Edge-core EAP105 Wi-Fi 7 Access Point User Guide

Edge-core EAP105 Wi-Fi 7 Access Point User Guide

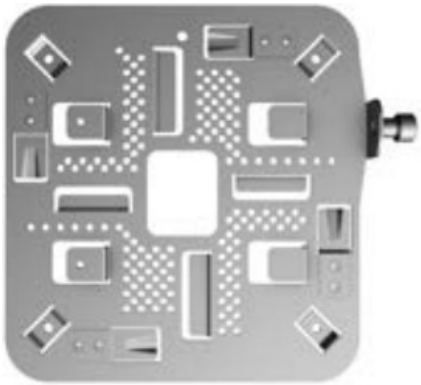
Contents

1 Package Contents
2 Overview
3 Installation
4 Mount the AP
5 Connect Cables
6 Check the System LED
7 Connect to the Web User Interface
8 (Optional) QR Code Onboarding
9 Safety and Regulatory Information
10 Professional Installation Instructions
11 CE Statement
12 Warnings and Cautionary Messages
13 Hardware Specifications
14 Power Specifications
15 Regulatory Compliances
16 Documents / Resources
16.1 References
17 Related Posts

Package Contents

1. EAP105 access point

2. Mounting bracket accessory



3. Ceiling plate

4. 2 x Mounting bracket security screws

5. Screw kit—4 screws and 4 plugs

6. QR code card

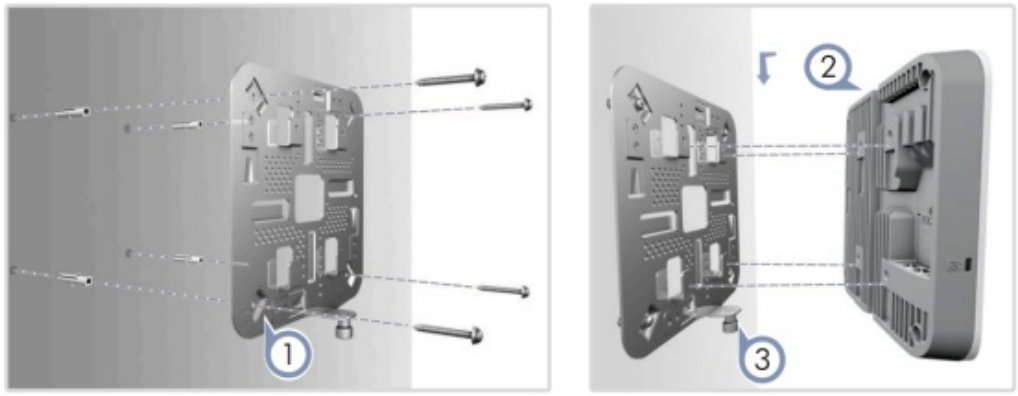
Overview

1. USB PD 3.0 15-20 VDC input
2. **Uplink (PoE) Port**: 5GBASE-T, 802.3at PoE
3. **LAN Port:** 10/100/1000BASE-T
4. **Restart/Reset button:**
    - A quick press restarts the system.
    - Press and hold for 5 seconds resets to factory defaults.
5. **System LED Indicator:**
    - **Green:** On (power OK), Blinking (boot up)
    - **Blue:** On (cloud managed)
    - **Purple:** Blinking (uplink activity in cloud-managed mode)
    - **Orange**: Blinking (uplink activity in stand-alone mode)
6. Kensington lock slot

Installation

Mount the AP

a. Mounting on a Wall



1. At the installation location on the wall, use the mounting bracket to mark four holes for the wall plugs and

screws (included in the screw kit).

Drill four holes for the wall plugs, and then insert the plugs and tap them flush with the wall surface.

Note: Drill 2.5 mm (±0.2 mm) holes for M3 self-tapping screws, or 4.5 mm (±0.2 mm) holes for nylon wall plugs.

Use the four screws to secure the bracket to the wall.

