

**EnGenius Fit Access Points** 



# **Managed Access Points**

Flexible, Reliable, and Secure Wireless Connectivity

EnGenius Fit Access Points provide wireless connectivity that's flexible, scalable and reliable for wireless applications. The powerful, business-class performance of access points are suitable for small business that has less or no IT resources.

### Affordable High-Performance Devices

Support faster 11ax (Wi-Fi 6) wireless speed in heavy multi-application traffic services. More devices can be used simultaneously with less latency.

### Flexible Power Options with Power-over-Ethernet

Flexible AP placement is possible with PoE support. Deploy APs on ceilings or in other locations even where power outlets are scarce. Connect and power APs via Ethernet cables on 802.3at/af PoE-capable switches, or with a PoE adapter from up to 328 feet from the power source.

### Outdoor Access Points Perform Better in Harsh Environments

EnGenius outdoor APs withstand temperatures ranging from -20° C to 60°C, IP67 standard waterproofing, and anti-UV protection.

### **Reliable Connectivity & Network Protection**

Ensure seamless, reliable connectivity for users and efficiently steer dual-band clients to the less congested 5 GHz band.Establish guest networks to prevent guest users from accessing network files or devices and segment user groups for increased security and bandwidth control.

### **Features & Benefits**

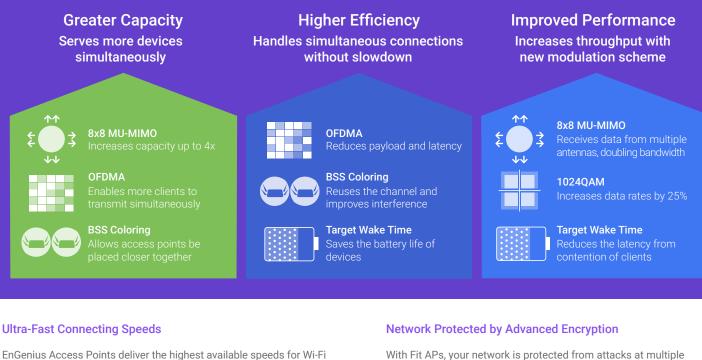
- Supports standards up to 802.11ax and backward compatible with 11ac/a/b/g/n
- The latest Wi-Fi 6 technology features high-capacity, high-efficient, and enhanced performance
- Dual-radio MU-MIMO improves performance, expands capacities
- · Industrial-grade IP67-rated housing for outdoor model
- Withstands harsh environment to ensure your network
   operates in extreme outdoor climates
- · PoE-compliant ports expand deployment & power options
- Low-profile ceiling, wall-mount & wall plate designs for flexible deployments
- Mesh wireless support simplifies setup, optimizes signals & self-heals
- FitXpress app or web enable users to configure devices quickly and monitor the installed or deployed devices on their smartphones or tablets.
- FitController, the plug-and-play hardware for on-premises, empowering you to monitor, manage, and troubleshoot locally.



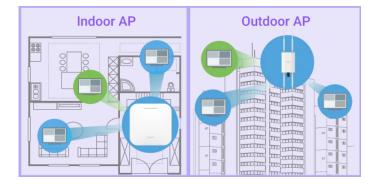
# **Wireless Access Points Feature Highlights**

### The Future-Proof Next-Gen Wi-Fi 6

The new 802.11ax (Wi-Fi 6) technology builds upon real-world deployment of 11ac. As next-generation Wi-Fi, 11ax is no longer just about speeds but also about stronger, steadier, and more efficient wireless connections.



EnGenius Access Points deliver the highest available speeds for Wi-Fi connectivity devices. Beamforming technology focuses signals directly to client devices, providing optimal, reliable reception even in densely crowded environments. Four spatial streams and dual-concurrent MU-MIMO radio operation sends beams to multiple users simultaneously, creating increased network capacity.



### **Flexibility in Deployment**

EnGenius Fit's versatile line of high-performance, managed, indoor ceiling- and wall-mount access points. Configure APs individually as stand-alone units, centrally managed via FitXpress or FitController.

With Fit APs, your network is protected from attacks at multiple levels through advanced wireless encryption standards such as 'Wi-Fi Protected Access Encryption' and authentication. Network threats are quickly detected and avoided through rogue AP detection, email alerts and real-time wireless invasion monitoring, allowing for immediate action to divert network hacks and other security threats.

### Secure Guest Networks

Organizations that offer Internet access to patrons or visitors— notably hotels, retail shops and restaurants—will appreciate Fit's guest network capabilities. Establish a secure guest network that blocks access to main corporate computers. Create separate Virtual LANs for increased security, network reliability and bandwidth conservation.



### **Simplified Deployment & Provisioning**

In combination with FitXpress or FitController

Management, EnGenius Fit APs are automatically discovered and provisioned. One-click individual or bulk configurations and upgrades save time. In addition, these access points are quickly and easily deployed and operated by users with limited networking experience.

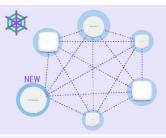
### **Optimize Connectivity with Mesh Technology**

Utilize mesh access point mode on select Fit APs for retrofit or new install applications where wire runs are not possible. Mesh's smart sensing technology adds devices quickly, optimizes routes between APs, and automatically self-heals the network in the event an AP should ever lose connection.



Extend Wi-Fi coveragewithout cabling hassles





Smart webbing by Enterprise-grade Mesh hassles



Keep High Performance in Harsh Environments

Designed to perform in harsh conditions, EnGenius Fit Outdoor Access Points feature industrial-grade from IP67-rated enclosures, ensuring the APs can withstand extreme outdoor climates. This includes prolonged outdoor exposure to sunlight, extreme cold, frost, snow, rain, hail, heat and humidity.



-20°C to 60°C

Industrial IP67

Anti UV

### **Power-over-Ethernet Convenience**

EnGenius Fit access points equipped PoE ports, enabling placement in locations where power outlets are scarce or unavailable such as on poles or rooftop eaves. Power the access points through a connected Ethernet cable directly to a managed Gigabit PoE Switch or with a PoE adapter up to 328 meter from the power source.

