



## **EnSky Series Indoor Access Points**



# **Indoor Managed Access Points**

Flexible, Reliable, and Secure in-room Wireless Connectivity

EnGenius EnSky Indoor Access Points provide wireless connectivity that's flexible, scalable and reliable for indoor applications. The powerful, business-class performance of access points are suitable for small to mid-size businesses who are looking for ultra-fast indoor Wi-Fi access.

#### Increase User Capacity & Maximize Network Bandwidth

Support heavy-use environments like campus libraries and busy multifloor offices with 11ax performance. 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.

## 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
- Tri-radio & dual-radio MU-MIMO improves performance, expands capacities
- 802.11ax adopts OFDMA for more efficient channel use and lower latency
- Beamforming technology of 11ax and 11ac optimizes signal reception & reliability.
- Remotely manage 1-10000+ APs via ezMaster™
- · No access point licensing or subscription fees
- 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 (select models)

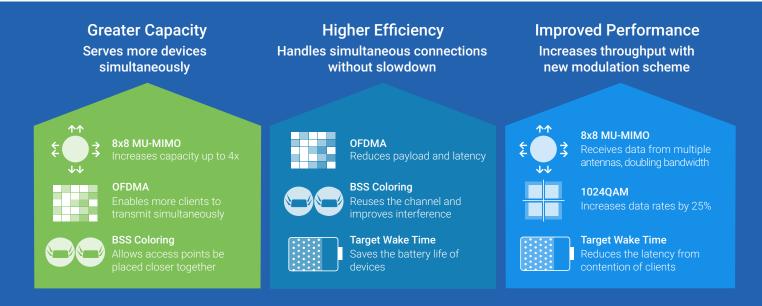


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## **Indoor Access Points Feature Highlights**

## 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.



### **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.



## Flexibility in Deployment

EnSky's versatile line of high-performance, managed, indoor ceiling- and wall-mount access points range from single-band 11n to high-capacity 4x4 11ax models. Wall plate models serve as all-in-one communication "hubs" for in-room wireless connectivity. Configure APs individually as stand-alone units, centrally managed via SkyKey controller or ezMaster software.

## **Protected by Advanced Encryption**

With EnSky 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 EnSky'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 SkyKey and ezMaster Network Management, EnSky 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 EnSky 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.



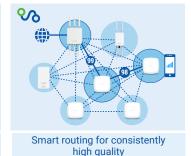


cabling hassles

Smart webbing by Enterprise-grade Meshhassles







#### Power-over-Ethernet Convenience

EnSky access points support 1 or 2.5 Gigabit (Wi-Fi 6 series) PoE ports, enabling placement in discreet locations where power outlets are scarce or unavailable. 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.

## **On-Premises Management Platform**

EnGenius EnSky's on-premises network management platform consists of SkyKey hardware and ezMaster management software. The platform empowers you to monitor, manage, and troubleshoot an indoor network locally or remotely. The plug-and-play SkyKey controller can manage up to 100 EnGenius access points or switches directly with built-in ezMaster software. ezMaster empowers you to setup and maintain multiple customer sites to save time and reduce the operational costs of site visits. You can manage up to 10,000 devices.

# **Access Points Comparison Table**

	Ceiling			
	EnGenius'	EnGeging	Er-German	LITTY Y.
Models	EWS330AP	EWS355AP	EWS360AP	EWS385AP
Wi-Fi Standard	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac	802.11a/b/g/n/ac Wave 2
Radio	2.4 GHz & 5 GHz			
Max. Data Rate on 2.4 GHz	400 Mbps	400 Mbps	450 Mbps	400 Mbps
Max. Data Rate on 5 GHz	867 Mbps	867 Mbps	1,300 Mbps	867 + 867 Mbps
Radio Chains/ Spatial Streams	2 x 2:2	2 x 2:2	3 x 3:3	2 x 2:2
Transmit Power on 2.4GHz	26 dBm	23 dBm	28 dBm	20 dBm
Transmit Power on 5GHz	25 dBm	23 dBm	28 dBm	20 dBm
Antenna on 2.4GHz	2 x 5 dBi (2.4 GHz)	2 x 5 dBi (2.4 GHz)	3 x 3 dBi (2.4 GHz)	2 x 5 dBi (2.4 GHz)
Antenna on 5GHz	2 x 5 dBi (5 GHz)	2 x 5 dBi (5 GHz)	3 x 5 dBi (5 GHz)	2 x 6 dBi (5 GHz)
Power-over-Ethernet	802.3af/at	802.3af/at	802.3at	802.3af
Ethernet Ports	1 x 10/100/1000 Ethernet Port	1 x 10/100/1000 Ethernet Port	1 x 10/100/1000 Ethernet Port	2 x 10/100/1000 Ethernet Ports
Dimensions	Ф132 x 37 mm	162 x 162 x 42 mm	162 x 162 x 42 mm	200 x 200 x 45 mm
Operating Temperature	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C
Mounting Type	Ceiling / Wall	Ceiling / Wall	Ceiling / Wall	Ceiling / Wall
Operating Modes	AP/Mesh/WDS AP/WDS BR/ Repeater	AP/Mesh/WDS AP/WDS BR/ Repeater	AP/Mesh/WDS AP/WDS BR/ Repeater	AP/Mesh/WDS AP/WDS BR/ Repeater
Mesh Technology	V	V	V	V
MU-MIMO	V	V	-	V
Beamforming	V	V	-	V
On-premise management (ezMaster)	V	V	٧	V
Mobile app (EnWiFi App)	V	V	V	V

