



## 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.



**Fit6 2x2 Lite**  
EWS356-FIT



**Fit6 2x2**  
EWS357-FIT



**Fit6 4x4 Lite**  
EWS276-FIT



**Fit6 4x4**  
EWS377-FIT



**Fit6 2x2 Outdoor**  
EWS850-FIT

# 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.

### Greater Capacity

Serves more devices simultaneously



#### 8x8 MU-MIMO

Increases capacity up to 4x



#### OFDMA

Enables more clients to transmit simultaneously



#### BSS Coloring

Allows access points be placed closer together

### Higher Efficiency

Handles simultaneous connections without slowdown



#### OFDMA

Reduces payload and latency



#### BSS Coloring

Reuses the channel and improves interference



#### Target Wake Time

Saves the battery life of devices

### Improved Performance

Increases throughput with new modulation scheme



#### 8x8 MU-MIMO

Receives data from multiple antennas, doubling bandwidth



#### 1024QAM

Increases data rates by 25%

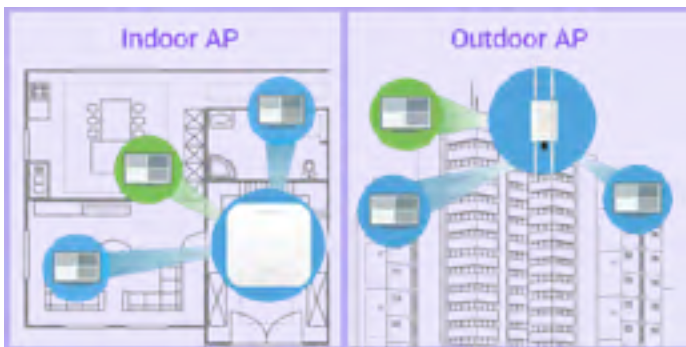


#### Target Wake Time

Reduces the latency from contention of clients

## Ultra-Fast Connecting Speeds

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.



## Network Protected by Advanced Encryption

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.



## 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.

## 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 coverage without cabling hassles



Smart webbing by Enterprise-grade Mesh hassles



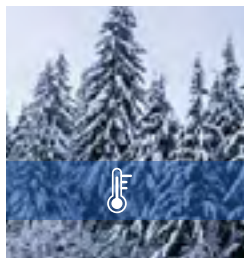
Smart healing when a wireless link is lost



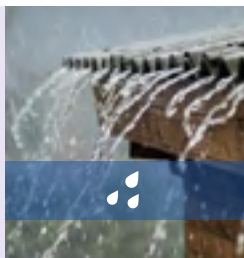
Smart routing for consistently high quality

## Keep High Performance in Harsh Environments

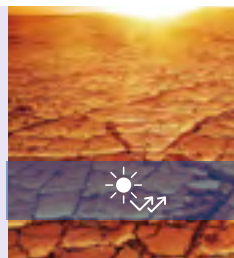
Designed to perform in harsh conditions, EnGenius Fit Outdoor Access Points feature industrial-grade from IP67-rated enclosures, ensuring the APs can withstand extreme outdoor climates. This includes prolonged outdoor exposure to sunlight, extreme cold, frost, snow, rain, hail, heat and humidity.



-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 6 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 7 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 / Ceiling	Ceiling / Wall	Wall/Pole
Operating Modes	AP/Mesh	AP/Mesh	AP/Mesh	AP/Mesh	AP/Mesh
Mesh Technology	v	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 like 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 EnGenius 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 connect 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 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 RADIUS 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 from 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.

# Specifications, Antenna Patterns, and Product Views

## Fit6 2x2 Lite (EWS356-FIT) Specifications

### Technical Specifications

#### Standards

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

#### Antenna

2.4GHz: 6 dBi

5GHz: 7 dBi

#### 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

### 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 21 dBm on 2.4 GHz

Up to 21 dBm on 5 GHz

(Maximum power is limited by regulatory domain)

#### Radio Chains

2 x 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 MCS11, 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)

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 20/40/80/160 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 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

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

380 g

#### 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 – Product Card

### Compliance & Warranty

#### Safety Compliance

CB

#### Regulatory Compliance

FCC

CE

IC

UKCA

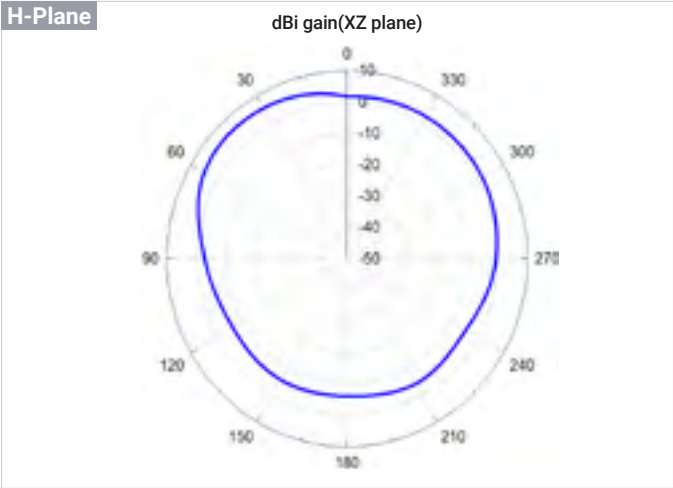
\*The available frequency bands and transmit power is varied by local regulatory.