### **Flexible Management Options for Different Businesses**

### Standalone Mode for Basic Configurations

Small business or SOHO with one or couple devices can manage the networks with the Access Point's local web-based GUI without additional software or controller.

### Quick & Smart Networking with FitXpress

The FitXpress mobile app or web portal is best for deploying small and middle-sized businesses with fewer IT resources or multiple locations to manage. FitXpress offers an easy-to-use and secure Wi-Fi solution with remote management on the go.

### On-Premises Management with FitController

FitController is a plug-and-play and feature-rich hardware to empower you to monitor, manage, and troubleshoot locally. Businesses require on-premises management with a demand for network scalability, or greater autonomy and privacy is desired.

# Access Points Comparison Table

	Indoor Access Points			Outdoor Access Points	
	· Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6
Model Name	Fit6 2x2 Lite	Fit6 2x2	Fit6 4x4 Lite	Fit6 4x4	Fit6 2x2 Outdoor
Model Number	EWS356-FIT	EWS357-FIT	EWS276-FIT	EWS377-FIT	EWS850-FIT
Wi-Fi Standard	802.11a/b/g/n/ac/ax	802.11a/b/g/n/ac/ax	802.11a/b/g/n/ac/ax	802.11a/b/g/n/ac/ax	802.11a/b/g/n/ac/ax
Radio	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz
Max. Data Rate on 2.4 GHz	574 Mbps	574 Mbps	1,148 Mbps	1,148 Mbps	574 Mbps
Max. Data Rate on 5 GHz	2,400 Mbps	1,200 Mbps	2,400 Mbps	2,400 Mbps	1,200 Mbps
Radio Chains/ Spatial Streams	2 x 2:2	2 x 2:2	4 x 4:4	4 x 4:4	2 x 2:2
Transmit Power on 2.4GHz	21 dBm	22 dBm	23 dBm	23 dBm	25 dBm
Transmit Power on 5GHz	21 dBm	22 dBm	23 dBm	23 dBm	23 dBm
Antenna on 2.4GHz	2 x 4 dBi (2.4GHz)	2 x 4 dBi (2.4GHz)	4 x 5 dBi (2.4GHz)	4 x 5 dBi (2.4GHz)	2 x 5 dBi (SMA-Type)
Antenna on 5GHz	2 x 5 dBi (5GHz)	2 x 5 dBi (5GHz)	4 x 5 dBi (5GHz)	4 x 6 dBi (5GHz)	2 x 5 dBi (SMA-Type)
Power-over-Ethernet	802.3af	802.3af/at	802.3at	802.3at	802.3af/at
Ethernet Ports	1x GE Port	1x GE Port	1x 2.5GE Port	1x 2.5GE Port	1x 2.5GE Port
IP Rating	-	-	-	-	IP67
Surge Protection	-	-	-	-	L-L: 1KV, L-G: 2KV
ESD Protection	-	-	-	-	Air: 8KV
Dimensions	160 x 160 x 30 mm	160 x 160 x 27 mm	205 x 205 x 33 mm	205 x 205 x 33 mm	190 x 124 x 47 mm
Operating Temperature	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C	-20°C to 60°C
Mounting Type	Ceiling / Wall	Ceiling / Wall	Wall / Ceilling	Ceiling / Wall	Wall/Pole
Operating Modes	AP/Mesh	AP/Mesh	AP	AP/Mesh	AP/Mesh
Mesh Technology	V	V	-	V	V
MU-MIMO	V	V	V	V	v
Beamforming	V	V	V	V	v
On-premise management (FitController)	V	V	V	V	V
Mobile app (FitXpress App)	V	V	V	V	V
Standalone Mode	V	V	V	V	V

\*Models vary depending on the region.

# **Software Lists**

# Access Points

### **Operating Models**

### **Access Point**

In Access Point Mode, AP behaves likes a central connection for stations or clients that support IEEE 802.11ax/ac/a/b/g/n networks. The stations and clients must be configured to use the same SSID (Service Set Identifier) and security password to associate with the AP. The AP supports up to eight SSIDs per band at the same time for secure access.

### **Client Bridge**

The Access Points can be used as a centralized Access Point with which other En-Genius Wireless Client Bridges can associate; leveraging the long-range capability of their internal high-gain directional antennas, resulting in a very cost-effective solution to expand a company network over a multiple building campus.

### WDS AP

This operating mode allows wireless connections to the Access Point using WDS technology. In this mode, configure the MAC addresses in both Access Points to enlarge the wireless area by enabling WDS Link settings.

### WDS Bridge

In WDS Bridge Mode, the Access Points can wirelessly connect different LANs by configuring the MAC address and security settings of each device. Use this mode when two wired LANs located a small distance apart want to communicate with each other. The best solution is to use the Access Point to onnect two wired LANs, as shown in the following diagram.

### Mesh Mode

Regular scanning signal level of an environment to provide parameters for performing Auto Transmit power and auto channel.

### Exquisite RF Management

### Auto Transmit Power

Automatically adjust power level when EnGenius Access Points operate wireless communication service under an environment.

### **Auto Channel**

Automatically assign a clearly channel to perform RF transmission under a pervasive environment.

### **Bandwidth Selection**

Choose bandwidth of channels, the widely bandwidth will carry more data to enhance the transmission throughput.

### **Transmit Power Configuration**

Configure the Transmit power to the proper value for optimizing your network.

### Fast Roaming (802.11k)

Collect the parameters of neighborhood Access Points to find the optimal AP.

### Fast Roaming (802.11v)

Cognize the signal strength of client devices under each to steer these client devices to one of Access Points if signal level is less than the default value of AP systems.

### **Band Steering**

Steer client devices to a proper frequency band for getting more bandwidth and speed under an Access Point. The change will improve overall performance.

### **Discard Legacy clients**

Discard legacy 11 a/b/g client to prevent the slowing down performance of an Access Point. The action can let Access Point carry more client devices under a pervasive environment.

### Disable 11ax transmission on 2.4GHz

Disable 11ax 2.4GHz wireless mode; the setting will be allowed client devices to associate with an Access Point throughout 11b/g/n mode.

