EWS850-FIT

Fit6 2x2 Outdoor

EnGenius Fit 802.11ax 2x2 Dual-Band Managed Outdoor Wireless Access Point

Overview

EnGenius Fit6 2x2 Managed Outdoor Wireless Access Point brings Wi-Fi 6 to your outdoor space with lightning speeds of up to 574 Mbps/2.4 GHz and 1,200 Mbps/5GHz for unparalleled performance. Its IP67 weatherproof housing provides a safe haven from the elements while its high gain antenna ensures that you remain connected in even the most remote locations without sacrificing security thanks to WPA3/WPA2-PSK (AES) encryption capabilities.

Features & Benefits

- Dual concurrent 802.11ax architecture and backward compatible with ac/a/b/g/n client devices.
- 360° omni-directional antennas to achieve comprehensive coverage for networking client devices under a pervasive environment.
- 5 dBi integrated 2x2 antenna
- Supports up to 1,200 Mbps in the 5GHz frequency band & 574 Mbps in the 2.4GHz frequency band
- 1x 2.5GE PoE+ port for flexible power options
- Compliance with Proprietary 48V PoE Input for flexible installation and implementing remotely reset/reboot Access Point over 100 meters (328 feet).
- Robust housing with IP67 enclosure rated to deploy at extremely weather .
- WPA3 & WPA2-AES authentication support
- Local and remote management over Fitcon controller without fees

Technical Specifications

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Standards

802.11a/b/g/n/ac/ax

Antenna - 2.4GHz

5dBi

Antenna - 5GHz

5dBi

Physical Interfaces

1 x 10/100/1000/2500 BASE-T

LED indicators

1 x Power

1 x LAN

1 x 2.4 GHz

1 x 5 GHz

Power Source

PoE 802.3af/at

Maximum Power Consumption

15.9W

Wireless & Radio Specifications

Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

Operation Modes

Managed mode: AP, AP Mesh, 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 23 dBm on 2.4 GHz

Up to 25 dBm on 5 GHz

(Maximum power is limited by regulatory domain)

Radio Chains

2 × 2:2

SU-MIMO

Two (2) spatial stream 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 1,200 Mbps wireless data rate with VHT80 to a 2x2 wireless device under the 5GHz radio.

MU-MIMO

Two (2) spatial streams Multiple (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 Multiple (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

802.11ax:

2.4 GHz: 9 to 574 (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 Technology

802.11ax: Orthogonal Frequency Division Multiple Access(OFDMA)

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

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

Channelization

802.11ax supports high efficiency throughput (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 high throughput under the 2.4GHz radio –HT40 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 User

128 per radio

Environmental & Physical

Operating Temperature

-4°~140°F/-20°C~60°C

Storage Temperature

-40F°~176°F/-40°C~80°C

Storage Humidity

Storage: 90% or less

IP Rating

IP67

Surge Protection

1KV

ESD Protection

Contact: 4KV Air: 8 K

Technical Specifications

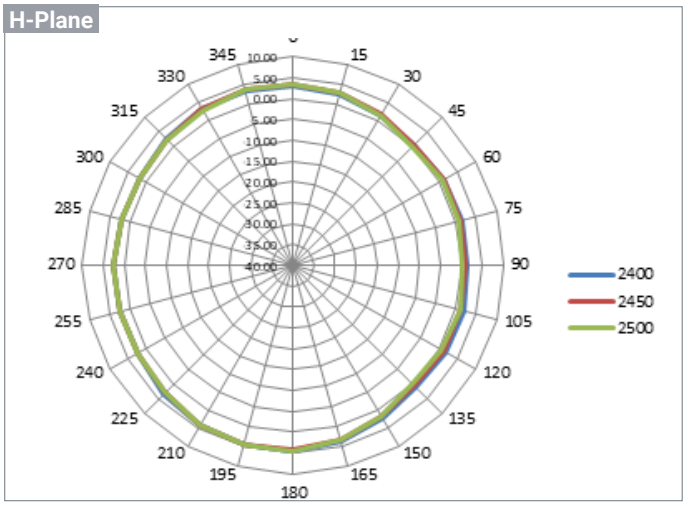
Dimensions & Weight
Weight
720 g
Dimensions
190x 124 x 47 mm
Package Contents
1 – EWS850-FIT Outdoor Access Point
2 – Pole-Mounting Brackets
1 – Wall-Mount Screw Set
2 – 2.4GHz 5dBi SMA Antennas
2 – 5GHz 5dBi SMA Antennas
1 – Quick Installation Guide
1 – EPA5006GR PoE Injector