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

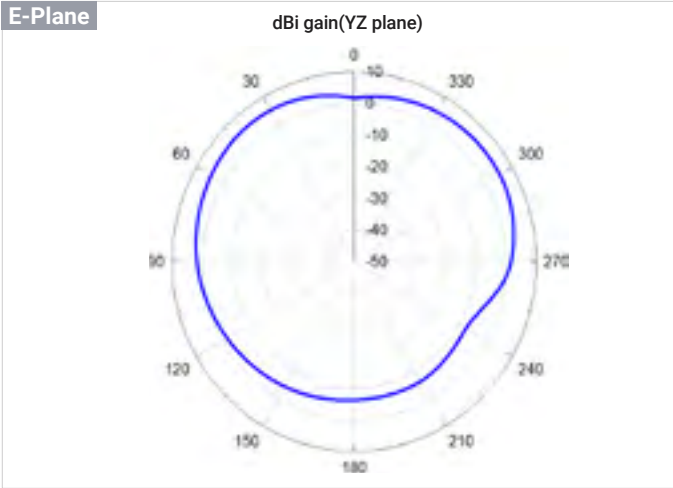
2.4GHz

H-Plane



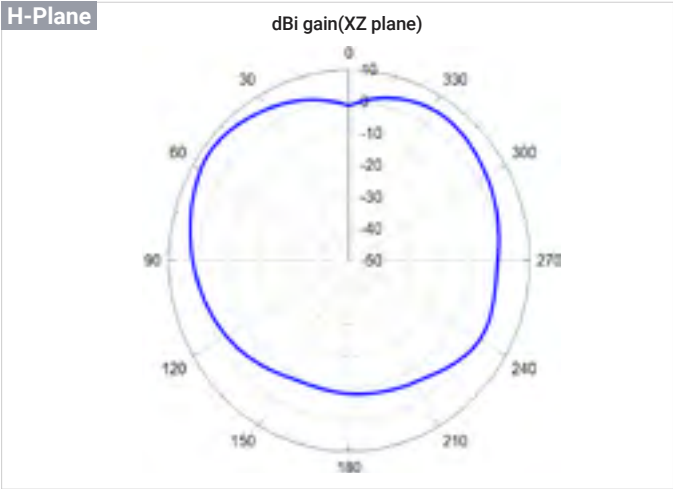
2.4GHz

E-Plane



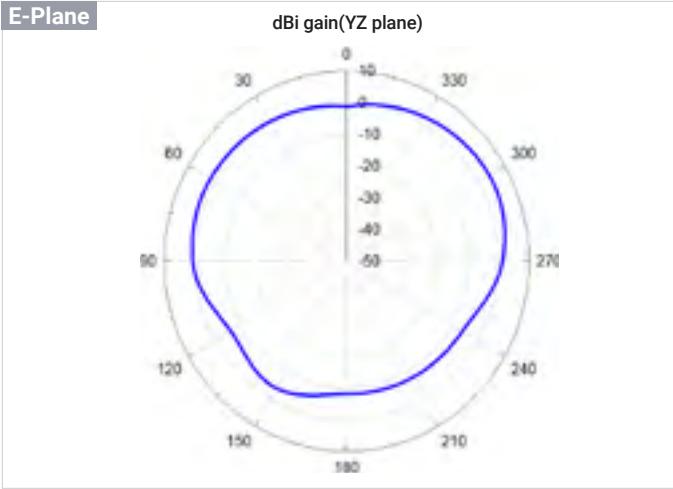
5GHz

H-Plane

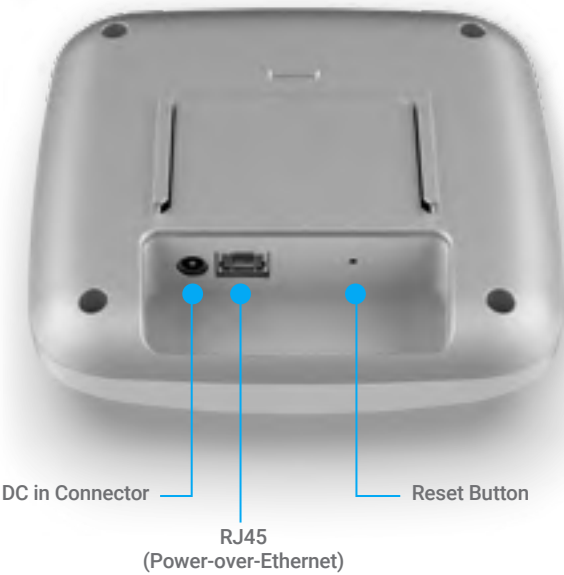


5GHz

E-Plane



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



# Specifications, Antenna Patterns, and 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

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 22 dBm on 2.4 GHz

Up to 22 dBm on 5 GHz

(Maximum power is limited by regulatory domain)

#### Radio Chains

2 x 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 MCS11, 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 –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 and Wall Mount Screw Kit