### Bit Rate Control (Min. Bit Rate)

An administrator can improve the performance of client devices on the 2.4 GHz and 5Ghz band via disabling lower bitrates on both radios. Setting the higher bit rate can be reduce the loading of Access Points and overall network, as well as improve performance on seamless roaming.

### **Optimize Performance**

### Quality of Service

Compliance with IEEE 802.11e standard Prioritizes voice over data for both tagged and untagged traffic Transmit video, voice and data at the same SSID

### Power Save Mode (UAPSD)

Some client devices are enabled UAPSD as defaulted for saving their power. Under UAPSD, AP will keep the connection with client devices and without further transmission. When client devices send the request to AP, AP will start to transmit data. The U-APSD will be benefited for VOIP device to save power.

### **Pre-Authentication**

Compliance with 802.11i &11x

### PMK Caching

Compliance with 802.11i

If wireless client devices have authenticated to an access point, it does not perform a full authentication exchange when client devices roaming between access points.

### Fast Roaming (802.11r)

Use a Fast Transition key to handover between Access Points. The behavior will assist client devices move from an AP to one of APs seamless under the same wireless network.

### **Multicast to Unicast Conversion**

Using the IGMP protocol, an access Point delivers high definition content to a large number of clients simultaneously.

### Easy to Management

### Multiple SSIDs

Each radio interface is supported 8 sets of SSIDs for networking client devices independently. Before performing advanced functions, users can consider enable either 2.4GHz or 5GHz radios, and both radio simultaneously.

### Guest Network (Only in Stand-alone mode)

Isolate each client for avoiding an unnecessary touch, leaking sensitive data, and enhancing Internet security and reliability.

### VLAN Tag

Independent VLAN setting can be enable or disable. Any packet that enters the Device without a VLAN tag will have a VLAN tag inserted with a PVID (Ethernet Port VID).

### VLAN Per SSID

Integrate VLAN ID with a SSID interface to forward packets over the defined path.

### Management VLAN

Feature is enabled with specified VLAN ID, the device will only allow management access with the same specified VLAN ID from remotely location by using protocols such as telnet, SSH, snmp, syslog etc.

### **Traffic Shaping**

Controls the bottle of bandwidth to offer the limited bandwidth for an individual SSID or each client per Access Point.

### MAC Address Filtering

Filter up to 32 sets MAC addresses per SSID

### E-Mail Alert

Provides a network monitoring tool for administrators to stay informed the configuration change.

### **Finger Printing**

The value added solution collects information of client devices including name of devices, IP address, MAC address, Operating system version, transmitting and receiving data, and signal level.

### Save Configuration as Users Default

Save the customized configuration as default value. The saved default value will be resumed when pushing HW reset button or via web UI.

### Scheduler AP/SSID Interfaces

Perform a regular reboot on access point at assigned schedule Perform it to enable or disable SSIDs of 2.4GHz or 5GHz interfaces from a period time. The change can save power of the AP.

### Easy to Management

### **SNMP & MIB**

v1/v2c/v3 support MIB I/II, Private MIB CLI supported

### **RADIUS Accounting**

Help operators to offload 3G to Wi-Fi seamlessly

### Wireless Clients list

Provide the list to display real status of wireless client devices on this Access Point.

### Comprehensive Protection

### Wireless Encryption Standard

EnGenius supports the securable encryption including WPA2, WPA3 and OWE.

### Hide SSID in beacons

Enable the hidden SSIDs function will let SSID invisible under SSIDs list when client devices seek to find the SSID.

### L2 Isolation

Block the communication between the associated clients to communicate with other clients from all hosts on the same subnet.

### **HTTPS**

A secure communication protocol can be enabled to allow secure management web access over a computer network.

### SSH Tunnel

A secure communication protocol can be enabled to allow secure remote shell access or command execution.

# FitController (Built-in management software)

### Controlling capability

### **Managing Qty of Devices**

Maximum 100 pcs of EnGenius Access Points and switches managed by FitController. More than 500 devices can be managed with EnGenius VM FitController solution.

### Dashboard

### Managed Access Points / Switches

Users can realize status of Access Points and Switches

### System Resource Usage

CPU: Usage (%) of CPU for this FitController Memory: Usage (%) of Memory for this FitController Disk: Usage (%) of Disk for this FitController

### System Overview

Users can realize ezMaster software version on this instance

### **Recent Projects**

Updated or revised projects are listed in the right side bar.

### **Global Settings**

### Account Management (Multi-Tenant)

Admin: A supervisor user can be considered as a master which can implement any managerial behaviors to your FitController.

Users: Admin can assign one of users to a project. Users can edit, manage, remove, add devices, and block/allow client devices to access Internet.

Managers: Admin can assign one of users to a project. Managers can edit, manage, remove devices, and block/allow client devices to access Internet.

Guests: Master can assign one of guests to a specified project. Under this project, a guest can review any information, except for configuration.

### E-Mail Alert

Provide a network monitoring tool for administrators stay informed the configuration change.

### Backup/Restore

Backup overall setting of an FitController account. Users can restore this settings/ configuration to one FitController easily.

### Reboot/Reset

Select to reboot or reset your FitController VM under your application platform.

### **Background Scanning**

Regular scanning signal level of an environment to provide parameters for performing Auto Transmit power and auto channel.

### Diagnostic

Enable this function to detect the connecting status of this FitController.

### Auto Transmit Power Automatically adjust r

Automatically adjust power level when EWS access points work at an environment.

### Auto Channel

Automatically assign a clearly channel to perform RF transmission under a pervasive environment.

### Software Update

Update FitController throughout manually update Update FitController throughout one-click-update function

### Inventory

Put AP to the inventory list before managing. You can choose either ways to add AP into your inventory, A)Manually Insert MAC and checkcode for putting devices into inventory. B)Import csv file to inventory. The csv file will be contented the MAC list of devices and checkcode.

### Scheduler Settings

Reboot: Reboot Access Points under a project at a time for every weeks or specified days.

Scheduler for SSIDs: Enable this function to allow one of SSIDs for enabling/disabling during a session or days of week.