 $<sup>\</sup>hbox{*Models vary depending on the region.}\\$ 

# **Access Points Comparison Table**

		Ceiling	Wall Plate
	Wi-Fi 6	Wi-Fi 6	E-Gwilia*
Models	EWS357AP	EWS377AP	EWS550AP
Wi-Fi Standard	802.11a/b/g/n/ac/ax	802.11a/b/g/n/ac/ax	802.11a/b/g/n/ac Wave 2
Radio	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz
Max. Data Rate on 2.4 GHz	574 Mbps	1,148 Mbps	400 Mbps
Max. Data Rate on 5 GHz	1,200 Mbps	2,400 Mbps	867 Mbps
Radio Chains/ Spatial Streams	2 x 2:2	4 x 4:4	2 x 2:2
Transmit Power on 2.4GHz	22 dBm	23 dBm	21 dBm
Transmit Power on 5GHz	22 dBm	23 dBm	20 dBm
Antenna on 2.4GHz	2 x 3 dBi (2.4 GHz)	4 x 3 dBi (2.4 GHz)	2 x 4 dBi(2.4 GHz)
Antenna on 5GHz	2 x 3 dBi (5 GHz)	4 x 3 dBi (5 GHz)	2 x 6 dBi (5 GHz)
Power-over-Ethernet	802.3af/at	802.3at	PoE: 802.3at PSE: 802.3af
Ethernet Ports	1 x 10/100/1000 Ethernet Port	1 x 10/100/1000/2500 Ethernet Port	3 x 10/100/1000 Ethernet Ports
Dimensions	160 x 160 x 27 mm	205 x 205 x 33 mm	188 x 125 x 26 mm
Operating Temperature	0°C to 40°C	0°C to 40°C	0°C to 40°C
Mounting Type	Ceiling / Wall	Ceiling / Wall	Wall Plate
Operating Modes	AP/Mesh/WDS AP/ WDS BR/WDS STA	AP/Mesh/WDS AP/ WDS BR/WDS STA	AP/Mesh/WDS AP/WDS BR/ Repeater
Mesh Technology	V	V	V
MU-MIMO	V	V	V
Beamforming	V	V	V
On-premise management (ezMaster)	V	V	V
Mobile app (EnWiFi App)	V	V	V

<sup>\*</sup>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.

#### Hotspot 2.0

This function will allow client devices to discover wireless Access Point under an environment and to automatically exchange data for getting authorization on accessing Internet when roaming between Access Points.

## 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.

## ezMaster

## Controlling capability

## Managing Qty of Devices

Maximum 1,000 pcs of EnGenius Access Points and switches when operating under VM platform.

Maximum 10,000 pcs of EnGenius Access Points and switches when operating under AMI platform.

## Dashboard

## Managed Access Points / Switches

Users can realize status of Access Points and Switches

### System Resource Usage

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

## 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 ezMaster.

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 ezMaster account. Users can restore this settings/configuration to one ezMaster easily.

#### Reboot/Reset

Select to reboot or reset your ezMaster 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 ezMaster.

#### **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 ezMaster throughout manually update

Update ezMaster 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**

OWF

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.

#### Whited List/Blocked List per SSID

- Whited List: Enable a list to allow client devices for accessing to this SSID.
- Blocked List: Enable a list to block client devices for accessing to this SSID.
- Filter up to 32 sets of MAC addresses per 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

## Hotspot 2.0

This function will allow client devices to discover wireless Access Point under an environment and to automatically exchange data for getting authorization on accessing Internet when roaming between Access Points.

#### Social Login

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 facebook login function.

## Monitoring

#### **Rogue AP Detection**

Enable the function to detect the fake access points in the environment.

#### **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.

#### Mach 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 ezMaster software version on the ezMaster / SkyKey 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, Switches, and ezMaster.

#### **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.

## **EnWiFi Mobile App**

### **Quick Configuration**

## **Proceed Initial Configuration**

When powering up EnGenius Access Points, users can use EnWiFi App to configure AP during initial settings.

## Proceed Cluster (group) Settings

Users can set Wi-Fi interfaces settings, Operating modes, SSIDs settings and VLAN setting and then put to a cluster/group. This is easier for initial configuration throughout your mobile / pad devices.

## Monitoring & Device Management

#### In-time Monitoring

You can review dashboard of an AP to realize status of these devices and then proceed further management. These information includes signal level (RSSI), transmit / receive performance, latency, and firmware version.

### Backup configure files

Users can backup configure files to your mobile devices and then restore to the Access Points. The backup and restore is greater on deploying same devices on multiple sites.

## Firmware Update via OCU

Click one button to synchronize with server on checking up-to-date firmware and then decide to upgrade or not by users.