Compliance
Safety Compliance
CB
WEEE
Yes
RoHS
Yes
Regulatory Compliance
FCC
CE
IC
UKCA

Antennas Patterns

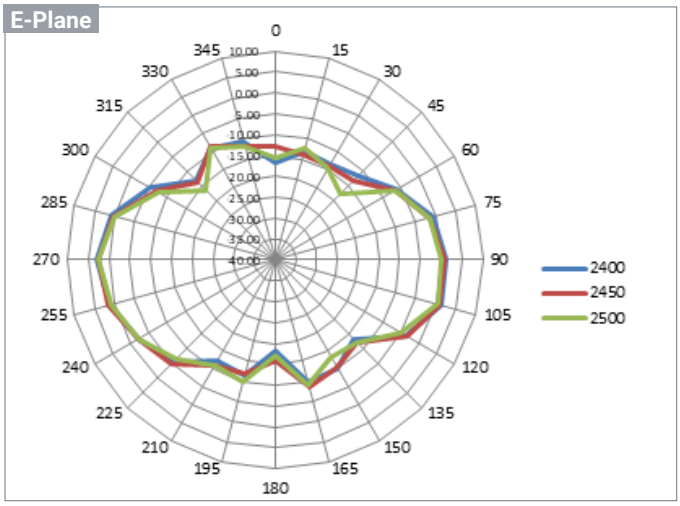
2.4GHz

H-Plane



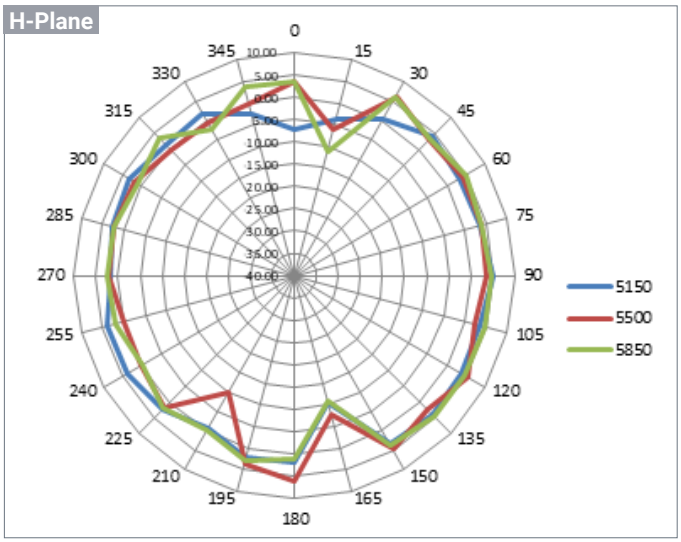