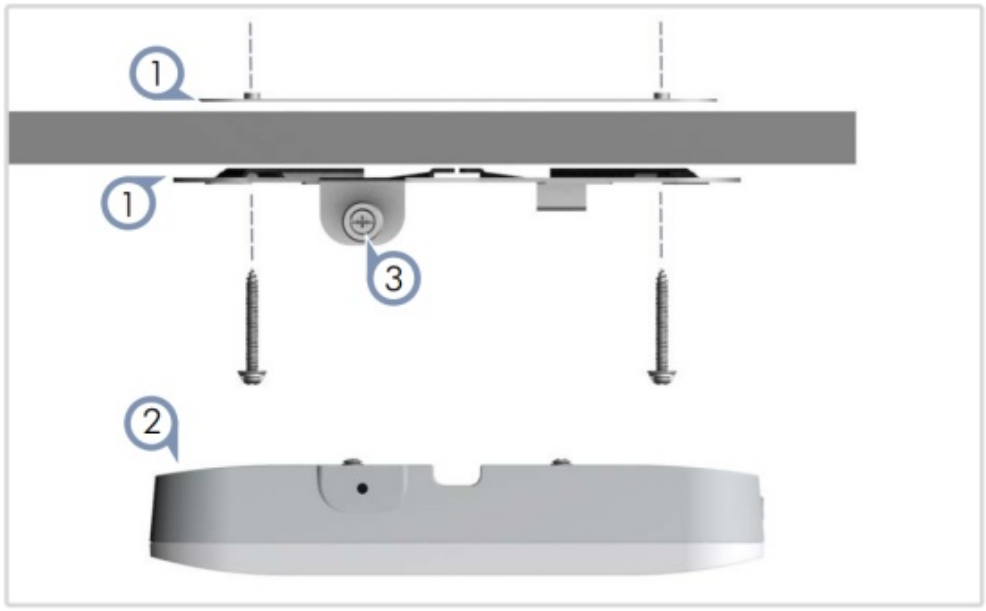
2. With its ports facing down, place the AP over the bracket flanges and then slide it down until it snaps into its secured position.
3. Use the bracket's thumb screw to secure the AP to the bracket.

b. Mounting on a Suspended Ceiling T-Bar

1. Slide the bracket accessory onto the base of the AP and secure it using the bracket's thumb screw.
2. Use the two included security screws to completely secure the bracket to the AP.
3. Position the ceiling-mount clip holders on either side of the T-bar, and then turn the AP until the two clips lock it to the T-bar.

Note: The AP mounting supports two different sizes of suspended ceiling T-bars. The position illustrated above is for 15 mm bars. Use the position at a 90 degrees angle for 24.5 mm bars.