## **EWS330AP Specifications**

## Radio Specification

Wi-Fi Standards

802.11a/b/g/n/ac Wave 2

Tx Power (Aggregated)

2.4GHz: Max. 26dBm\*

5GHz Max. 25dBm\*

**Data Rate** 

802.11b: 1, 2, 5.5, 11Mbps

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

802.11n: 6.5 to 400Mbps (MCS0 to MCS15, HT20 to HT40, support 256-QAM modulation to achieve 400Mbps under 2.4GHz)

802.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS=1 to 2, VHT20 to VHT80)

**SU-MIMO Capability** 

2.4GHz: 2x2

5GHz: 2x2

**MU-MIMO Capability** 

2.4GHz: 2x2

5GHz: 2x2

**Modulation Type** 

802.11b: BPSK,QPSK, CCK

802.11a/g/n/ac: BPSK,QPSK, 16-QAM, 64-QAM, 256-QAM

Support frequency

2400-2483.5MHz, 5150-5250MHz, 5470-5725MHz, 5725-5850MHz\*

Tx Beamforming

Yes

### Antenna Specification

2.4GHz

5dBi

5GHz

5dBi

## Physical Interfaces

**Networking Ethernet Port** 

1 x 10/100/1000 BASE-T

DC-Input

DC12V

**Reset Button** 

Yes, proceed reset and reboot when pushing this button

Power Source and Consumption

Power over Ethernet (PoE)

Proprietary 54V / 802.3af/at

**DC-Input** 

DC12V / 1A

**Power Consumption** 

PoE: Max. 12W DC 12V: Max. 11.9W

Mechanical Specification

Dimensions

Ф132 x 37 mm

Weight

179g

**Environmental Specification** 

**Operating Temperature** 

0 to 40 °C

**Storage Temperature** 

-40 to 80 °C

Storage Humidity

10 to 95% non-condensing

**Mounting Method** 

**Ceiling Mount** 

Yes

Wall Mount

Yes

**Pole Mount** 

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Regulatory Compliance and Certification

Regulatory Compliance

FCC, CE, IC

Safety Compliance

СВ

Wi-Fi Alliance

-

WEEE

Yes

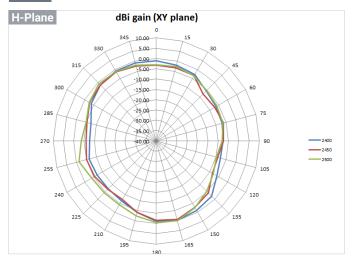
RoHS

Yes

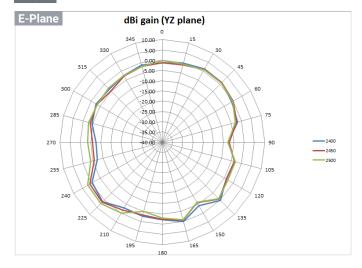
<sup>\*</sup>The available frequency bands and transmit power is varied by local regulatory.

## **EWS330AP Antenna Patterns**

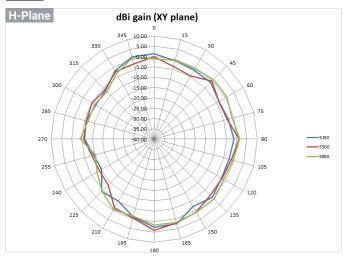
## 2.4GHz

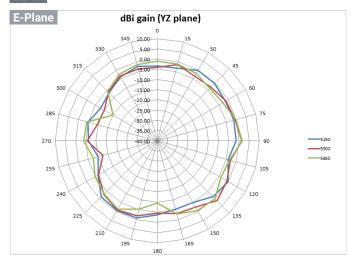


## 2.4GHz

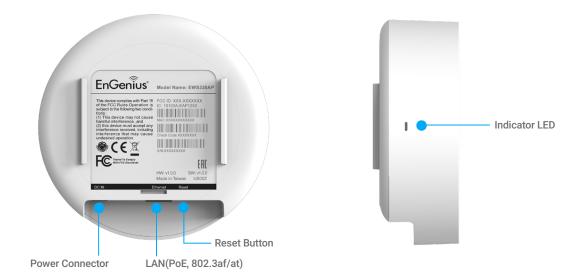


## 5GHz





## **EWS330AP Product Views**



## **EWS355AP Specifications**

Radio Specification	
Vi-Fi Standards	
02.11a/b/g/n/ac Wave2	
x Power (Aggregated)	
.4GHz: Max. 23dBm*	
GHz Max. 23dBm*	
Data Rate	
02.11b: 1, 2, 5.5, 11Mbps	
02.11a/g: 6, 9, 12, 18, 36, 48, 54Mbps	
02.11n: 6.5 to 400Mbps (MCS0 to MCS15, HT20 to HT40, support 256-nodulation to achieve 400Mbps under 2.4GHz)	QAM
02.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS=1 to 2, VHT20 to VHT8	J)
SU-MIMO Capability	
.4GHz: 2x2	
GHz: 2x2	
/IU-MIMO Capability	
.4GHz: 2x2	
GHz: 2x2	
Modulation Type	
02.11b: BPSK, QPSK, CCK	

