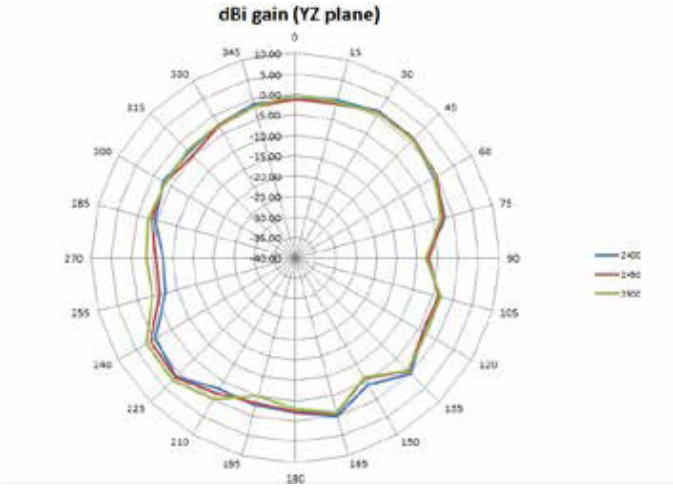
Warranty

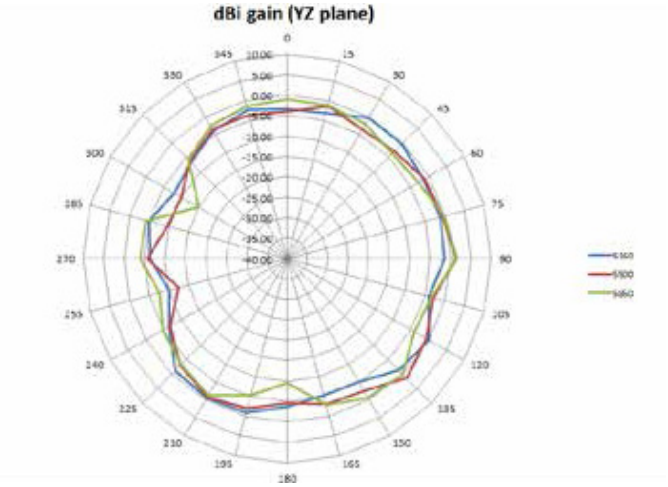
2 Year

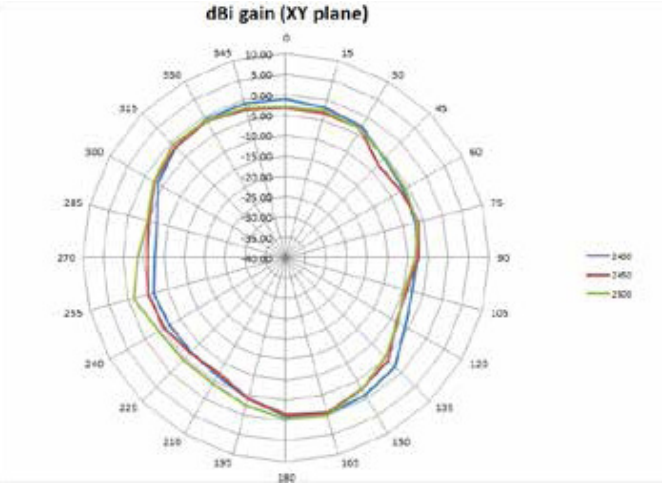
Certifications

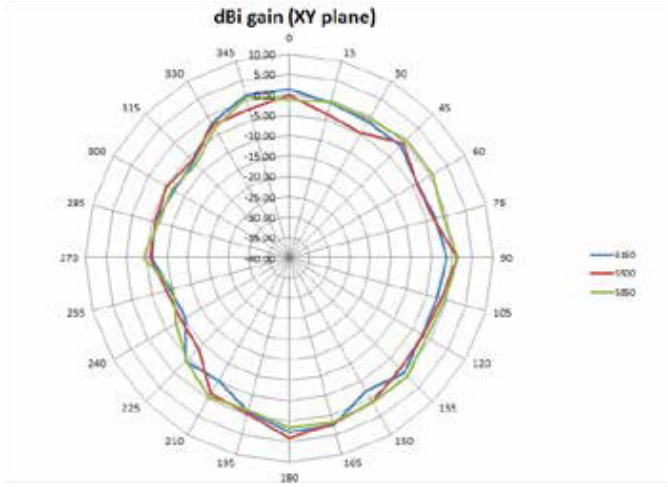
CE

FCC

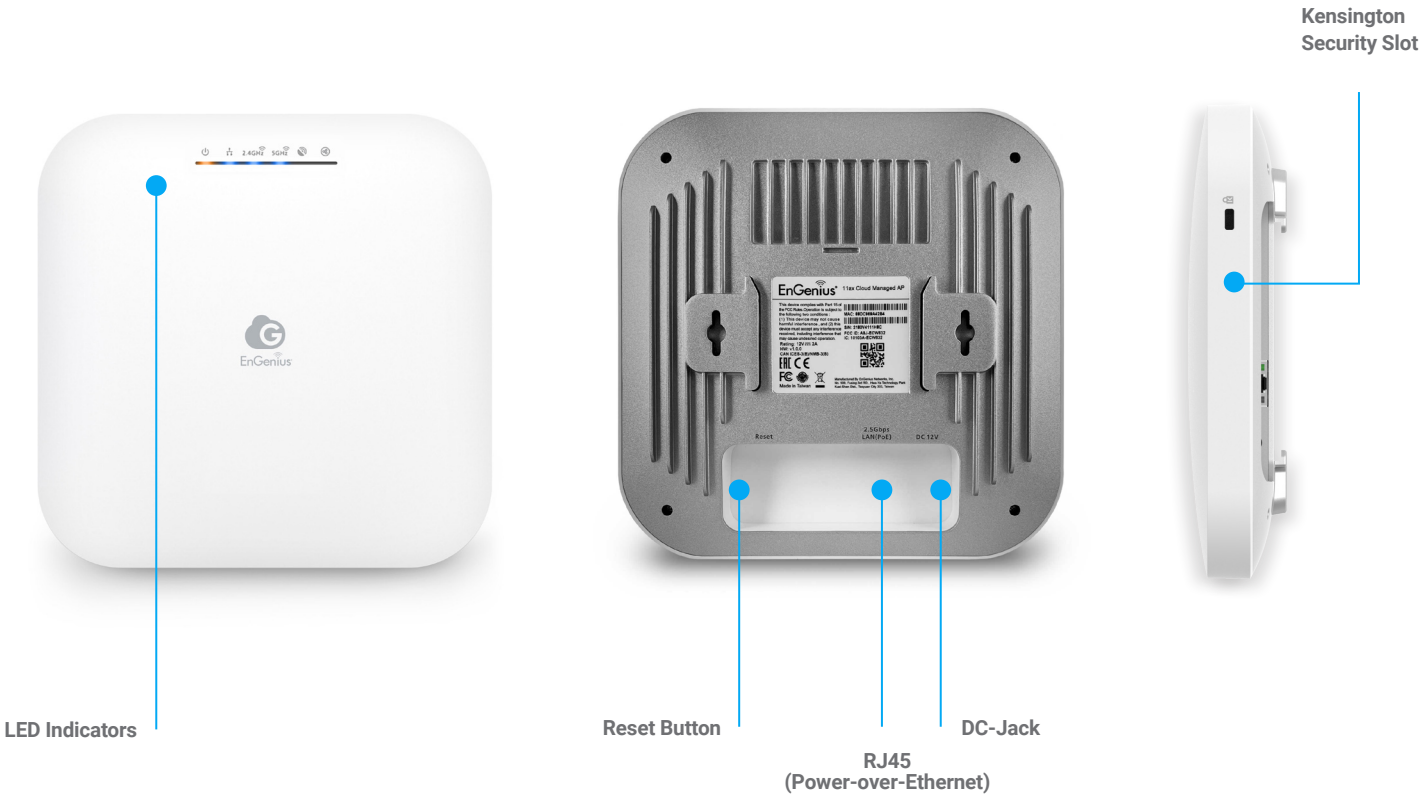








ECW220S Security Access Point



Plug & Play with Zero Configuration

Scan & Go

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

Email: partners@engeniustech.com | Website: engeniustech.com

Version: 1.00 11/2021