2.4GHz

E-Plane



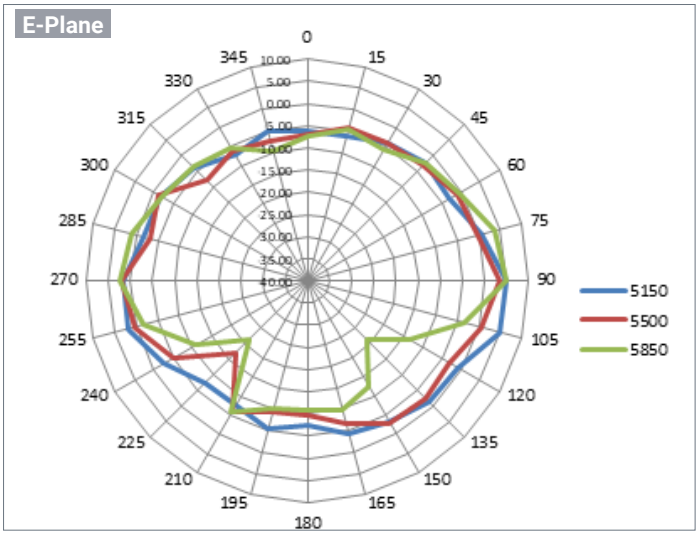
5GHz

H-Plane

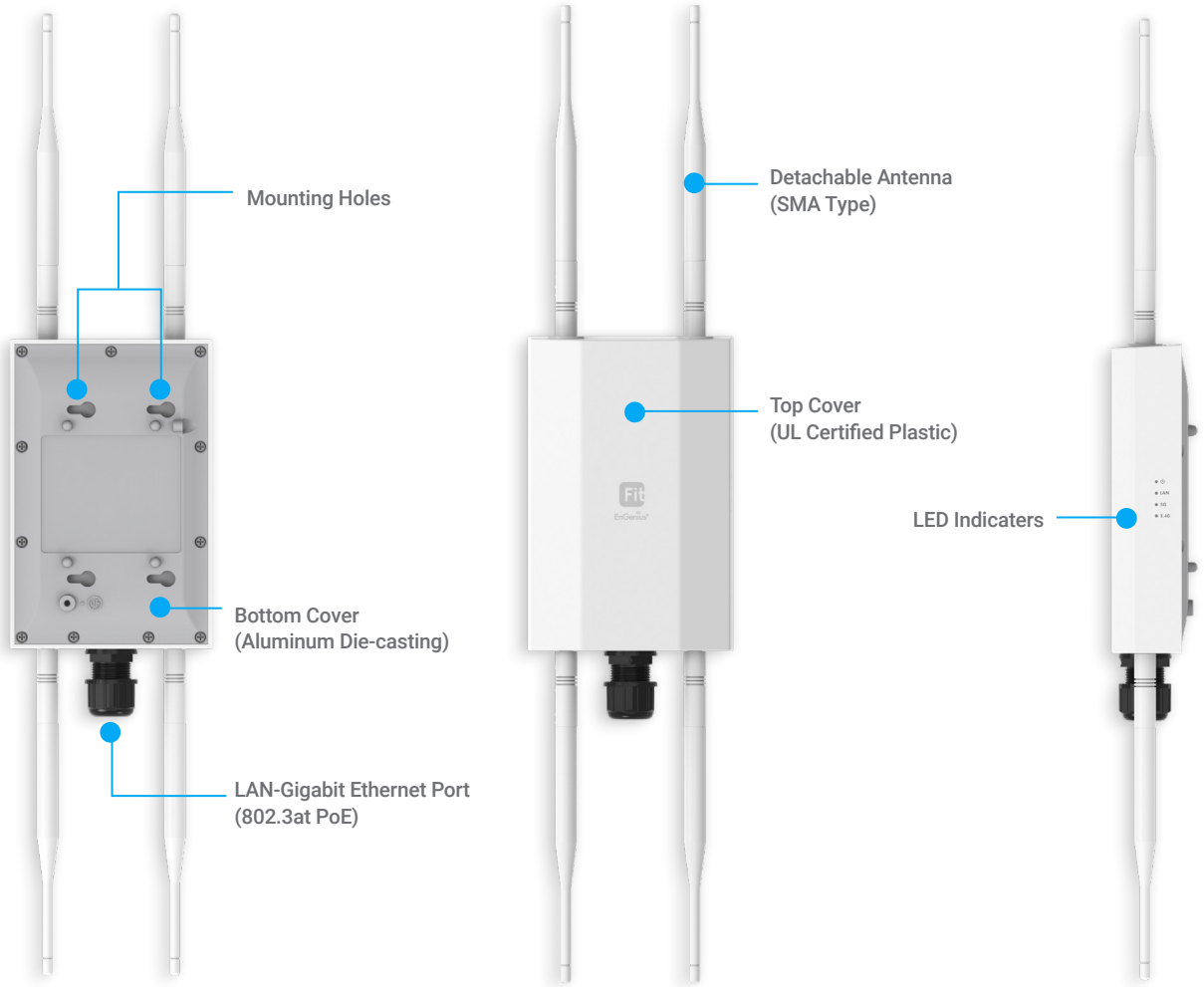


5GHz

E-Plane



Hardware Overviews



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