1 – Product Card

### Compliance & Warranty

#### Safety Compliance

CB

#### Regulatory Compliance

FCC

CE

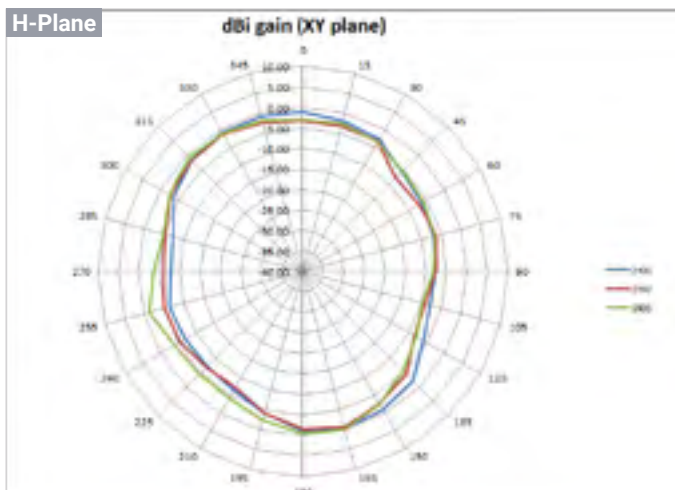
IC

UKCA

## Fit6 2x2 (EWS357-FIT) Antenna Patterns

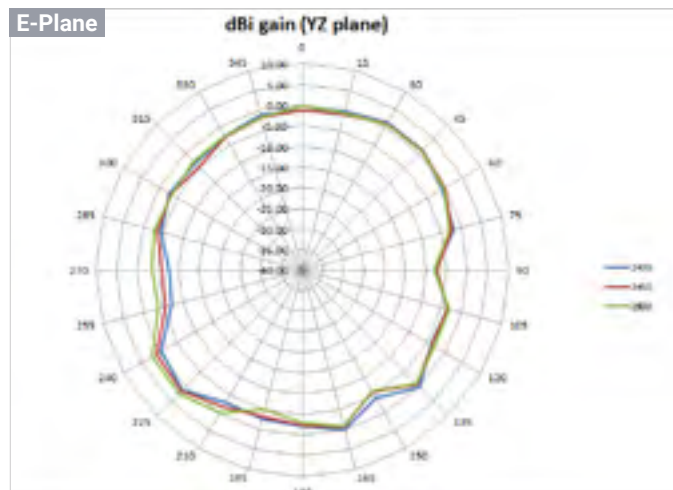
2.4GHz

H-Plane



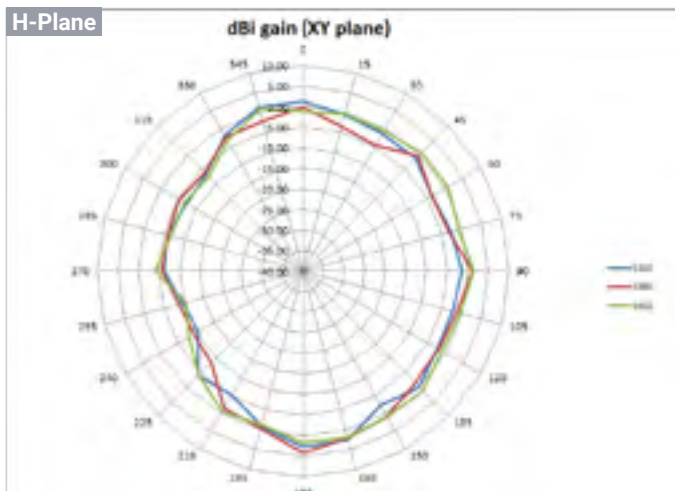
2.4GHz

E-Plane



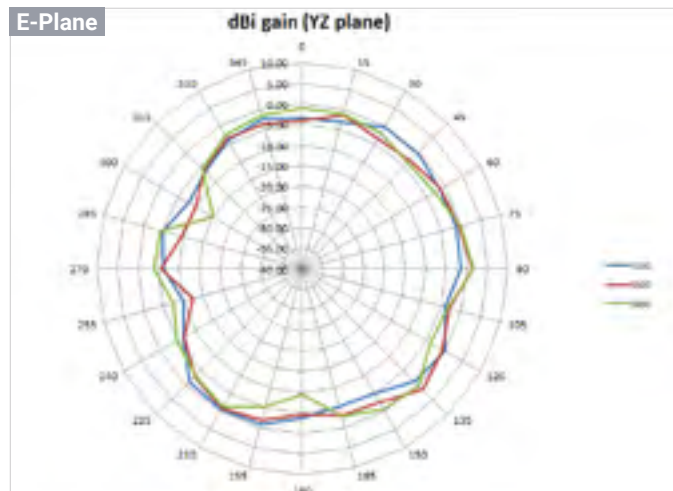
5GHz

H-Plane

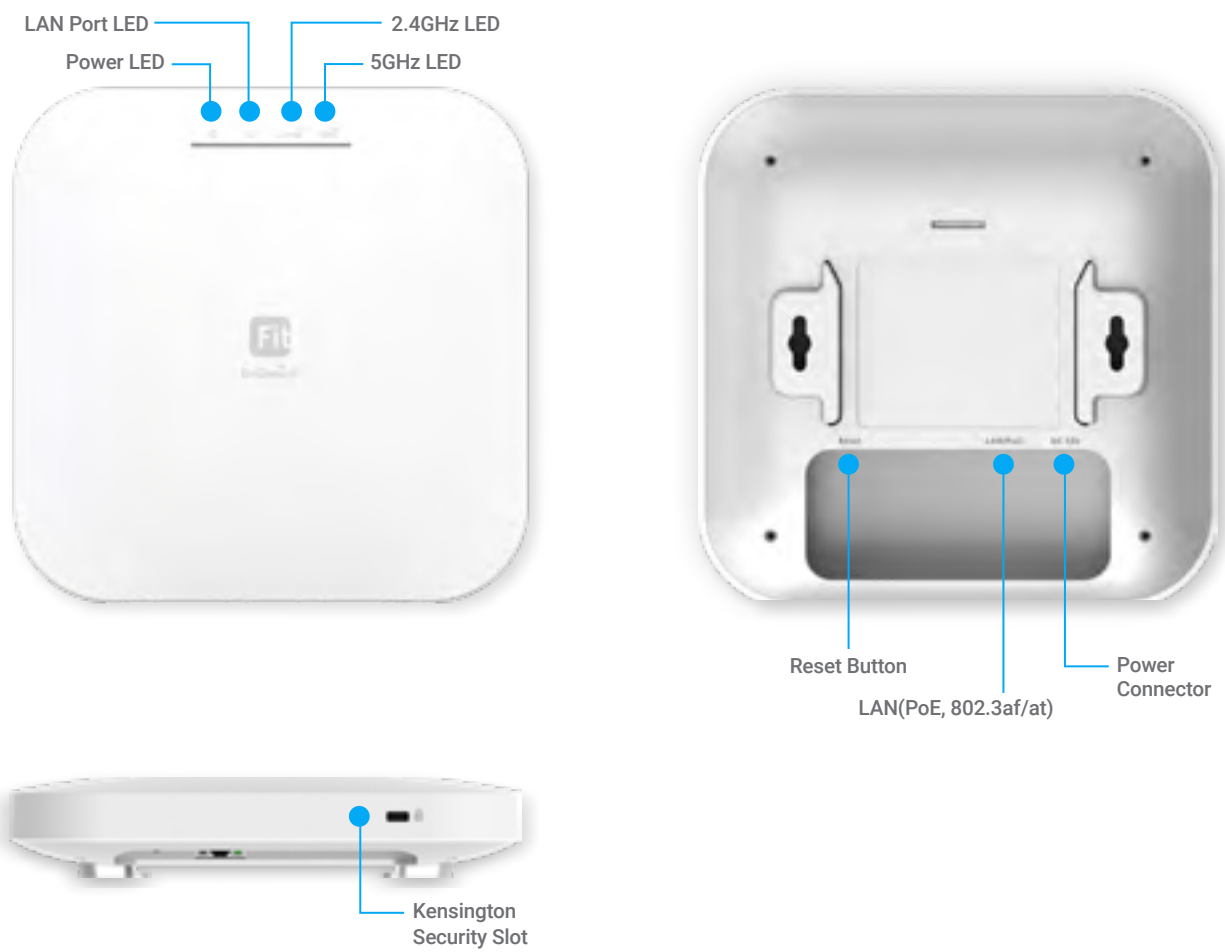


5GHz

E-Plane



**Fit6 2x2 (EWS357-FIT) Product Views**



# Specifications, Antenna Patterns, and 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 ~ 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)

#### Radio Chains

4 x 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

