



# EWS356-FIT



# EnGenius Fit Managed EWS356-FIT Wi-Fi 6 2x2 Indoor Wireless Access Point

Simple • Secure • Smart



EnGenius Fit Managed EWS356-FIT Wi-Fi 6 2x2 indoor wireless access point is a business-class device that provides secure and reliable high performance while reducing capital and operating expenses for cost-conscious small businesses. With support for the latest 802.11ax technology, this access point can deliver maximum speeds of 574 Mbps (2.4 GHz) and 1200 Mbps (5 GHz). Additionally, it features an easy-to-use web interface for cloud or on-premises management options based on network architecture and technical aptitude.

# **Features & Benefits**

- Dual concurrent 802.11ax architecture & backwardcompatible 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
- Select cloud or on-premises 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.
- GigE PoE-Compliance with 802.3at & 48V PoE input for flexible installation up-to 328 feet
- Mesh wireless support simplifies setup, optimizes signals & self-heals

# **Technical Specifications**

Standards

IEEE 802.11ax on 2.4 GHz

IEEE 802.11ax on 5 GHz

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

#### Processor

Qualcomm® Dual-Core CPU ARM Cortex A53 @ 1.0GHz

# Antenna

2 x 2.4 GHz: 4 dBi

2 x 5 GHz: 5 dBi

Integrated Omni-Directional Antenna

### **Physical Interface**

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

1x DC Jack

1 x Reset Button

**LED Indicators** 

1 x Colors LEDs

#### **Power Source**

Power-over-Ethernet: 802.3at Input

12VDC /2A

#### **Maximum Power Consumption**

17.4W

# WIRELESS & RADIO SPECIFICATIONS

#### **Operating Frequency**

Dual-Radio Concurrent 2.4 GHz & 5 GHz

### **Operation Modes**

AP, Mesh, AP 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 21 dBm on 2.4 GHz

# Up to 21 dBm on 5 GHz

TX BEAMFORMING (TXBF)

**Radio Chains/Spatial Stream** 

# 2x2:2

# SU-MIMO

Two (2) spatial streams SU-MIMO for 2.4GHz and two (2) spatial streams SU-MIMO for 5GHz up to 1,774Mbps wireless data rate to a single 11ax wireless client device under both the 2.4G Hz and 5GHz radios.

#### **MU-MIMO**

Two (2) spatial streams Multiple (MU)-MIMO for up to 1200 Mbps wireless data rate to transmit to one (1) two streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Two (2) multiple (MU)-MIMO for up to 574 Mbps wireless data rate to transmit to one (1) two streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

## SUPPORTED DATA RATES (MBPS)

802.11ax:

• 2	.4 GHz:	9 to 574	(MCS0 t	o MCS11	, NSS =	1 to 2)
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• 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)

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

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

# Channelization

802.11ax supports very high throughput (VHT) –VHT 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

**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	DIMENSIONS & WEIGHTS		
Supports 802.1d Spanning Tree Protocol	EWS356-FIT Device		
QoS (Quality of Service)	Weight: 0.83 lbs. (380 g)		
Compliant With IEEE 802.11e Standard	Length: 6.30" (160 mm)		
WMM	Width: 6.30" (160 mm)		
SNMP	Height: 1.18" (30 mm)		
v1, v2c, v3	Packaging		
MIB	Weight: 1.10 lbs. (500 g)		
I/II, Private MIB	Length: 10.35" (263 mm)		
Wireless Security	Width: 6.41" (163 mm)		
WPA3-PSK (SAE)	Height: 1.49" (38 mm)		
WPA3 Enterprise	Package Contents		
WPA2 Enterprise (AES)	1 - EWS356-FIT Cloud Managed Indoor Access Point		
WPA2 AES-PSK	1 – Ceiling Mount Base (9/16" Trail)		
OWE	1 – Ceiling Mount Base (15/16" Trail)		
Hide SSID in Beacons	1 - Ceiling and Wall Mount Screw Kits		
MAC Address Filtering, Up to 32 MACs per SSID	Quick Start Guide QR Code		
Wireless STA (Client) Connected List	Mobile App QR Code		
SSH Tunnel	Certifications		
Client Isolation	FCC, CE, IC		
ENVIRONMENT & PHYSICAL	Warranty		
Temperature Range	1 Year		
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			

# **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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