EWS276-Fit

EnGenius Fit Wi-Fi 6 4x4 Indoor Wireless Access Point

Simple • Secure • Smart

The EnGenius EWS276-Fit access point is Wi-Fi 6 4x4 access point that can be managed using the Fit mobile app, Fit on-premises controller, or Fit cloud management system. The EWS276-Fit supports up to 3.5 Gbps aggregate Wi-Fi speeds, one 2.5 GbE PoE+ port and eight 5 dBi internal antennas. This EnGenius AP has the ability to provide faster speeds, improved coverage, and 250 concurrent connections.

Features & Benefits

- Dual concurrent 802.11ax architecture & backward-compatible with 11ac/a/b/g/n client devices; 4x4 antenna
- Supports up to 2,400 Mbps in 5-GHz frequency band & 1,148 Mbps in 2.4-GHz frequency band
- 2.5 GbE realizes greater throughput and supports 802.3at & 48V PoE input for flexible installation over 100 meters (328 feet)
- Select mobile app, on-premises, cloud lite management options based on network architecture, administrative permissions.
- From anywhere cloud visibility and control
- Setup in minutes with app-based step by step instructions
- Quick-scan device register, remote monitoring, and troubleshooting
- Real-time system metrics, analytics, and remote configurations
- No access point licensing or subscription fees
- 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
- BSS coloring for tagging packets with a “color” to differentiate between adjacent basic service sets.
- Spatial reuse identifies color sets via BSS coloring & simultaneously transmits on the same channel, reducing transmission waiting time and contention.

Technical Specifications

EWS276-Fit

Standards

IEEE 802.11ax on 2.4 GHz

IEEE 802.11ax on 5 GHz

Backward compatible with 802.11a/b/g/n/ac

Processor

Mediatek MT7986A Quad-core A53 2GHz

Antenna

4 x 2.4 GHz: 5 dBi

4 x 5 GHz: 5 dBi

Integrated Omni-Directional Antenna

Physical Interface

1 x 10/100/1000/2500 N-BASE-T, RJ-45 Ethernet Port

1x 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 /2A

Maximum Power Consumption

17W

Wireless & Radio Specifications

Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

Operation Modes

AP

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 23 dBm on 2.4 GHz

Up to 23 dBm on 5 GHz

(Maximum power is limited by regulatory domain)

Tx Beamforming (TxBF)

Yes

Radio Chains/Spatial Stream

4x4:4

SU-MIMO

Four (4) spatial stream SU-MIMO for 2.4GHz and four spatial stream SU-MIMO for 5GHz up to 3,548 Mbps wireless data rate to a single wireless client device under both the 2.4 GHz and 5GHz radios.

MU-MIMO

Four (4) spatial streams Multiple (MU)-MIMO for up to 2400 Mbps wireless data rate to transmit to two (2) two streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Four (4) multiple (MU)-MIMO for up to 1,148 Mbps wireless data rate to transmit to two streams MUMIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

Supported Data Rates (Mbps)

802.11ax:
- 2.4 GHz: 9 to 1148 (MCS0 to MCS11, NSS = 1 to 4)
- 5 GHz: 18 to 2400 (MCS0 to MSC11, NSS = 1 to 4)

802.11b: 1, 2, 5.5, 11

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

802.11n: 6.5 to 600 Mbps (MCS0 to MCS31)

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

Supported Radio Technologies

802.11ax: Orthogonal Frequency Division Multiple Access (OFDMA)

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

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

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

Max Concurrent

128 per radio

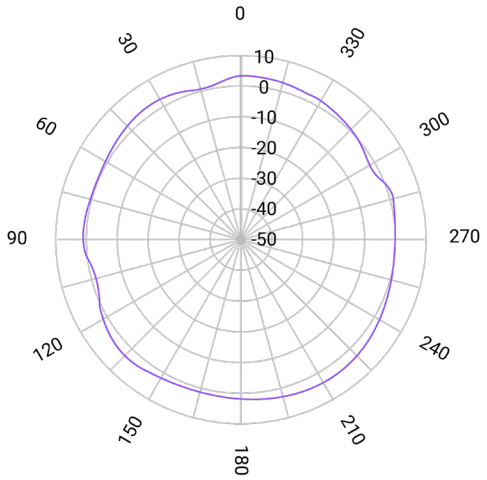
Management
Multiple BSSID
8 SSIDs for both 2.4GHz and 5GHz radios.
VLAN Tagging
Supports 802.1q SSID-to-VLAN Tagging
Cross-Band VLAN Pass-Through
Management VLAN
Spanning Tree
Supports 802.1d Spanning Tree Protocol
QoS (Quality of Service)
Compliant with IEEE 802.11e Standard
WMM
SNMP
v1, v2c, v3
MIBzz
I/II, Private MIB
Wireless Security
WPA3
WPA2 Enterprise (AES)
WPA2 AES-PSK
Hide SSID in Beacons
MAC Address Filtering, up to 32 MACs per SSID for standalone mode
MAC Address Filtering, up to 256 MACs per SSID for managed mode
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 & Weights
Device EWS276-Fit
Weight: 1.26 lbs. (0.57 kg)
Length: 8.10" (205.7 mm)
Width: 8.10" (205.7 mm)
Height: 1.31" (33.2 mm)
Packaging
Weight: 1.92 lbs. (0.87 kg)
Length: 9.72" (247 mm)
Width: 9.72" (247 mm)
Height: 3.43" (87 mm)
Master Carton
Weight: 22.18 lbs. (10.06 kg)
Length: 20.39" (518 mm)
Width: 18.03" (458 mm)
Height: 11.26" (286 mm)
No. of product boxes per master carton
10 units
Package Contents
1 - EWS276-Fit 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 Kits
Quick Start Guide QR Code
Mobile App QR Code
RoHS
Yes
Regulatory Compliance
FCC, CE, IC, UKCA
Warranty
1 Year