## Support frequency

2400-2483.5MHz, 5150-5250MHz, 5470-5725MHz, 5725-5850MHz\*

802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

## Tx Beamforming

Yes

## Antenna Specification

#### 2.4GHz

5dBi

## 5GHz

5dBi

## Physical Interfaces

### **Networking Ethernet Port**

1 x 10/100/1000 BASE-T

## DC-Input

DC12V

## **Reset Button**

Yes, proceed reset and reboot when pushing this button

## Power Source and Consumption

#### Power over Ethernet (PoE)

Proprietary 54V / 802.3af/at

#### DC-Input

DC12V / 1A

#### **Power Consumption**

PoE: Max. 12W DC 12V: Max. 12W

### Mechanical Specification

#### **Dimensions**

162 x 162 x 42 mm

### Weight

336g

## **Environmental Specification**

### **Operating Temperature**

0 to 40 °C

### **Storage Temperature**

-40 to 80 °C

### Storage Humidity

10 to 95% non-condensing

## **Mounting Method**

## **Ceiling Mount**

Yes

## Wall Mount

Yes

### **Pole Mount**

-

## Regulatory Compliance and Certification

### **Regulatory Compliance**

FCC, CE, IC

### Safety Compliance

СВ

### Wi-Fi Alliance

-

## WEEE

Yes

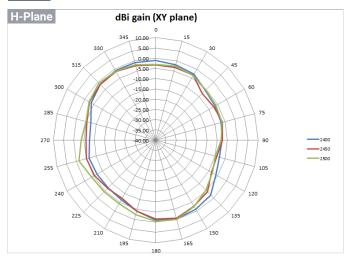
#### RoHS

Yes

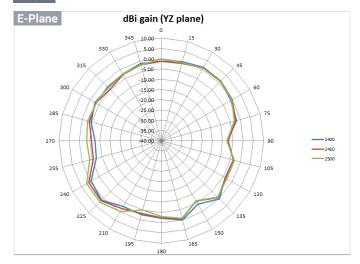
<sup>\*</sup>The available frequency bands and transmit power is varied by local regulatory.

## **EWS355AP Antenna Patterns**

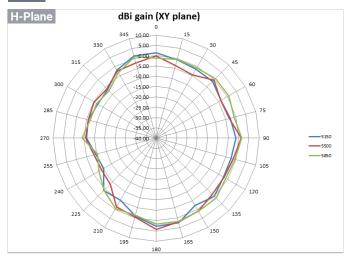
## 2.4GHz

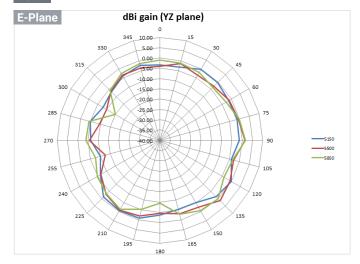


## 2.4GHz

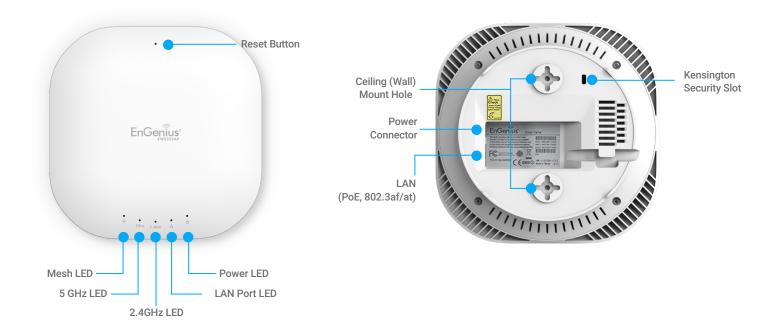


## 5GHz





## **EWS355AP Product Views**



## **EWS360AP Specifications**

Radio Specification	
Wi-Fi Standards	
802.11a/b/g/n/ac	

Tx Power (Aggregated)
2.4GHz: Max. 28dBm\*

5GHz Max. 28dBm\*

**Data Rate** 

802.11b: 1, 2, 5.5, 11Mbps

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

802.11n: 6.5 to 450Mbps (MCS0 to MCS23, HT20 to HT40)

802.11ac: 6.5 to 1300Mbps (MCS0 to MCS9, NSS=1 to 3, VHT20 to VHT80)

**SU-MIMO Capability** 

2.4GHz: 3x3

5GHz: 3x3

**MU-MIMO Capability** 

2.4GHz: 3x3

5GHz: 3x3

**Modulation Type** 

802.11b: BPSK,QPSK, CCK

802.11a/g/n/ac: BPSK,QPSK, 16-QAM, 64-QAM, 256-QAM

Support frequency

2400-2483.5MHz, 5150-5250MHz, 5470-5725MHz, 5725-5850MHz\*

Tx Beamforming

No

Antenna Specification

2.4GHz

3dBi

5GHz

5dBi

Physical Interfaces

**Networking Ethernet Port** 

1 x 10/100/1000 BASE-T

DC-Input

DC12V

Reset Button

Yes, proceed reset and reboot when pushing this button

Power Source and Consumption

Power over Ethernet (PoE)

