

ECW536

EnGenius Cloud Managed 4x4x4 Indoor Tri-Band WiFi 7 Access Point

Extreme Performance, Enterprise Features & Cloud Management



The EnGenius Cloud Managed ECW536 is a sleekly designed Wi-Fi 7 tri-band 4x4x4 access point that supports up to 18.7 gigabits speeds using 2.4 GHz, 5 GHz, and 6 GHz band. The ECW536 using Wi-Fi 7 standards supports 320 MHz channels, 4-MU-MIMO, 4096-QAM, Multi-Link Operation and Multi-RU puncturing to increase reliability and performance by using multiple bands, avoiding interference, and reducing latency. The ECW536 is supported with two 10 GbE ports, 1st port supporting PoE++ for easy install and a 2nd port for gigabit speed to another device.

Features & Benefits

- Wi-Fi 7 Tri-band, 2.4GHz, 5 GHz, and 6 GHz supports 18.7 Gbps aggregate speeds.
- Ultra-wide 320 MHz channels in 6 GHz to deliver extreme throughput gains.
- 4x4x4 integrated omni-directional antenna design for greater coverage area.
- 4 MU-MIMO spatial streams to ensure premium performance in high density environments.
- 4096-QAM advanced modulation packs more data for throughput and capacity.
- Multi-Link Operation (MLO) increases throughput and reliability utilizing multiple bands.
- Multi-RU puncturing avoids interference, increases throughput, and reduces latency.
- Sleek ceiling-mount with a modern multi-color LED for low-profile design.
- Simple click-n-twist mounting and Kingston lock for easy and secure installation.
- 10 GbE PoE++ port to maximize multi-gigabit connection speeds and AP placement.
- Secondary 10 GbE port to conveniently connect to another high-performance device.
- Cutting-edge cloud management for centralized management and mass scalability.
- Advanced enterprise security with radius and isolated guest access for more secure networks.
- Access point diagnostic tools for real-time remote monitoring and troubleshooting.

Technical Specifications

ECS536

Standards

IEEE 802.11be on 2.4 GHz

IEEE 802.11be on 5 GHz

IEEE 802.11be on 6 GHz

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

Processor

Qualcomm[®] Networking Pro 1220

Antenna

4 x 2.4 GHz: 5 dBi

4 x 5 GHz: 6 dBi

4 x 6 GHz: 5 dBi

Physical Interface

2 x 10/100/1000/2500/5000/10000 BASE-T, RJ-45 Ethernet Port

1x DC Jack

1 x Reset Button

LED Indicators

1 x Multi-Color LED

Power Source

Power-over-Ethernet: 802.3bt Input

12VDC /3A Power Adapter (Not Included)

Maximum Power Consumption

35W

Wireless & Radio Specifications

Operating Frequency

Tri-Radio Concurrent 2.4 GHz, 5 GHz, & 6 GHz

Operation Modes

AP, Mesh

Frequency Radio

2.4 GHz: 2400 MHz ~ 2482 GHz

5 GHz: 5150 MHz ~ 5250 MHz, 5250 MHz ~ 5350 MHz, 5470 MHz ~ 5725 MHz, 5725 MHz ~ 5850 MHz

6 GHz: 5.925 GHz ~ 6.425 GHz, 6.425 GHz ~ 6.525 GHz, 6.525 GHz ~ 6.875 GHz, 6.875 GHz ~ 7.125 GHz

Transmit Power

Up to 25 dBm on 2.4 GHz

Up to 24 dBm on 5 GHz

Up to 24 dBm on 6 GHz

(Maximum power is limited by regulatory domain)

Tx Beamforming (TxBF)

Increasing signal reliability and transmitting distance.

Radio Chains/Spatial Stream

4x4x4:4

SU-MIMO

Four (4) spatial stream Single User (SU) MIMO for up to 1,376 Mbps wireless data rate with VHT40 bandwidth to a 4x4 wireless device under the 2.4GHz radio.