### **Finger Printing**

The value added solution collect information of client devices including name of devices, IP address, MAC address, Operating system version, transmitting and receiving data, and signal level.

### Cluster Setting (Group Setting)

### SSID Setting

Support 8 SSIDs on both 2.4GHz and 5GHz radios Users can enable either 2.4GHz or 5GHz radios, as well as enable both radios under a SSID.

### Hidden SSID in beacons

Hide this SSID to avoid users for finding it.

### VLAN Per SSID

Integrate VLAN ID with a SSID interface to forward packets over the defined path.

### **Fast Roaming**

Collect parameters of neighborhood Access Points to find the optimal AP, then client devices will use a fast transition key to handover between AP.

### **Band Steering**

Steer client devices to a proper frequency band for getting more bandwidth and speed under an Access Point.

### NAS IP

The NAS IP address to be sent in RADIUS packets from that server.

### Cluster Setting (Group Setting)

### NAS ID

It is primarily used to notify the source of RADIUS access request so that, the RADI-US server can choose policy for that request.

### NAS Port

Assign a port to be sent in Radius packets from that server.

### Wireless Encryption Standard

OWE

WPA3/WPA2 Personal (SAE/PSK-AES) WPA3/WPA2 Enterprise

### L2 Isolation

Block the communication between the associated clients to communicate with other

clients from all hosts on the same subnet. The isolation will be greater for users to isolate each client devices for malicious behavior.

### L2 Isolation with whitelist

Users can enable this function to allow devices to be accessed by client devices when enabling L2 Isolation.

### VIP List/Blocked List per SSID

Blocked List: Enable a list to block client devices for accessing to this SSID.

### Captive Portal (NAT / Bridge mode)

Differentiate the authority of users on using Internet access. When enabling the NAT mode, the client devices will get IP form the default NAT server of EnGenius internal

### Traffic Shaping (bandwidth control)

- Controls the bottle of bandwidth to offer the limited bandwidth for an individual SSID or each client per Access Point.

- Traffic shaping function will be allowed to configure as Kbps or Mbps

### Social Login (FitXpress)

The function will apply users information to achieve single sign-on which does not need to create a new account for a specific service. In this stage, EnGenius will support login function.

### Monitoring

### **Active Clients**

The page will show clients' information including client name, getting IP, MAC address, Client OS, SSID, Band, Tx, Rx, and RSSI information.

### Access Point

Top ten traffic for the Managed AP. We can reserve data up to 7 days.

### Visualization

### **Topology View**

Topology view could assist users to realize status of your network and then find abnormal devices for trouble shooting easily.

### Map View

Enter this view to find locations of Access Points or switches on global view of google map. You may also filter one of APs from google map easily.

### **Floor Plan View**

Upload a floor plan for this project. Users can put a known floor plan and then place Access Points or switches on this view.

### Mesh View

Mesh view also can be realize the overall topology for mesh.

### **Hotspot Service**

Captive Portal profile setting will be set a profile to apply on one of SSIDs. Users can configure authentication types, session of connecting clients, redirect page types and redirect behavior.

### System Overview

Users can realize FitController software version on the FitController management platform.

### Recent Projects

Updated or revised projects are listed in the right side bar.

### Maintenance

### **Bulk Update**

Throughout this function to proceed mass upgrade procedure on a specific AP.

### Bulk Update (Switch)

Throughout this function to proceed mass upgrade procedure on a specific switch.

### **One Click Update**

Click one button to synchronize with server on checking up-to-date firmware and then decide to upgrade or not by users. This function is available on Access Points and Switches.

### **AP Remote Log**

Synchronize clients' information of AP to a remote log server. The information will be included the MAC, browsing url, uptime, last seen and IP information of client devices.

**Note:** The capacity of AP will be reduced when enabling AP remote log function. Updated or revised projects are listed in the right side bar.

# Fit6 2x2 Lite (EWS356-FIT) Specifications

Technical Specifications	
Standards	
802.11a/b/g/n/ac/ax	
Antenna	
2.4GHz: 4dBi	
5GHz: 5dBi	
Physical Interfaces	
1 x 10/100/1000 BASE-T	
DC12V	
Reset/Reboot button	
LED indicators	
1 x Multi-color LED	
Power Source	
PoE 802.3af	
DC12V	
Maximum Power Consumption	
10.7W	

10.7W

### 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  $\sim$  5250 MHz, 5250 MHz  $\sim$  5350 MHz, 5470 MHz  $\sim$  5725 MHz, 5725 MHz  $\sim$  5850 MHz

**Transmit Power** 

Up to 21 dBm on 2.4 GHz

Up to 21 dBm on 5 GHz

(Maximum power is limited by regulatory domain)

**Radio Chains** 

 $2 \times 2:2$ 

### **SU-MIMO Capability**

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 2,400 Mbps wireless data rate with HE160 to a 2x2 wireless device under the 5GHz radio.

### MU-MIMO Capability

Two (2) spatial streams Multiple (MU)-MIMO up to 2,400 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 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 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	)
302.11a/g/n/ac: Orthogonal Frequency Division Multiple (OFDM)	
302.11b: Direct-sequence spread-spectrum (DSSS)	
Channelization	
302.11ax supports high efficiency throughput (HE) —HE 20/40/80,	/160 MHz
302.11ac supports very high throughput (VHT) –VHT 20/40/80 M	Hz
302.11n supports high throughput (НТ) —НТ 20/40 MHz	
$302.11n$ supports high throughput under the $2.4 \mathrm{GHz}$ radio $-\mathrm{HT40}$ QAM)	MHz (256-
302.11n/ac/ax packet aggregation: A-MPDU, A-SPDU	
Supported Modulation	
302.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM	
302.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM	
302.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM	
802.11b: BPSK, QPSK, CCK	
Max Concurrent User	

32°F~104°F (0 °C~40 °C)

Storage Temperature

-40 °F~176 °F (-40 °C~80 °C)

**Operating Temperature** 

Storage: 90% or less

Dimensi	ions &	Weight
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Dimensions