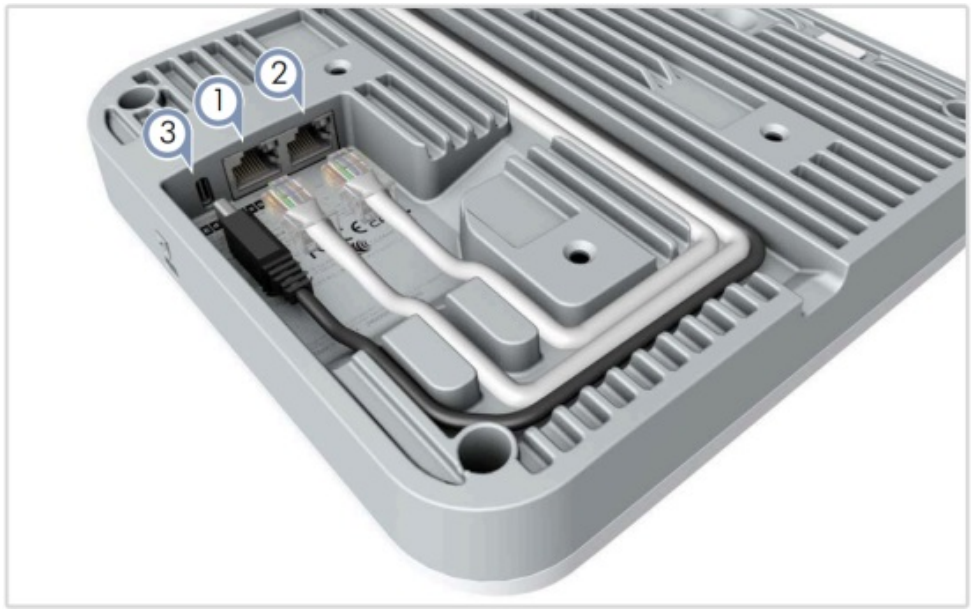
c. Mounting on a Ceiling Without T-Bars



1. At the installation location on the ceiling, use the mounting bracket to mark and drill four holes for the screws (included in the screw kit).
   Place the ceiling plate on the top side of the ceiling surface.
   Use the four screws to secure the bracket to the ceiling plate through the ceiling material (screw torque must be less than 6 kgf.cm).
2. Place the AP over the bracket flanges and then slide it onto the bracket until it snaps into its secured position.
3. Use the bracket's thumb screw to secure the AP to the bracket.

Connect Cables

a. Connect LAN Cables



1. Connect Category 5e or better cable to the Uplink (PoE) 5GBASE-T RJ-45 port. When connected to a PoE source, the Uplink (PoE) port connection provides power to the unit.
2. (Optional) Connect a local LAN switch or computer to the LAN 1000BASE-T RJ-45 port.

   b. (Optional) Connect AC Power Adapter
3. When not connected to a PoE source, connect the AC power adapter to the USB PD Type-C port on the AP and

then plug the adapter into a nearby AC power source.

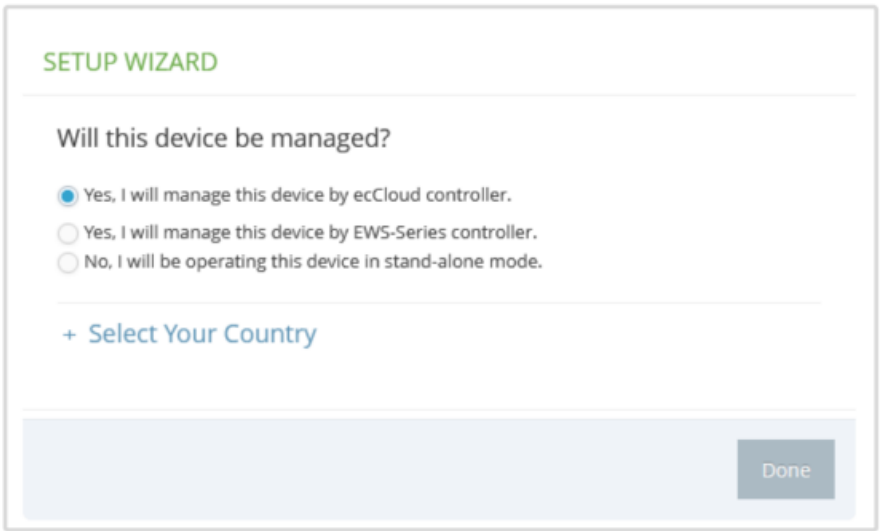
Check the System LED

1. When operating normally, the System LED should be on green. Blinking indicates the device is booting up.

Connect to the Web User Interface

1. Connect a PC directly to the AP's LAN port.
2. Set the PC IP address to be on the same subnet as the AP LAN port default IP address. (The PC address must start 192.168.2.x with subnet mask 255.255.255.0.)
3. Enter the AP's default IP address of 192.168.2.1 into the web browser address bar.

   Note: To connect to the web interface using the Uplink (PoE) port, the IP address is automatically assigned through DHCP by default. If a DHCP server is unreachable, the Uplink (PoE) port reverts to a fallback IP address of 192.168.1.10.
4. On first-time log in to the web interface, the Setup Wizard starts and you must select how the AP will be managed, either using the ecCLOUD controller, an EWS-Series controller, or in stand-alone mode.