Four (4) spatial stream Single User (SU) MIMO for up to 5,764 Mbps wireless data rate with HE160 bandwidth to a 4x4 wireless device under the 5GHz radio.

Four (4) spatial stream Single User (SU) MIMO for up to 11,529 Mbps wireless data rate with EHT320 bandwidth to a 4x4 wireless device under the 6GHz radio.

MU-MIMO

Four (4) spatial stream Multi-User (MU)-MIMO for up to 1,376 Mbps wireless data rate with VHT40 bandwidth to a 4x4 wireless device under the 2.4GHz radio simultaneously.

Four (4) spatial stream Multi-User (MU)-MIMO for up to 5,764 Mbps wireless data rate with HE160 bandwidth to a 4x4 wireless device under the 5GHz radio simultaneously.

Four (4) spatial stream Multi-User (MU)-MIMO for up to 11,529 Mbps wireless data rate with EHT320 bandwidth to a 4x4 wireless device under the 6GHz radio simultaneously.

Supported Data Rates (Mbps)

802.11be:

- 6 GHZ: Max 11,600 (MCS0 to MSC13, NSS = 1 to 4)
- 5 GHz: Max 5,800 (MCS0 to MSC11, NSS = 1 to 4)
- 2.4 GHz: Max 1,440 (MCS0 to MCS11, NSS = 1 to 4)

802.11ax:

- 6 GHZ: 18 to 4,800 (MCS0 to MSC13, NSS = 1 to 4)
- 5 GHz: 18 to 2,400 (MCS0 to MSC11, NSS = 1 to 4)
- 2.4 GHz: 9 to 1,148 (MCS0 to MCS11, NSS = 1 to 4)

802.11ac: 6.5 to 1733 Mbps (MCS0 to MCS9, NSS = 1 to 4)

802.11n: 6.5 to 600 Mbps (MCS0 to MCS15)

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

802.11b: 1, 2, 5.5, 11

Supported Radio Technologies

802.11be supports extreme high efficiency (EHT)-EHT 20/40/80/160/320 (6 GHz only) MHz

802.11ax supports high efficiency (HE)-HE 20/40/80/160 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

802.11be: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, 4096-QAM

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	Environment & Physical
Multiple BSSID	Temperature Range
8 SSIDs for 2.4GHz, 5GHz, & 6 GHz radios	Operating: 32°F~104°F (0°C~40°C)
VLAN Tagging	Storage: -40°F~176 °F (-40°C~80°C)
Supports 802.1q SSID-to-VLAN Tagging	Humidity (non-condensing)
Cross-Band VLAN Pass-Through	Operating: 90% or less
Management VLAN	Storage: 90% or less
Spanning Tree	Dimensions & Weights
Supports 802.1d Spanning Tree Protocol	ECW536 Device
QoS (Quality of Service)	Weight: TBD
IEEE 802.11e compliant	Length: 9.06" (230 mm)
WMM	Width: 9.06" (230 mm)
SNMP	Height: 1.46" (37 mm)
v1, v2c, v3	Packaging
MIB	Weight: TBD
I/II, Private MIB	Length: TBD
Wireless Security	Width: TBD
WPA3 Enterprise	Height: TBD
WPA3-PSK (SAE)	Master Carton
WPA3/WPA2-PSK Mixed	Weight: TBD
WPA2 Enterprise	Length: TBD
WPA2 AES-PSK	Width: TBD
Hide SSID in Beacons	Height: TBD
MAC Address Filtering, up to 256 MACs per SSID	No. of boxes per carton
Wireless STA (Client) Connected List	10 units
SSH Tunnel	Package Contents
Client Isolation	1 – ECW536 Cloud Managed Indoor Access Point
L2 Isolation	1 –Mount Base
	1 - Ceiling and Wall Mount Screw Kits
	1 - Quick Installation Guide

Certifications

FCC, CE, IC

Warranty

2 Year

Product Images



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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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