802.11ax: 2.4 GHz: 9 to 1,148 (MCS0 to MCS11, NSS = 1 to 4)

5 GHz: 18 to 2,400 (MCS0 to MCS11, 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 (MCS0 to MCS31)

#### 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

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 and Wall Mount Screw Kit

1 – Product Card

### Compliance & Warranty

#### Safety Compliance

CB

#### Regulatory Compliance

FCC

CE

IC

UKCA

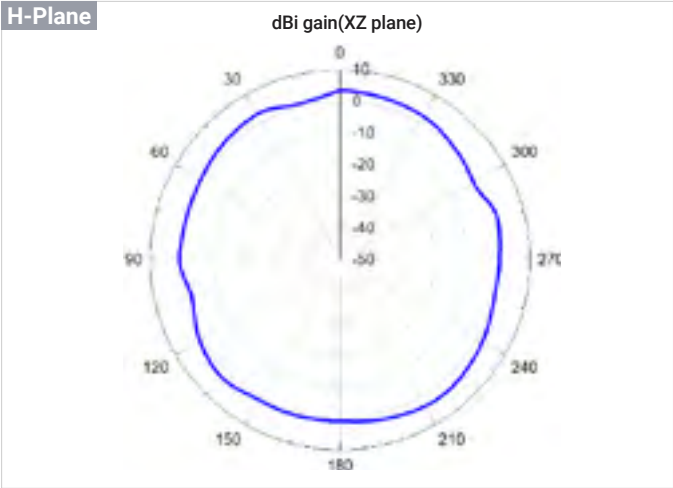
\*The available frequency bands and transmit power is varied by local regulatory.