Proprietary 54V / 802.3at

DC-Input

DC12V / 2A

**Power Consumption** 

PoE: Max. 20W DC 12V: Max. 19W

Mechanical Specification

**Dimensions** 

162 x 162 x 42 mm

Weight

336g

**Environmental Specification** 

**Operating Temperature** 

0 to 40 °C

**Storage Temperature** 

-40 to 80 °C

Storage Humidity

10 to 95% non-condensing

**Mounting Method** 

**Ceiling Mount** 

Yes

**Wall Mount** 

Yes

Pole Mount

\_\_\_\_

Regulatory Compliance and Certification

Regulatory Compliance

FCC, CE, IC, RCM

Safety Compliance

СВ

Wi-Fi Alliance

-

WEEE

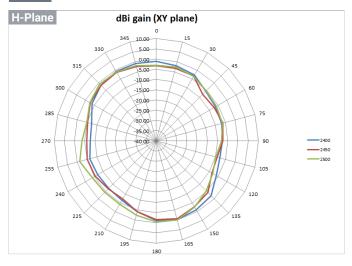
\_\_\_\_

RoHS

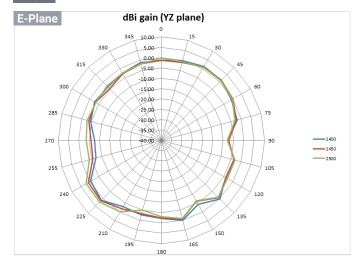
<sup>\*</sup>The available frequency bands and transmit power is varied by local regulatory.

## **EWS360AP Antenna Patterns**

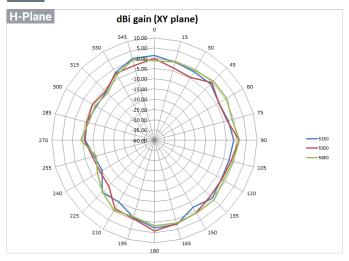
## 2.4GHz

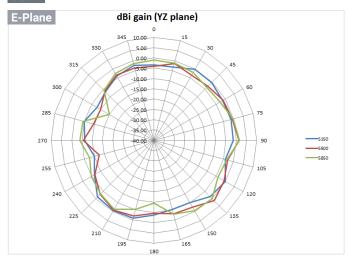


## 2.4GHz

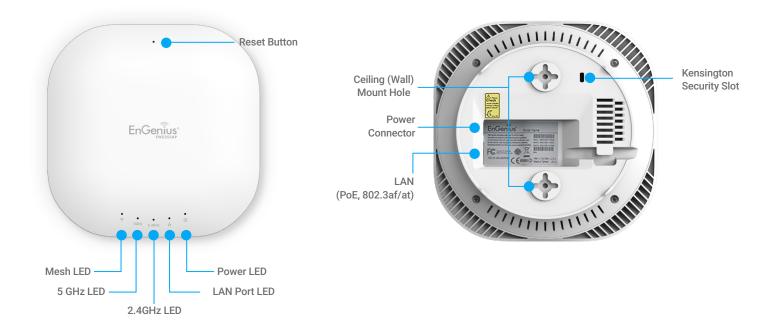


## 5GHz





## **EWS360AP Product Views**



## **EWS357AP Specifications**

Wi-Fi Standards 302.11a/b/g/n/ac/ax  Tx Power (Aggregated)	
<del>-</del>	
Tx Power (Aggregated)	
(333)	
2.4GHz: Max. 22dBm*	
5GHz Max. 22dBm*	
Data Rate	
302.11b: 1, 2, 5.5, 11Mbps	
302.11a/g: 6, 9, 12, 18, 36, 48, 54Mbps	
302.11n: 6.5 to 300Mbps (MCS0 to MCS15, HT20 to HT40)	
302.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS=1 to 2, VHT20 to VHT80	)
302.11ax (2.4GHz): 9 to 574Mbps (MCS0 to MCS11, NSS=1 to 2, HE20 to	HE40)
302.11ax (5GHz): 18 to 1200Mbps (MCS0 to MCS11, NSS=1 to 2, HE20 to	HE80)
SU-MIMO Capability	
2.4GHz: 2x2	
5GHz: 2x2	
MU-MIMO Capability	
2.4GHz: 2x2	
5GHz: 2x2	
Modulation Type	
302.11b: BPSK, QPSK, CCK	
802.11a/g/n/ac: BPSK,QPSK, 16-QAM, 64-QAM, 256-QAM	
802.11ax: BPSK,QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM	
Support frequency 2400-2483.5MHz, 5150-5250MHz, 5470-5725MHz, 5725-5850MHz*	
2 100 2 100.0(vii 12, 01 00 0200(vii 12, 047 0 07 20(vii 12, 07 20 0000(vii 12	
Tx Beamforming	
/es	
Max Concurrent User	
wax concurrent oser	

Physical Interfaces	
Networking Ethernet Port	

1 x 10/100/1000 BASE-T

DC-Input

DC12V

Yes, proceed reset and reboot when pushing this button

Power	Source	and (	Consum	ption

### Power over Ethernet (PoE)

Proprietary 54V / 802.3af/at

### DC-Input

DC12V / 1.5A

#### **Power Consumption**

PoE: Max. 13W DC 12V: Max. 12.8W

## Mechanical Specification

### **Dimensions**

160 x 160 x 27 mm

### Weight

382g

## **Environmental Specification**

### **Operating Temperature**

0 to 40 °C

### **Storage Temperature**

-40 to 80 °C

## Storage Humidity

10 to 95% non-condensing

## **Mounting Method**

## **Ceiling Mount**

Yes

## **Wall Mount**

Yes

## **Pole Mount**

## Regulatory Compliance and Certification

## **Regulatory Compliance**

FCC, CE, IC, NCC

### **Safety Compliance**

СВ

## Wi-Fi Alliance

Yes

## WEEE

Yes

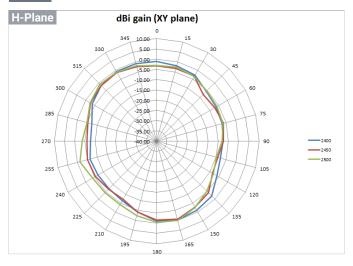
#### RoHS

Yes

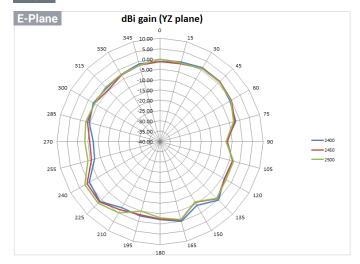
<sup>\*</sup>The available frequency bands and transmit power is varied by local regulatory.