Antennas Patterns

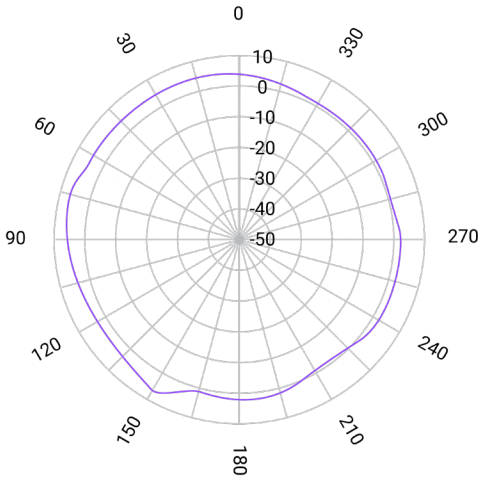
2.5GHz: H-Plane

dBi Gain (XZ plane)



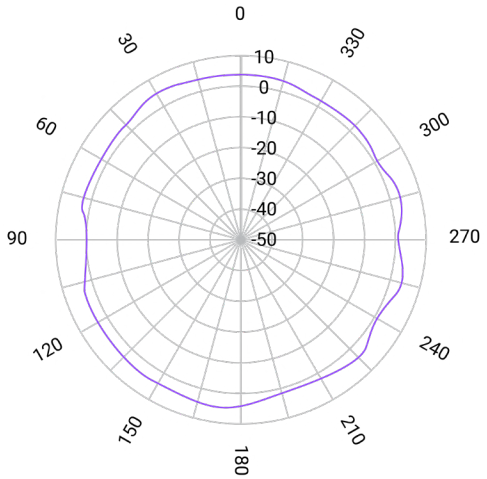
2.4GHz: E-Plane

dBi Gain (YZ plane)



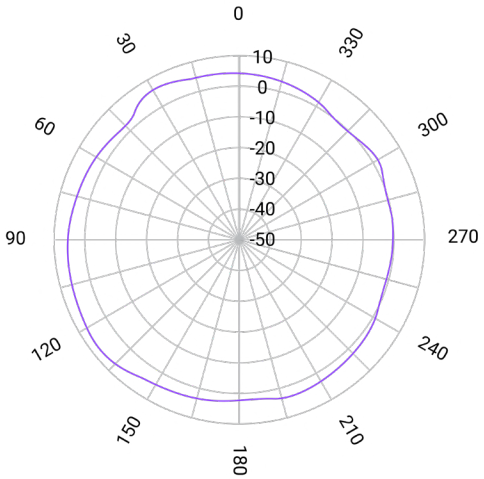
5GHz: H-Plane

dBi Gain (XZ plane)

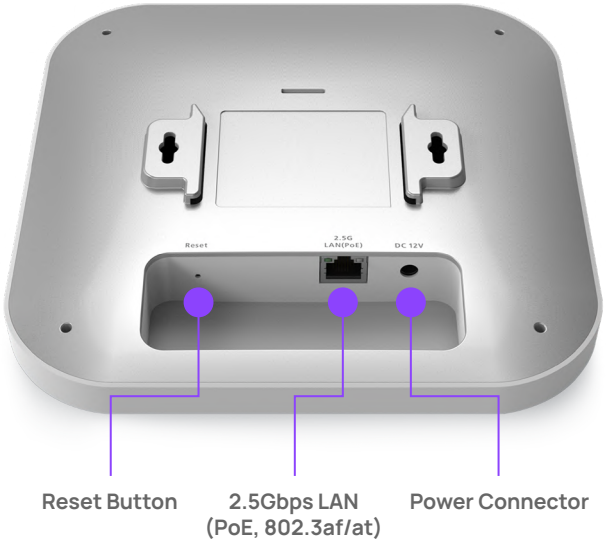


5GHz: E-Plane

dBi Gain (YZ plane)



Product Images



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Version: 08/2023

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.