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

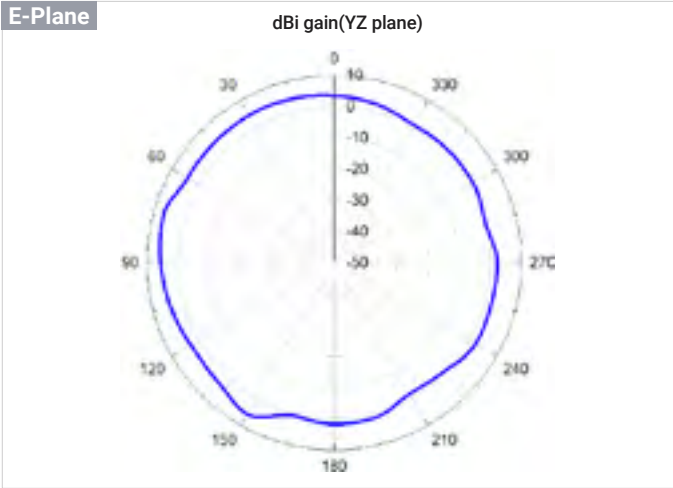
2.4GHz

H-Plane



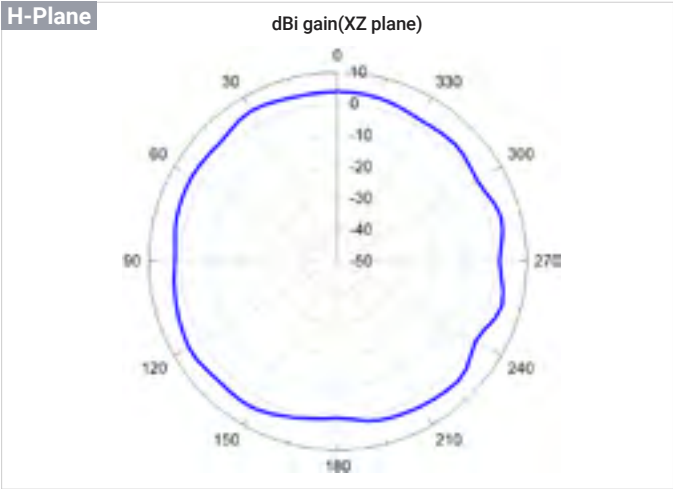
2.4GHz

E-Plane



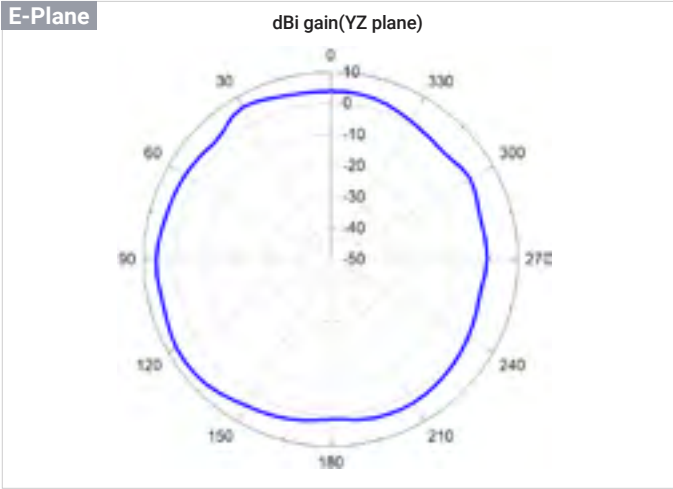
5GHz

H-Plane

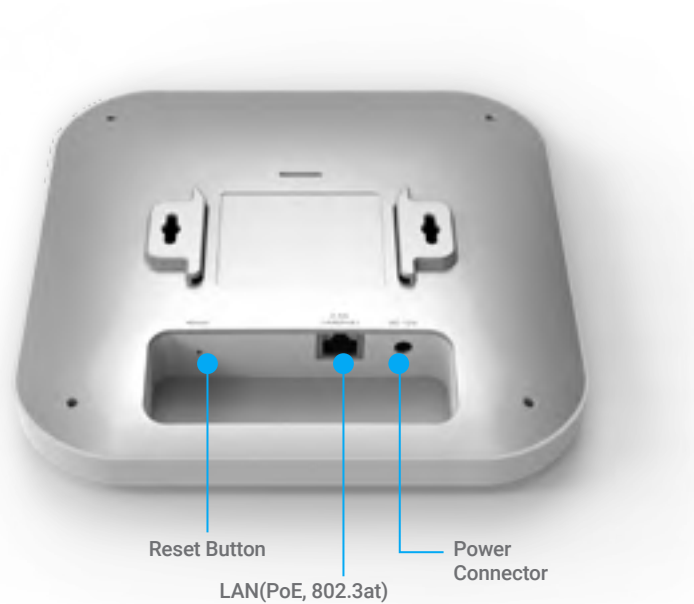


5GHz

E-Plane



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



# Specifications, Antenna Patterns, and Product Views

## Fit6 4x4 (EWS377-FIT) Specifications

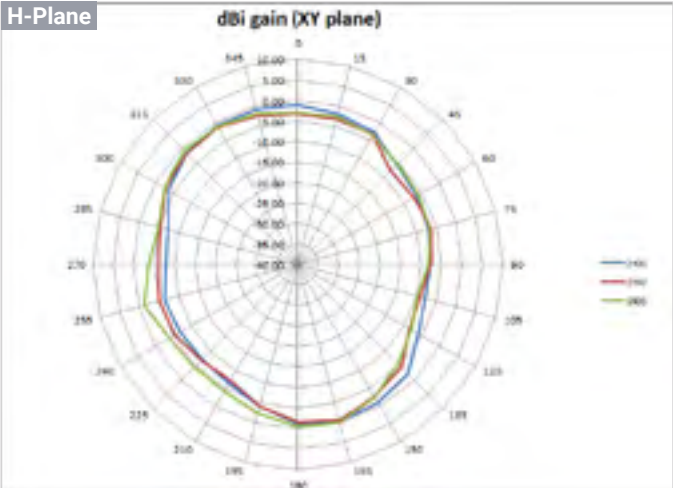
Technical Specifications
<b>Standards</b>
802.11a/b/g/n/ac/ax
<b>Antenna</b>
2.4GHz: 5dBi
5GHz: 6dBi
<b>Physical Interfaces</b>
1 x 10/100/1000/2500 BASE-T
DC12V
Reset/Reboot button
<b>LED indicators</b>
1 x Power
1 x LAN
1 x 2.4 GHz
1 x 5 GHz
<b>Power Source</b>
PoE 802.3at
DC12V
<b>Maximum Power Consumption</b>
19.5W
Wireless & Radio Specifications
<b>Operating Frequency</b>
Dual-Radio Concurrent 2.4 GHz & 5 GHz
<b>Operation Modes</b>
Managed mode: AP, AP Mesh, Mesh
<b>Frequency Radio</b>
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
<b>Transmit Power</b>
Up to 23 dBm on 2.4 GHz
Up to 23 dBm on 5 GHz
(Maximum power is limited by regulatory domain)
<b>Radio Chains</b>
4 x 4:4
<b>SU-MIMO Capability</b>
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.
<b>MU-MIMO Capability</b>
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.

<b>Supported Data Rates</b>
802.11ax: 2.4 GHz: 9 to 1,148 (MCS0 to MCS11, NSS = 1 to 4), 5 GHz: 18 to 2,400 (MCS0 to MCS11, 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 (MCS0 to MCS31)
802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4)
<b>Supported Radio Technologies</b>
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)
<b>Channelization</b>
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
<b>Supported Modulation</b>
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
<b>Max Concurrent User</b>
128 per radio
Environmental & Physical
<b>Operating Temperature</b>
32°F~104°F (0 °C~40 °C)
<b>Storage Temperature</b>
-40 °F~176 °F (-40 °C~80 °C)
<b>Operating Temperature</b>
Storage: 90% or less
Dimensions & Weight
<b>Weight</b>
597 g
<b>Dimensions</b>
205 x 205 x 33 mm
<b>Package Contents</b>
1 – EWS377-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 – Product Card
Compliance & Warranty
<b>Safety Compliance</b>
CB
<b>Regulatory Compliance</b>
FCC
CE
IC
UKCA