160 x 160 x 30 mm

### **Package Contents**

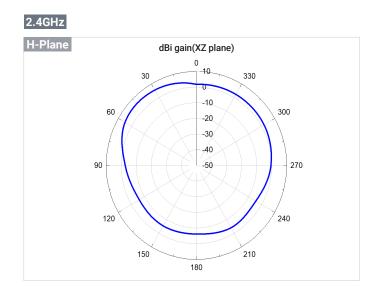
1 – EWS356-FIT Indoor Access Point
1 – Ceiling Mount Base (9/16" Trail)
1 – Ceiling Mount Base (15/16″ Trail)
1 – Ceiling and Wall Mount Screw Kit

1 – Quick Installation Guide

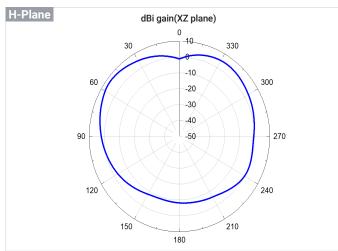
compliance & Warranty	
afety Compliance	
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\*The available frequency bands and transmit power is varied by local regulatory.

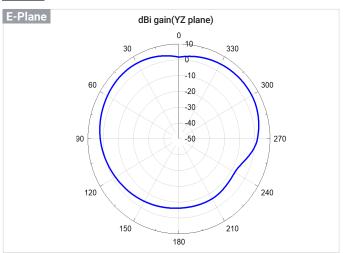
# Fit6 2x2 Lite (EWS356-FIT) Antenna Patterns

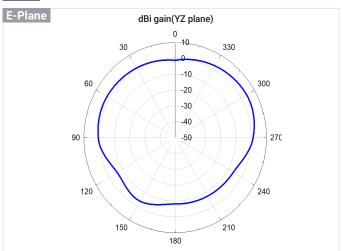




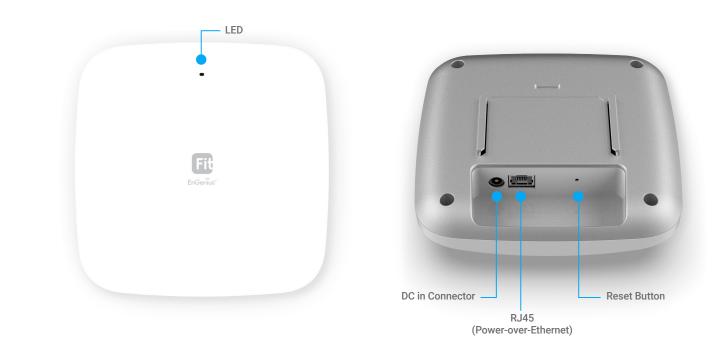


2.4GHz





# Fit6 2x2 Lite (EWS356-FIT) Product Views



# Fit6 2x2 (EWS357-FIT) Specifications

Technical Specifications	
Standards	
802.11a/b/g/n/ac/ax	
Antenna	
2.4GHz: 4dBi	
5GHz: 5dBi	
Physical Interfaces	
1 x 10/100/1000 BASE-T	
DC12V	
Reset/Reboot button	
LED indicators	
1 x Power	
1 x LAN	
1 x 2.4 GHz	
1 x 5 GHz	
Power Source	
PoE 802.3af/at	
DC12V	
Maximum Power Consumption	
12.8W	

### Wireless & Radio Specifications

**Operating Frequency** 

### Operation Modes

Managed mode: AP, AP Mesh, Mesh

### Frequency Radio

2.4 GHz: 2400 MHz ~ 2482 MHz

5 GHz: 5150 MHz  $\sim$  5250 MHz, 5250 MHz  $\sim$  5350 MHz, 5470 MHz  $\sim$  5725 MHz, 5725 MHz  $\sim$  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)

### **Radio Chains**

2 × 2:2

### SU-MIMO Capability

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 Capability

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.

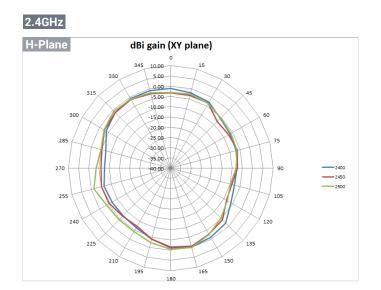
### Supported Data Rates

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 Technologies	
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 $-\rm HT40~MHz$ (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	
32°F~104°F (0 °C~40 °C)	
Storage Temperature	
-40 °F~176 °F (-40 °C~80 °C)	
Operating Temperature	
Storage: 90% or less	
	_
Dimensions & Weight	
Weight	
382 g	
Dimensions	
160 x 160 x 27 mm	
Package Contents	
1 – EWS357-FIT Indoor Access Point	
1 – Ceiling Mount Base (9/16" Trail)	
1 – Ceiling Mount Base (15/16" Trail)	
1 – Ceiling Mount Base (15/16" Trail) 1 – Ceiling and Wall Mount Screw Kit	

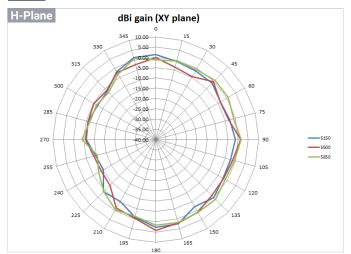
# Compliance & Warranty Safety Compliance CB

Regulatory Con	pliance		
FCC			
CE			
IC			
UKCA			

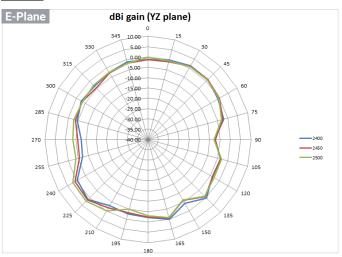
# Fit6 2x2 (EWS357-FIT) Antenna Patterns