5. **Continue with the Setup Wizard to make other settings:**
   - **Cloud-Managed Mode:** Select the country of operation.
   - **EWS-Series Controller Mode:** Complete the CAPWAP setup, use the default wireless network setting or

customize the network name, then set a password (the default user name is “admin” with password “admin”), and select the country of operation.

- **Stand-Alone Mode**: Use the default wireless network setting or customize the network name, then set a password (the default user name is “admin” with password “admin”), and select the country of operation.

6. Click “Done” to finish the setup wizard.

Note: For more information on the Setup Wizard and AP configuration, refer to the User Manual.

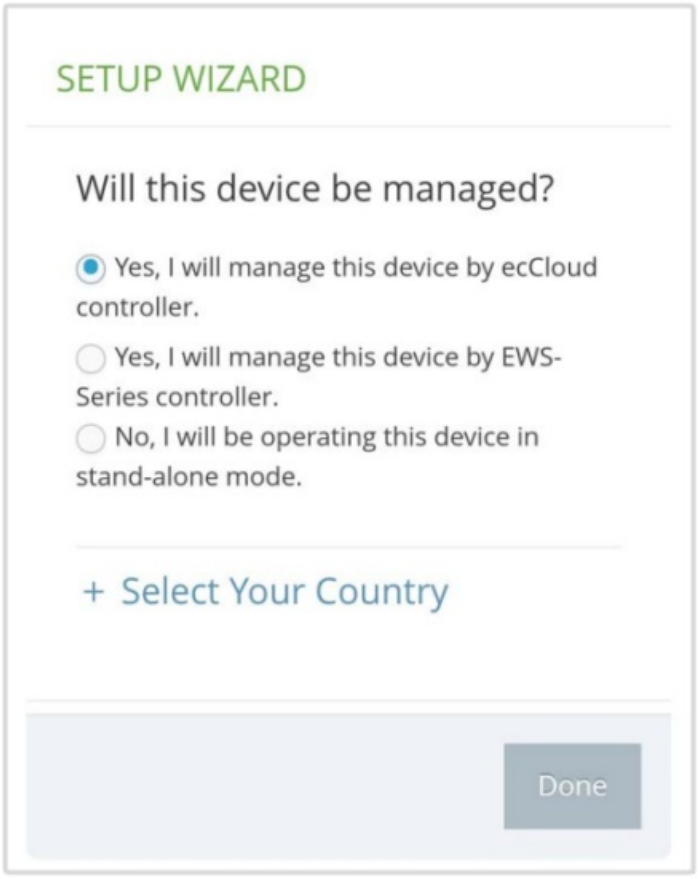
(Optional) QR Code Onboarding

For quick set up and registration of your AP with the ecCLOUD controller, you can scan the QR code on the AP using a phone.

Follow these steps:

1. Make sure the AP is powered on and connected to the Internet.
2. Use the camera (iPhone) or a barcode app (Android) on your phone to scan the AP’s QR code. The QR code is printed on a label next to the AP’s ports.

3. When a message pops up, tap “yes” to join the Wi-Fi network (iPhone requires you to go to Settings > Wi-Fi or open the browser for the message to pop up).
   The web browser should open and redirect to the Setup Wizard page.
   Note: If the phone cannot connect to the Wi-Fi network, type the SSID (network name) and password manually. The SSID name is the AP serial number (for example, EC0123456789), and the password is the AP MAC address (for example, 903CB3BC1234).
4. After setting a new password and the regulatory country, select to manage the AP using the ecCLOUD controller, an EWS-Series controller, or to manage the AP in stand-alone mode.