# Fit6 4x4 (EWS377-FIT) Antenna Patterns

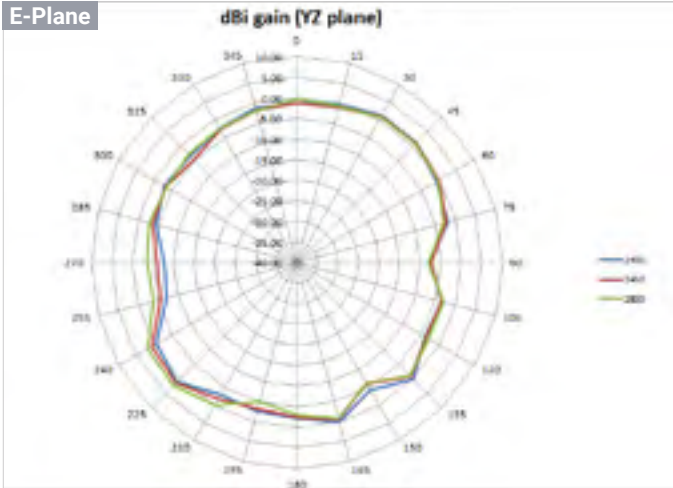
2.4GHz

H-Plane



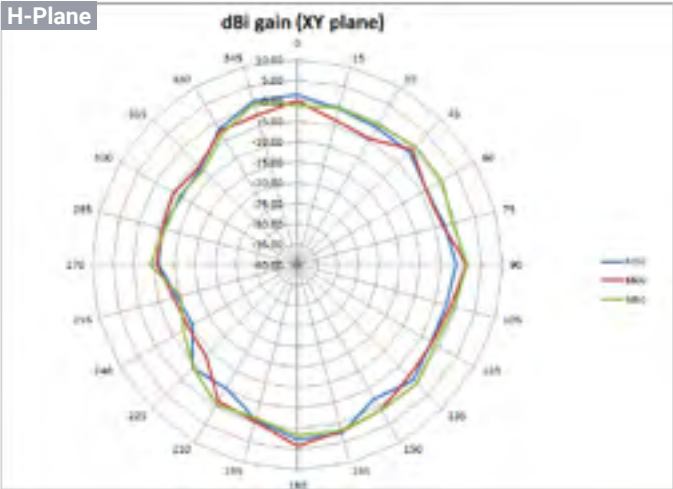
2.4GHz

E-Plane



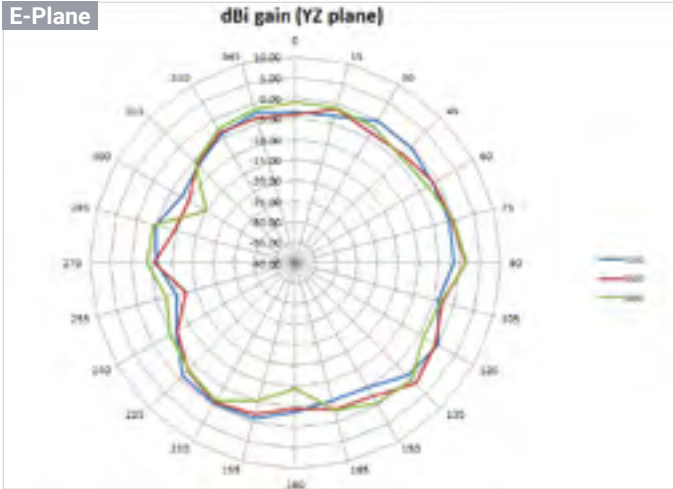
5GHz

H-Plane

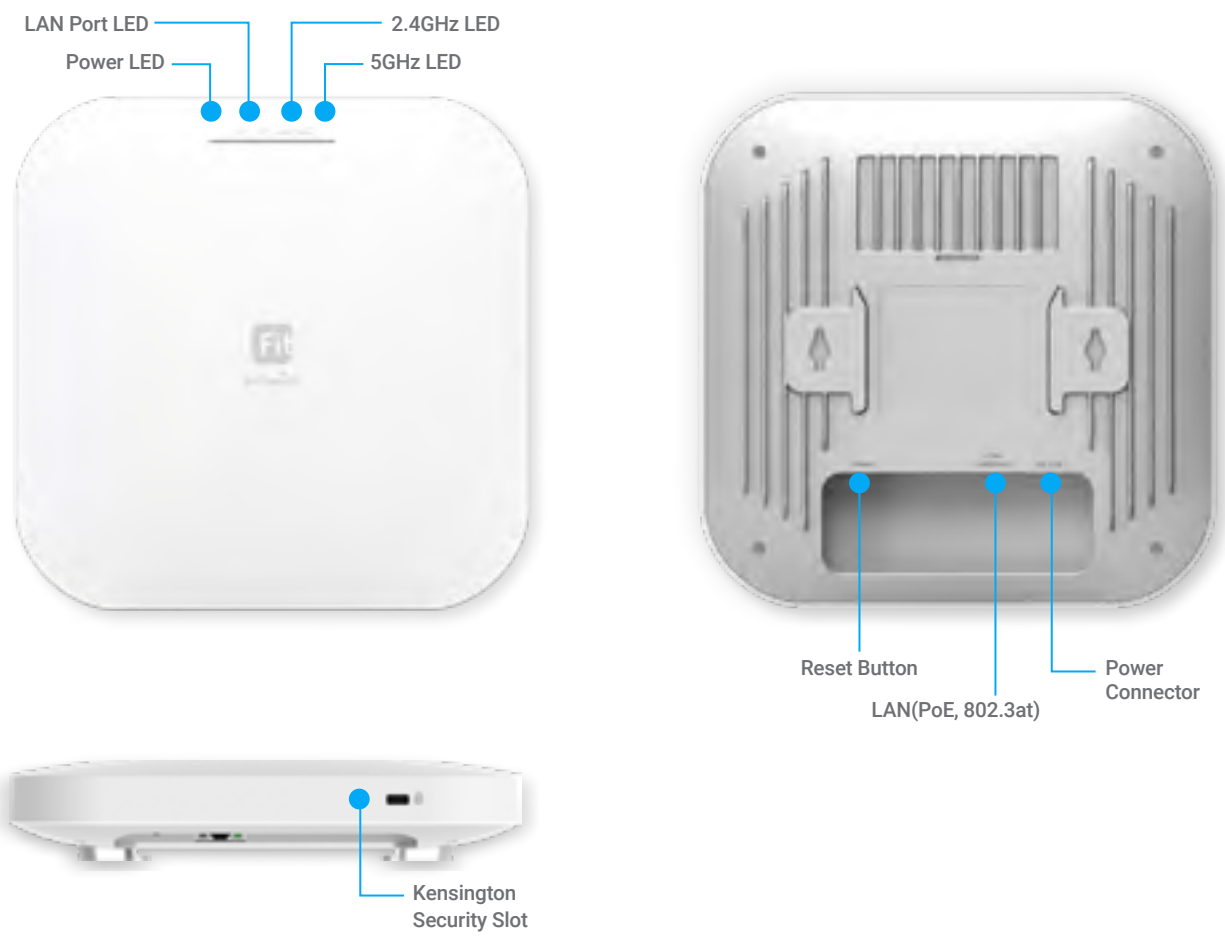


5GHz

E-Plane



**Fit6 4x4 (EWS377-FIT) Product Views**



# Specifications, Antenna Patterns, and Product Views

## Fit6 2x2 Outdoor (EWS850-FIT) Specifications

Technical Specifications
<b>Standards</b>
802.11a/b/g/n/ac/ax
<b>Antenna</b>
2.4GHz: 5dBi
5GHz: 5dBi
<b>Physical Interfaces</b>
1 x 10/100/1000/2500 BASE-T
<b>LED indicators</b>
1 x Power
1 x LAN
1 x 2.4 GHz
1 x 5 GHz
<b>Power Source</b>
PoE 802.3af/at
<b>Maximum Power Consumption</b>
15.9W

Wireless & Radio Specifications
<b>Operating Frequency</b>
Dual-Radio Concurrent 2.4 GHz & 5 GHz
<b>Operation Modes</b>
Managed mode: AP, AP Mesh, Mesh
<b>Frequency Radio</b>
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
<b>Transmit Power</b>
Up to 23 dBm on 2.4 GHz
Up to 25 dBm on 5 GHz
(Maximum power is limited by regulatory domain)