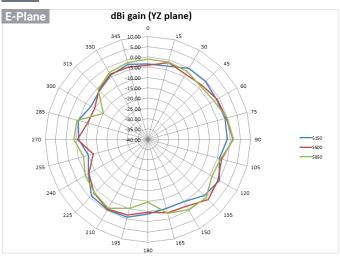


5GHz



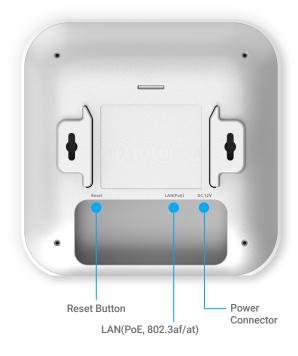
2.4GHz





# Fit6 2x2 (EWS357-FIT) Product Views







# Fit6 4x4 Lite (EWS276-FIT) Specifications

Technical Specifications
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
DC12V
Reset/Reboot button
LED indicators
1 x Power
1 x LAN
1 x 2.4 GHz
1 x 5 GHz
Power Source
PoE 802.3at
DC12V
Maximum Power Consumption
17W
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  $\sim$  5250 MHz, 5250 MHz  $\sim$  5350 MHz, 5470 MHz  $\sim$  5725 MHz, 5725 MHz  $\sim$  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)

### **Radio Chains**

 $4 \times 4:4$ 

### SU-MIMO

Four (4) spatial stream Single User (SU) MIMO for up to 1148 Mbps wireless data rate with HE40 bandwidth to a 4x4 wireless client device under the 2.4GHz radio.

Four (4) spatial stream Single User (SU) MIMO for up to 2400 Mbps wireless data rate with HE80 to a 4x4 wireless device under the 5GHz radio.

### MU-MIMO

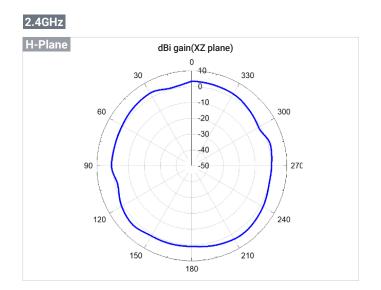
Four (4) spatial streams Multiple (MU)-MIMO up to 2,400 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Four (4) spatial streams Multiple (MU)-MIMO up to 1,148 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

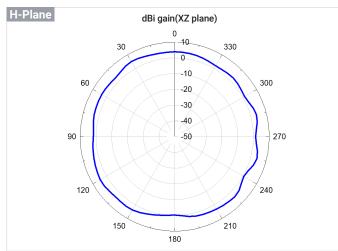
Supported Data Rates
302.11ax: 2.4 GHz: 9 to 1,148 (MCS0 to MCS11, NSS = 1 to 4)
5 GHz: 18 to 2,400 (MCS0 to MSC11, NSS = 1 to 4)
302.11b: 1, 2, 5.5, 11
302.11a/g: 6, 9, 12, 18, 36, 48, 54
302.11n: 6.5 to 600 (MCS0 to MCS31)
Supported Radio Technology
302.11ax: Orthogonal Frequency Division Multiple Access(OFDMA)
302.11a/g/n/ac: Orthogonal Frequency Division Multiple (OFDM)
302.11b: Direct-sequence spread-spectrum (DSSS)
Channelization
302.11ax supports high efficiency throughput (HE) —HE 20/40/80 MHz
302.11ac supports very high throughput (VHT) —VHT 20/40/80 MHz
302.11n supports high throughput (HT) —HT 20/40 MHz
802.11n supports high throughput under the 2.4GHz radio –HT40 MHz (256- QAM)
302.11n/ac/ax packet aggregation: A-MPDU, A-SPDU
Supported Modulation
302.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
302.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
302.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
302.11b: BPSK, QPSK, CCK
Max Concurrent User
Max Concurrent User 128 per radio
128 per radio
128 per radio Environmental & Physical
128 per radio
128 per radio Environmental & Physical Operating Temperature
128 per radio Environmental & Physical Operating Temperature 32°F~104°F (0 °C~40 °C)
128 per radio Environmental & Physical Operating Temperature 32°F~104°F (0 °C~40 °C) Storage Temperature
128 per radio Environmental & Physical Dperating Temperature 32°F~104°F (0 °C~40 °C) Storage Temperature 40 °F~176 °F (-40 °C~80 °C)
128 per radio Environmental & Physical Operating Temperature 32°F~104°F (0 °C~40 °C) Storage Temperature 40 °F~176 °F (-40 °C~80 °C) Operating Temperature Storage: 90% or less
128 per radio         Environmental & Physical         Operating Temperature         32°F~104°F (0 °C~40 °C)         Storage Temperature         40 °F~176 °F (-40 °C~80 °C)         Operating Temperature         Storage: 90% or less         Dimensions & Weight
128 per radio Environmental & Physical Derating Temperature 32°F~104°F (0 °C~40 °C) Storage Temperature 40 °F~176 °F (-40 °C~80 °C) Derating Temperature Storage: 90% or less Dimensions & Weight Weight
128 per radio Environmental & Physical Derating Temperature 32°F~104°F (0 °C~40 °C) Storage Temperature 40 °F~176 °F (-40 °C~80 °C) Derating Temperature Storage: 90% or less Dimensions & Weight Weight 570 g
128 per radio Environmental & Physical Derating Temperature 32°F~104°F (0 °C~40 °C) Storage Temperature 40 °F~176 °F (-40 °C~80 °C) Derating Temperature Storage: 90% or less Dimensions & Weight Weight
128 per radio         Environmental & Physical         Operating Temperature         32°F~104°F (0 °C~40 °C)         Storage Temperature         40 °F~176 °F (-40 °C~80 °C)         Operating Temperature         Storage: 90% or less         Dimensions & Weight         Weight         570 g         Dimensions         205 x 205 x 33 mm
128 per radio         Environmental & Physical         Operating Temperature         32°F~104°F (0 °C~40 °C)         Storage Temperature         40 °F~176 °F (-40 °C~80 °C)         Operating Temperature         Storage: 90% or less         Dimensions & Weight         570 g         Dimensions
128 per radio         Environmental & Physical         Operating Temperature         32°F~104°F (0 °C~40 °C)         Storage Temperature         40 °F~176 °F (-40 °C~80 °C)         Operating Temperature         Storage: 90% or less         Dimensions & Weight         Weight         570 g         Dimensions         205 x 205 x 33 mm         Package Contents
128 per radio         Environmental & Physical         Operating Temperature         32°F~104°F (0 °C~40 °C)         Storage Temperature         40 °F~176 °F (-40 °C~80 °C)         Operating Temperature         Storage: 90% or less         Dimensions & Weight         %eight         570 g         Dimensions         205 x 205 x 33 mm         Package Contents         1 - EWS276-FIT Indoor Access Point
128 per radio         Environmental & Physical         Operating Temperature         32°F~104°F (0°C~40°C)         Storage Temperature         40°F~176°F (-40°C~80°C)         Operating Temperature         Storage: 90% or less         Dimensions & Weight         Weight         570 g         Dimensions         205 x 205 x 33 mm         Package Contents         1 - EWS276-FIT Indoor Access Point         1 - Ceiling Mount Base (9/16″ Trail)         1 - Ceiling Mount Base (15/16″ Trail)         1 - Ceiling Mount Base (15/16″ Trail)         1 - Ceiling Mount Base (15/16″ Trail)
128 per radio         Environmental & Physical         Operating Temperature         32°F~104°F (0 °C~40 °C)         Storage Temperature         40 °F~176 °F (-40 °C~80 °C)         Operating Temperature         Storage: 90% or less         Dimensions & Weight         Weight         570 g         Dimensions         205 x 205 x 33 mm         Package Contents         1 - EWS276-FIT Indoor Access Point         1 - Ceiling Mount Base (9/16″ Trail)         1 - Ceiling Mount Base (15/16″ Trail)
128 per radio         Environmental & Physical         Operating Temperature         32°F~104°F (0°C~40°C)         Storage Temperature         40°F~176°F (-40°C~80°C)         Operating Temperature         Storage: 90% or less         Dimensions & Weight         Weight         570 g         Dimensions         205 x 205 x 33 mm         Package Contents         1 - EWS276-FIT Indoor Access Point         1 - Ceiling Mount Base (9/16″ Trail)         1 - Ceiling Mount Base (15/16″ Trail)         1 - Ceiling Mount Base (15/16″ Trail)         1 - Ceiling Mount Base (15/16″ Trail)