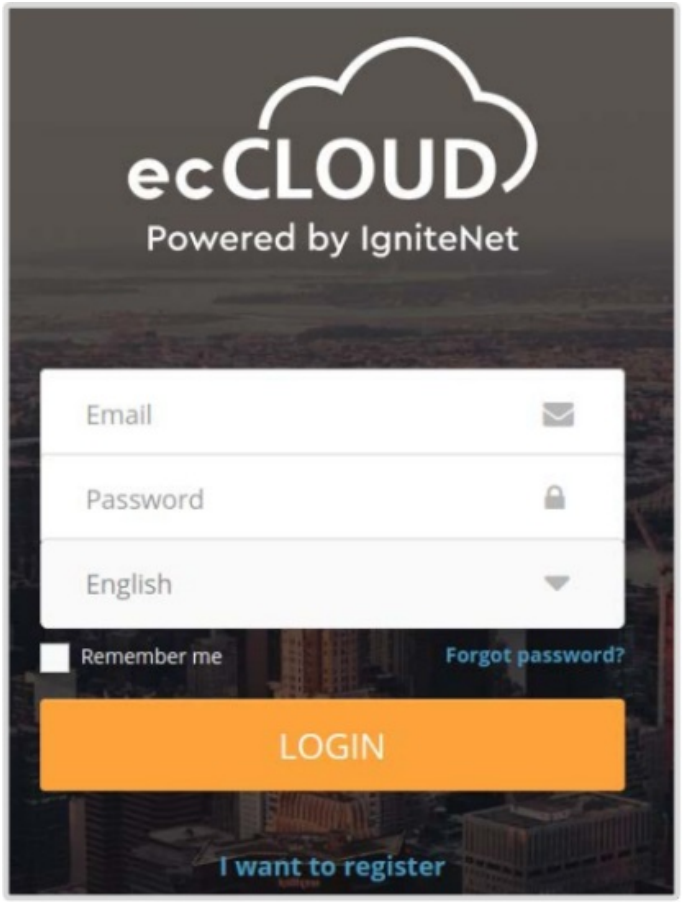


α. Stand-Alone Mode: Use the default wireless network setting or customize the network name and password. Tap “Done” to finish the Setup Wizard.

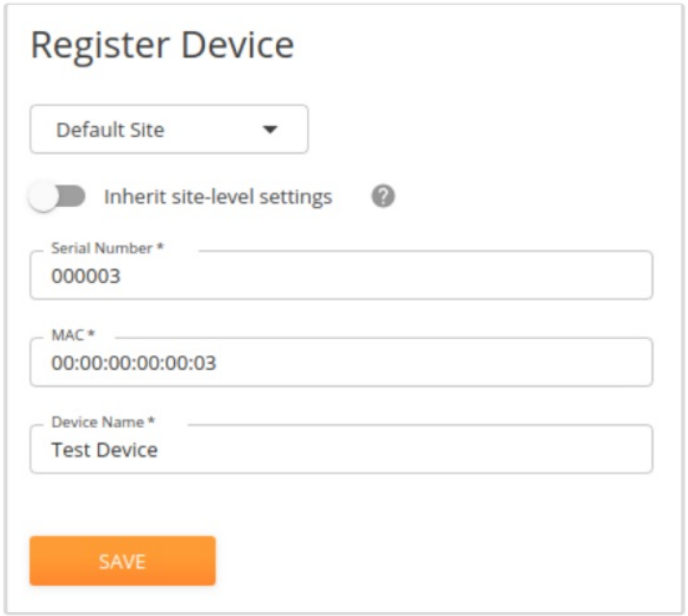
Wait about two minutes for the AP configuration to update, and then connect to the wireless network name configured in the setup wizard. The browser is then redirected to the login page of the AP.

b. EWS-Series Controller Mode: Complete the CAPWAP setup, then set a password and select the country of operation. Tap “Done” to finish the setup wizard.

C. Cloud-Managed Mode: Tap “Done” to finish the setup wizard and the browser is redirected to the ecCLOUD login page.



If you already have an ecCLOUD account, log in and select a site for the AP. The AP is automatically registered for cloud management. After you tap “Save,” wait about two minutes for the cloud controller to configure the AP.



If you do not have an ecCLOUD account, tap “I want to register” and first set up an account. Create a cloud and site before confirming the regulatory country. After tapping “Next,” the AP is then automatically registered for cloud management. After you tap “Save,” wait about two minutes for the cloud controller to configure the AP.