<b>Radio Chains</b>
2 x 2:2
<b>SU-MIMO Capability</b>
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.
<b>MU-MIMO Capability</b>
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.
<b>Supported Data Rates</b>
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)

<b>Supported Radio Technologies</b>
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)
<b>Channelization</b>
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
<b>Supported Modulation</b>
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
<b>Max Concurrent User</b>
128 per radio

Environmental & Physical
<b>Operating Temperature</b>
-4°~140°F/-20°C~60°C
<b>Storage Temperature</b>
-40 °F~176 °F (-40 °C~80 °C)
<b>Operating Temperature</b>
Storage: 90% or less
Dimensions & Weight
<b>Weight</b>
720 g
<b>Dimensions</b>
190 x 124 x 47 mm
<b>Package Contents</b>
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 – Product Card
1 – EPA5006GR PoE Injector

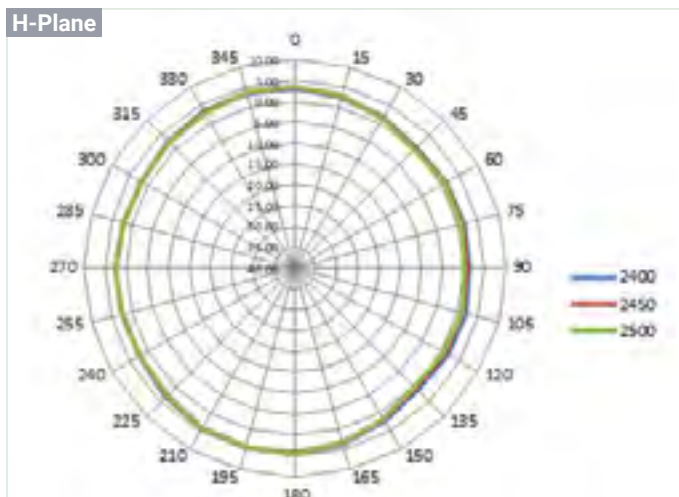
Compliance & Warranty
<b>Safety Compliance</b>
CB
<b>Regulatory Compliance</b>
FCC
CE
IC
UKCA