## **EWS357AP Antenna Patterns**

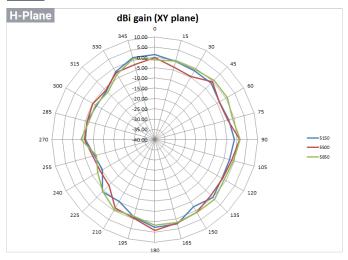
## 2.4GHz

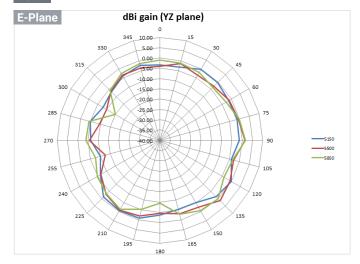


## 2.4GHz



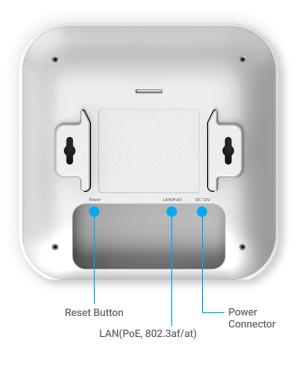
## 5GHz





## **EWS357AP Product Views**





Radio Specific	Cation
Wi-Fi Standards	
802.11a/b/g/n/a	ıc/ax
Tx Power (Aggre	egated)
2.4GHz: Max. 23	dBm*
5GHz Max. 23dB	m*
Data Rate	
802.11b: 1, 2, 5.5	i, 11Mbps
802.11a/g: 6, 9, 1	12, 18, 36, 48, 54Mbps
802.11n: 6.5 to 6	00Mbps (MCS0 to MCS31, HT20 to HT40)
802.11ac: 6.5 to	1733Mbps (MCS0 to MCS9, NSS=1 to 4, VHT20 to VHT80)
802.11ax (2.4GH	z): 9 to 1148Mbps (MCS0 to MCS11, NSS=1 to 4, HE20 to HE40)
802.11ax (5GHz)	: 18 to 2400Mbps (MCS0 to MCS11, NSS=1 to 4, HE20 to HE80)
SU-MIMO Capab	pility
2.4GHz: 4x4	
5GHz: 4x4	
MU-MIMO Capa	bility
2.4GHz: 4x4	
5GHz: 4x4	
Modulation Type	
Modulation Type 802.11b: BPSK,Q	
	BPSK,QPSK, 16-QAM, 64-QAM, 256-QAM
	QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
Support frequen	
2400-2483.5MHz	z, 5150-5250MHz, 5470-5725MHz, 5725-5850MHz*
Tx Beamforming	J
Yes	
Max Concurrent	User
511 Per radio	
Antenna Spec	rification
2.4GHz	
3dBi	
5GHz	
3dBi	
Physical Inter	taces
Networking Ethe	
1 x 10/100/1000	//2500 BASE-T
DC-Input	
DC12\/	

Proprietary 54V / 802.3at
DC-Input
DC12V / 2A
Power Consumption
Power Consumption
PoE: Max. 21W DC 12V: Max. 20W
Mechanical Specification
Dimensions
205 x 205 x 33 mm
Weight
597g
Environmental Specification
Operating Temperature
0 to 40 °C
Storage Temperature
-40 to 80 °C
Storage Humidity  10 to 95% non-condensing
10 to 93% Horrechidensing
Mounting Method
Ceiling Mount
Yes
Wall Mount
Yes
Pole Mount
Regulatory Compliance and Certification
Regulatory Compliance
FCC, CE, IC
Safety Compliance
СВ
Wi-Fi Alliance
-
WEEE

Power Source and Consumption

Power over Ethernet (PoE)

Yes RoHS

Yes

Yes, proceed reset and reboot when pushing this button

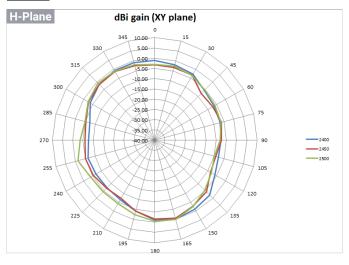
DC12V

**Reset Button** 

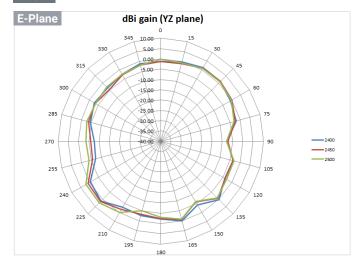
 $<sup>{}^{\</sup>star}\mathrm{The}$  available frequency bands and transmit power is varied by local regulatory.