# CB Regulatory Compliance FCC CE IC UKCA

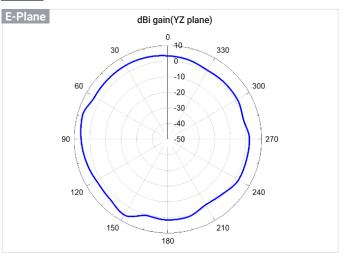
# Fit6 4x4 Lite (EWS276-FIT) Antenna Patterns

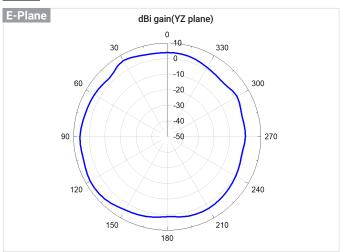




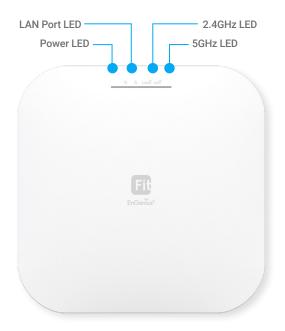


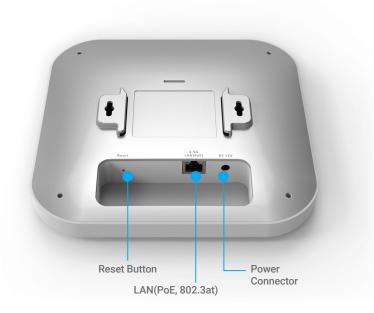
### 2.4GHz





# Fit6 4x4 Lite (EWS276-FIT) Product Views







# Fit6 4x4 (EWS377-FIT) Specifications

Technical Specifications	
Standards	
802.11a/b/g/n/ac/ax	
Antenna	
2.4GHz: 5dBi	
5GHz: 6dBi	
Physical Interfaces	
1 x 10/100/1000/2500 BASE-T	
DC12V	
Reset/Reboot button	
LED indicators	
1 x Power	
1 x LAN	
1 x 2.4 GHz	
1 x 5 GHz	
Power Source	
PoE 802.3at	
DC12V	
Maximum Power Consumption	
19.5W	

### 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  $\sim$  5250 MHz, 5250 MHz  $\sim$  5350 MHz, 5470 MHz  $\sim$  5725 MHz, 5725 MHz  $\sim$  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)

### **Radio Chains**

 $4 \times 4:4$ 

### SU-MIMO Capability

Four (4) spatial stream Single User (SU) MIMO for up to 1148 Mbps wireless data rate with HE40 bandwidth to a 4x4 wireless client device under the 2.4GHz radio.

Four (4) spatial stream Single User (SU) MIMO for up to 2400 Mbps wireless data rate with HE80 to a 4x4 wireless device under the 5GHz radio.

### **MU-MIMO** Capability

Four (4) spatial streams Multiple (MU)-MIMO up to 2,400 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

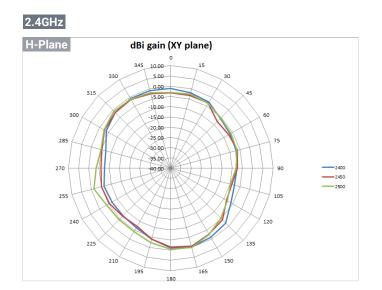
Four (4) spatial streams Multiple (MU)-MIMO up to 1,148 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

### **Supported Data Rates**

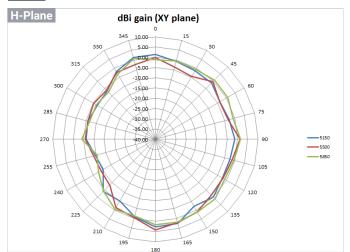
### Compliance & Warranty

Safety Compliance	
СВ	
Regulatory Compliance	
FCC	
CE	
IC	
UKCA	

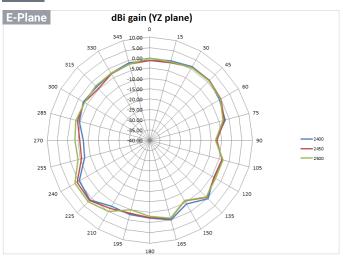
# Fit6 4x4 (EWS377-FIT) Antenna Patterns