## Fit6 2x2 Outdoor (EWS850-FIT) Antenna Patterns

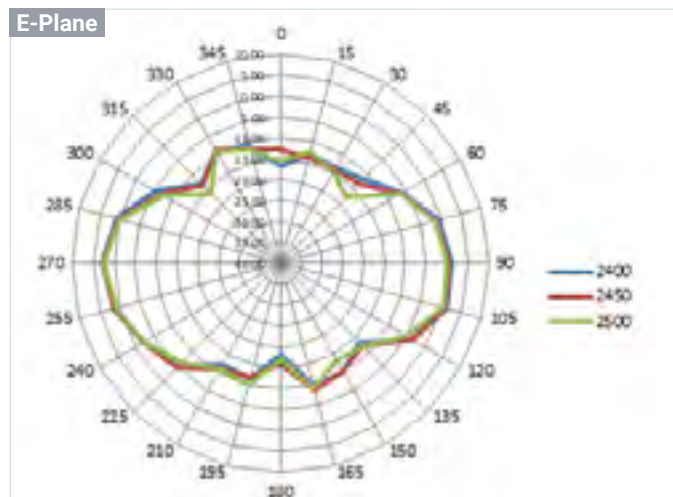
2.4GHz

H-Plane



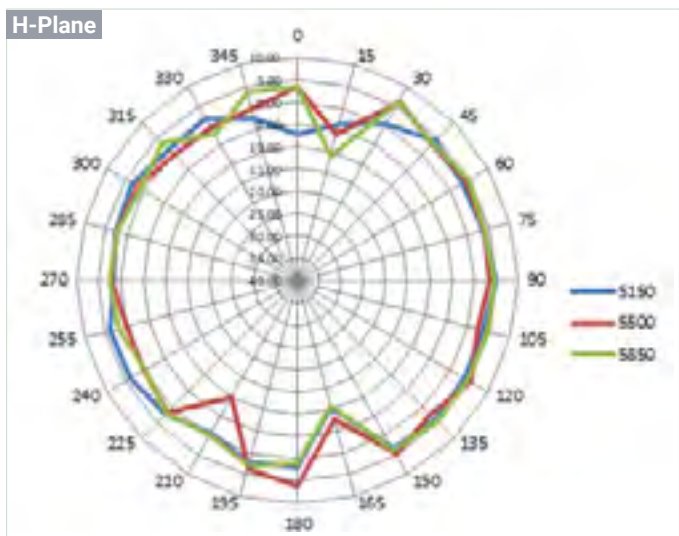
2.4GHz

E-Plane



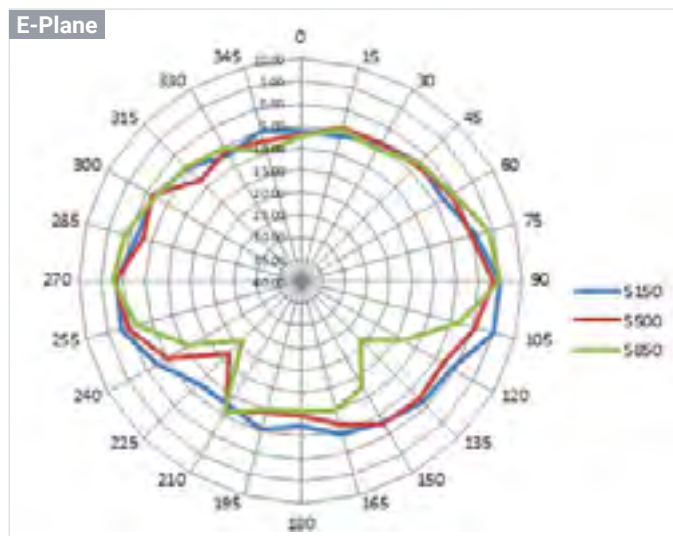
5GHz

H-Plane

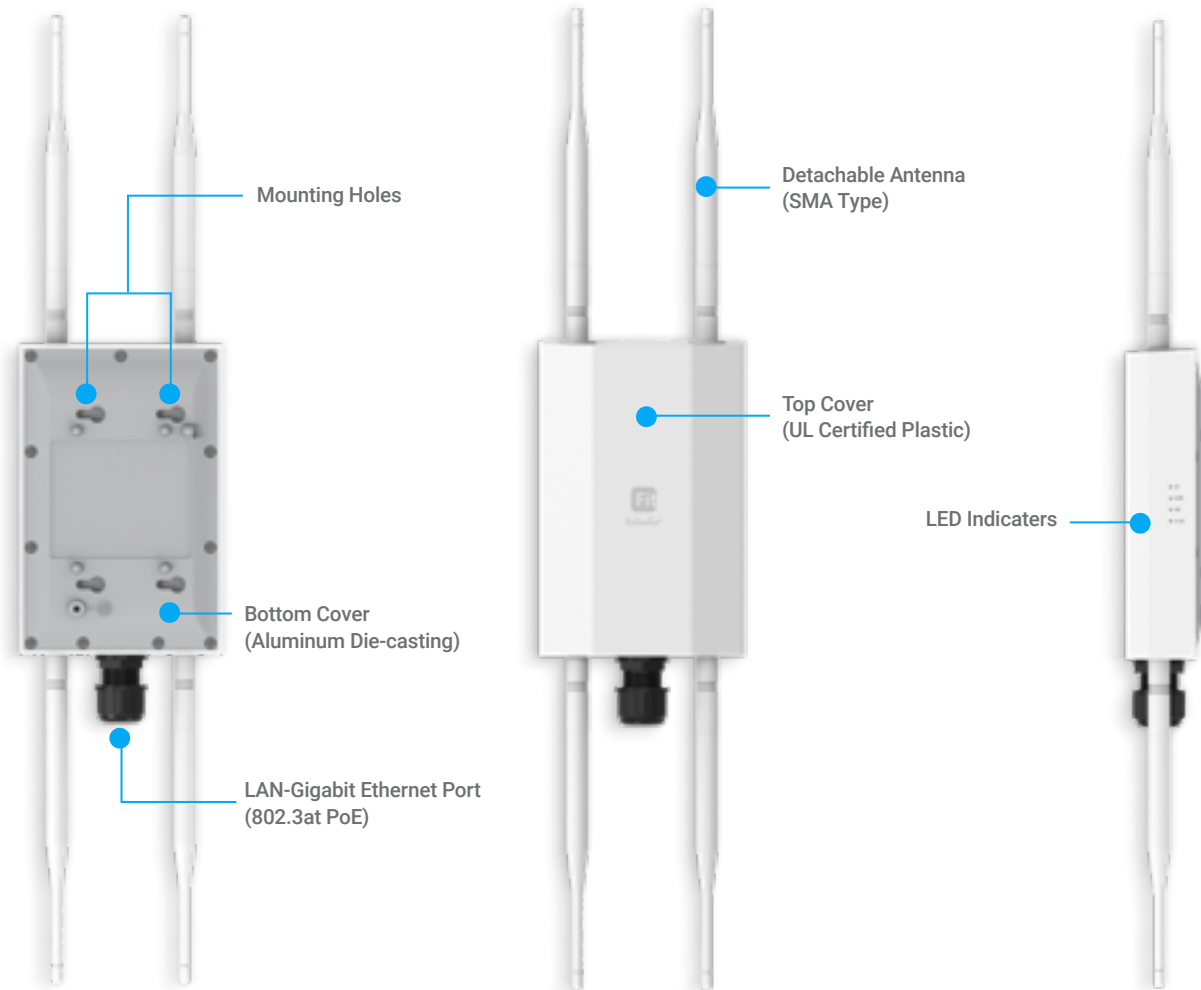


5GHz

E-Plane



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



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Website: [www.engeniustech.com/apac](http://www.engeniustech.com/apac)

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