## **EWS377AP Antenna Patterns**

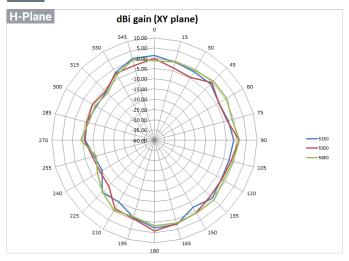
## 2.4GHz

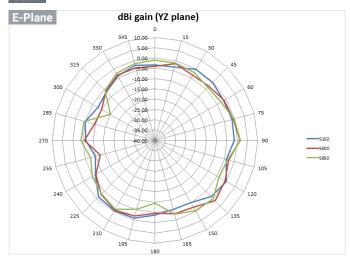


## 2.4GHz



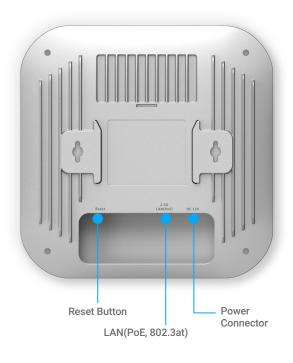
## 5GHz





## **EWS377AP Product Views**





## **EWS385AP Specifications**

# Radio Specification

802.11a/b/g/n/ac Wave 2; Tri-band

## Tx Power (Aggregated)

Wi-Fi Standards

2.4GHz: Max. 20dBm\*

5GHz Max. 20dBm\*

#### **Data Rate**

802.11b: 1, 2, 5.5, 11Mbps

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

802.11n: 6.5 to 400Mbps (MCS0 to MCS15, HT20 to HT40, support 256-QAM modulation to achieve 400Mbps under 2.4GHz)

802.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS=1 to 2, VHT20 to VHT80)

#### **SU-MIMO Capability**

2.4GHz: 2x2

5GHz: 2x2+2x2

#### **MU-MIMO Capability**

2.4GHz: 2x2

5GHz: 2x2+2x2

## **Modulation Type**

802.11b: BPSK,QPSK, CCK

802.11a/g/n/ac: BPSK,QPSK, 16-QAM, 64-QAM, 256-QAM

## Support frequency

2400-2483.5MHz, 5150-5250MHz, 5470-5725MHz, 5725-5850MHz\*

### Tx Beamforming

Yes

### Antenna Specification

## 2.4GHz

5dBi

### 5GHz

6dBi

## Physical Interfaces

## Networking Ethernet Port

2 x 10/100/1000 BASE-T

## DC-Input

DC12V

#### **Reset Button**

Yes, proceed reset and reboot when pushing this button

### Power Source and Consumption

#### Power over Ethernet (PoE)

Proprietary 54V / 802.3af/at

#### **DC-Input**

DC12V / 1A

#### **Power Consumption**

PoE: Max. 11W DC 12V: Max. 11W

#### Mechanical Specification

#### Dimensions

200 x 200 x 45 mm

#### Weight

614g

### **Environmental Specification**

#### **Operating Temperature**

0 to 40 °C

#### **Storage Temperature**

-40 to 80 °C

### Storage Humidity

10 to 95% non-condensing

## **Mounting Method**

## **Ceiling Mount**

Yes

## Wall Mount

Yes

## Pole Mount

-

## Regulatory Compliance and Certification

## Regulatory Compliance

FCC, CE, IC

#### Safety Compliance

СВ

## Wi-Fi Alliance

-

## WEEE

Yes

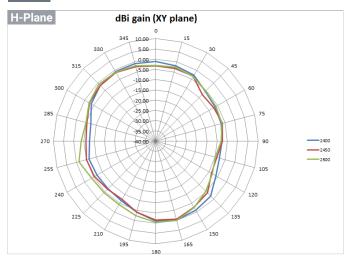
## RoHS

Yes

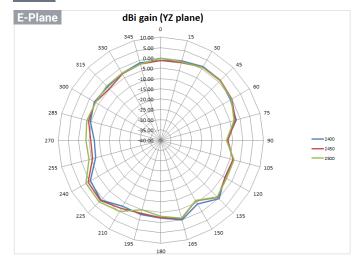
<sup>\*</sup>The available frequency bands and transmit power is varied by local regulatory.