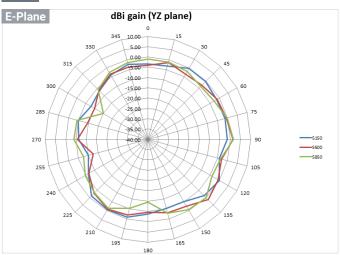


5GHz



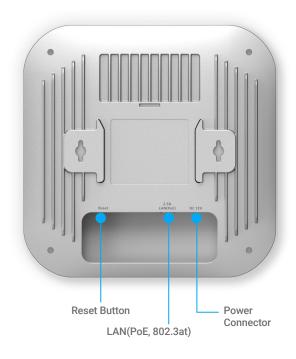
2.4GHz





# Fit6 4x4 (EWS377-FIT) Product Views







# Fit6 2x2 Outdoor (EWS850-FIT) Specifications

Technical Specifications
Standards
802.11a/b/g/n/ac/ax
Antenna
2.4GHz: 5dBi
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  $\sim$  5250 MHz, 5250 MHz  $\sim$  5350 MHz, 5470 MHz  $\sim$  5725 MHz, 5725 MHz  $\sim$  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** 

 $2 \times 2:2$ 

### **SU-MIMO Capability**

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 Capability

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 Technologies

oupportou riduito roor	morogroo
802.11ax: Orthogonal	Frequency Division Multiple Access(OFDMA)
802.11a/g/n/ac: Ortho	ogonal Frequency Division Multiple (OFDM)
802.11b: Direct-sequer	nce spread-spectrum (DSSS)
Channelization	
802.11ax supports hig	h efficiency throughput (HE) —HE 20/40/80 MHz
802.11ac supports ver	ry high throughput (VHT) —VHT 20/40/80 MHz
802.11n supports high	n throughput (HT) —HT 20/40 MHz
802.11n supports high QAM)	n throughput under the 2.4GHz radio –HT40 MHz (256-
802.11n/ac/ax packet	aggregation: A-MPDU, A-SPDU
Supported Modulation	n
802.11ax: BPSK, QPSK	K, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
802.11ac: BPSK, QPSk	K, 16-QAM, 64-QAM, 256-QAM
802.11a/g/n: BPSK, QF	PSK, 16-QAM, 64-QAM
802.11b: BPSK, QPSK,	ССК
Max Concurrent User	
128 per radio	
Environmental & P	hysical
Operating Temperatur	re
-4°~140°F/-20°C~60	°C

Weight 720 g

Storage Temperature

**Operating Temperature** 

Dimensions & Weight

Storage: 90% or less

-40 °F~176 °F (-40 °C~80 °C)

<b>_</b>				
Dir	no	nci	ior	10

190 x 124 x 47 mm

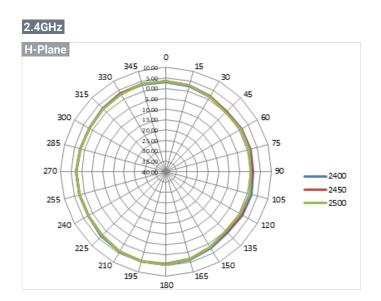
### **Package Contents**

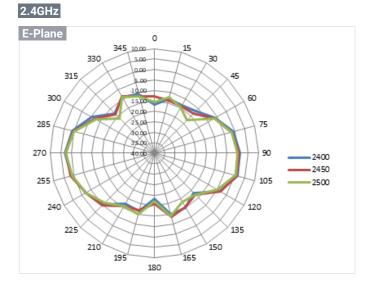
1 – EWS850-FIT Outdoor Access Point	
2 – Pole-Mounting Brackets	
1 – Wall-Mount Screw Set	
2 – 2.4GHz 5dBi SMA Antennas	
2 – 5GHz 5dBi SMA Antennas	
1 – Quick Installation Guide	
1 – EPA5006GR PoE Injector	

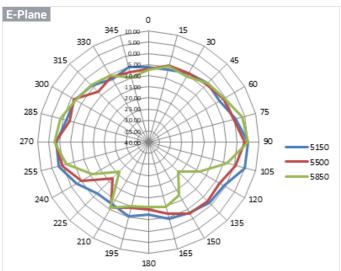
# Compliance & Warranty

ourcey compnance	
СВ	
Regulatory Compliance	
FCC	
CE	
IC	
UKCA	

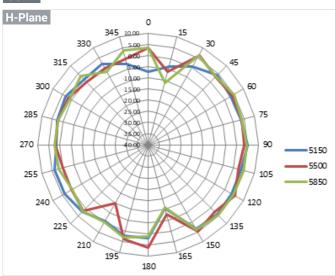




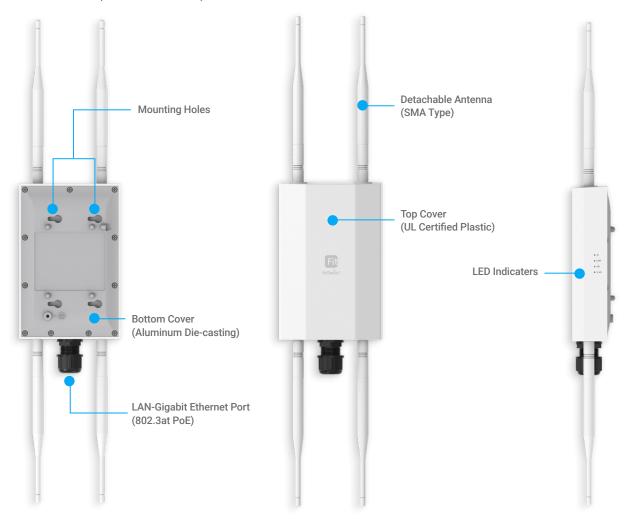








## Fit6 2x2 Outdoor (EWS850-FIT) Product Views



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