## **EWS385AP Antenna Patterns**

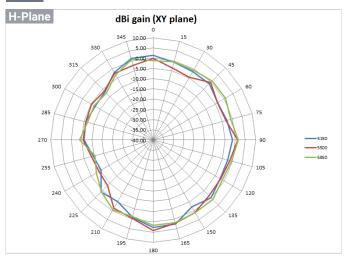
## 2.4GHz

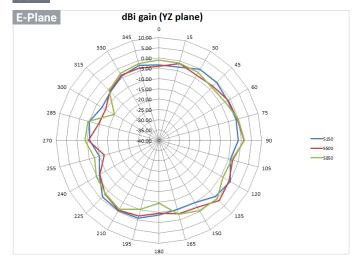


## 2.4GHz

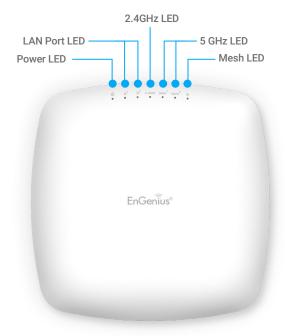


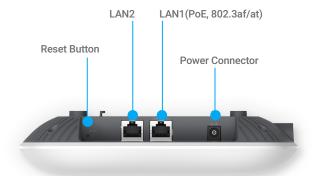
## 5GHz





## **EWS385AP Product Views**





## **EWS550AP Specifications**

## Radio Specification Wi-Fi Standards 802.11a/b/g/n/ac Wave 2 Tx Power (Aggregated) 2.4GHz: Max. 21dBm\* 5GHz Max. 20dBm\* **Data Rate** 802.11b: 1, 2, 5.5, 11Mbps 802.11a/g: 6, 9, 12, 18, 36, 48, 54Mbps 802.11n: 6.5 to 400Mbps (MCS0 to MCS15, HT20 to HT40, support 256-QAM modulation to achieve 400Mbps under 2.4GHz) 802.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS=1 to 2, VHT20 to VHT80) **SU-MIMO Capability** 2.4GHz: 2x2 5GHz: 2x2 **MU-MIMO Capability** 2.4GHz: 2x2 5GHz: 2x2 **Modulation Type** 802.11b: BPSK,QPSK, CCK 802.11a/g/n/ac: BPSK,QPSK, 16-QAM, 64-QAM, 256-QAM Support frequency 2400-2483.5MHz, 5150-5250MHz, 5470-5725MHz, 5725-5850MHz\* Tx Beamforming Antenna Specification 2.4GHz 4dBi 5GHz 6dBi Physical Interfaces **Networking Ethernet Port** 3 x 10/100/1000 BASE-T DC-Input DC12V

Power Source and Consumption
Power over Ethernet (PoE)
Proprietary 54V / 802.3af/at (Supports 802.3af output when PoE input is 802.3at
DC-Input
DC12V / 1A
Power Consumption
PoE: Max. 10W; 25.4W (PoE+PSE) DC 12V: Max. 9.2W; 24.6W (PoE+PSE)
Mechanical Specification
Dimensions
188 x 125 x 26 mm
Weight
454q
E :
Environmental Specification
Operating Temperature
0 to 40 °C
Storage Temperature
-40 to 80 °C
Storage Humidity
10 to 95% non-condensing
Mounting Method
Ceiling Mount
Yes
Wall Mount
Yes
Pole Mount
-
Demoleten Compliance and Combined
Regulatory Compliance and Certification
Regulatory Compliance
FCC, CE, IC
Safety Compliance
СВ
THE PLANE

Wi-Fi Alliance

WEEE

Yes RoHS Yes

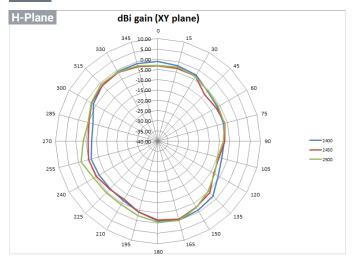
Yes, proceed reset and reboot when pushing this button

**Reset Button** 

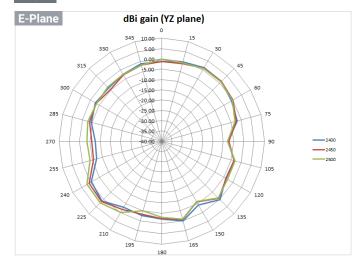
<sup>\*</sup>The available frequency bands and transmit power is varied by local regulatory.

## **EWS550AP Antenna Patterns**

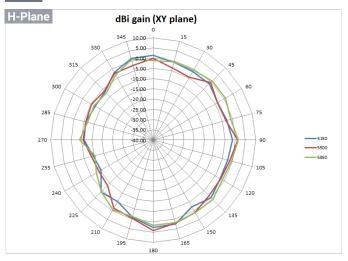
## 2.4GHz

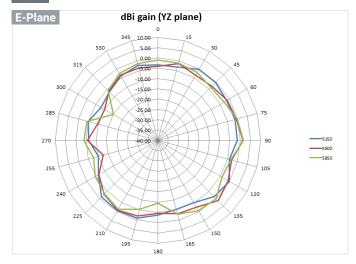


## 2.4GHz

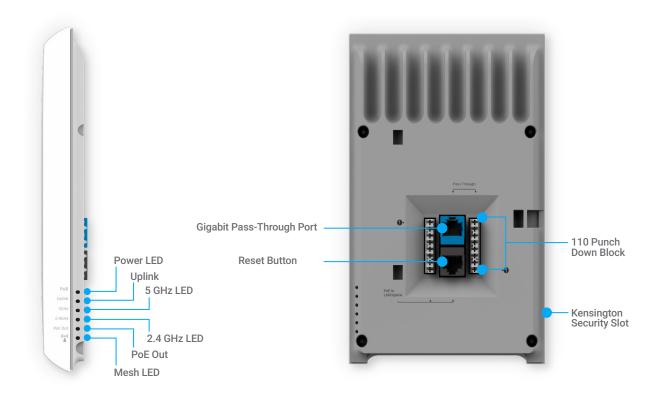


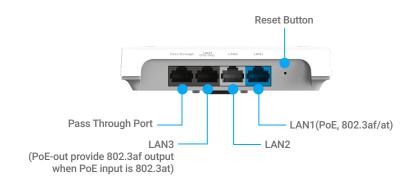
## 5GHz





## **EWS550AP Product Views**





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