Note: Refer to the Edge core ecCLOUD Controller User Manual for more information on setting up and configuring APs through ecCLOUD.

Safety and Regulatory Information

FCC Class B
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against barnful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by terming the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/IV technician for help

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For product available in the USA/Canada market, only channel 1~11. can be operated. Selection of other channels is not possible.

IMPORTANT NOTE:
FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 54 cm between the radiator and your body.

Professional Installation Instructions

1. **Installation personnel**
   This product is designed for specific applications and should be installed by qualified personnel who have knowledge of RF and its related regulations. A general user shall not attempt to install or modify the equipment configuration.
2. **Installation location**
   To meet regulatory RF exposure requirements, this product shall be installed at a location where, during normal operations, the radiating. antenna is at least 54 cm away from any nearby persons,
3. **Installation procedure**
   Please refer to this equipment's user manual for the procedure details.
4. **Waning**
   The installation position must be carefully selected so that the final output power does not exceed the limit set forth in relevant regulations. Violation of output power regulations could lead to serious federal penalties.
   The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that the operation of this device is permitted in large aircraft while flying above 10,000 feet in the 5.925-6.425 GHz band.
   Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

Industry Canada
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference
2. This device must accept any interference, including interference that may cause undesired operation of the device.

The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

IMPORTANT NOTE:
IC Radiation Exposure Statement:
This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **32** cm between the radiator & your body.

Caution
User should also be advised that:

Devices shall not be used for control of or communications with unmanned aircraft systems.

Devices shall not be used on oil platforms.

Devices shall not be used on aircraft, except for the low-power indoor access points, indoor subordinate devices, low-power client devices, and very low-power devices operating in the 5925-6425 MHz band, that may be used on large aircraft as defined in the Canadian Aviation Regulations, while flying above 3,048 mefres (10,000 feef).

CE Statement

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

The device is restricted to indoor use only when operating in the 5150 to5350 MHz frequency range.

All operational modes:
2.4 GHz: 802.11b, 802.11g, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20), 802.11ac (VHT40), 802.11ax (HE20), 802.11ax (HE40)

5 GHz: 802.11a, 802.11n (HT20), 802.11n (HT40), 802.1Tac (VHT20), 802.1 Tac (VHT40), 802.11ac (VHT80), 802.1lac (VHT160), 802.11ax (HE20), 802.1 1ax (HE40), 802.11ax (HEBO), 802.11ax (HE160)

6 GHz: 802.11a, 802.11n (HT20), 802.11n (HT40), 802.1 Tac (VHT20), 802.1 Tac (VHT40), 802.11ac (VHT80), 802.1lac (VHT160), 802.11ac (VHT320), 802.11ax (HE20), 802.11ax (HE40), 802.11ax (HE8O), 802.11ax (HE160), 802.1 1ax (HE320)
BLE 2.4 GHz: 802.15.1

The frequency and maximum transmitted power limit in EU are listed as below:
2412-2472 MHz: 20 dBm
5150-5350 MHz: 23 dBm
5500-5700 MHz: 30 dBm
5925-6425 MHz: 23 dBm

AT	BE	BG	CH	CY	CZ
DE	DK	EE	EL	ES	FI
FR	HR	HU	IE	IS	IT
LI	LT	LU	LV	MT	NL
NO	PL	PT	RO	SE	SI
SK	TR	UK			

The abbreviations of the countries, as prescribed in above fable, where any restrictions on putting info service or any requirements for authorization of use exist.

CE Mark Declaration of Conformance for EMI and Safety (EEC)
This information technology equipment is in compliance with the Directive 2014/53/EU and Directive 2014/35/EU. The Declaration of Conformity (DoC) can be obtained from **www.edgecore.com->support->download**.

Japan VCCI Statement
5 GHz band (W52, W53): Indoor use only
6 GHz LPI (Low Power Indoor), indoor use only

NCC Statement (Taiwan)
WiFi 5GHz Device

Warnings and Cautionary Messages

Warning: This product does not contain any serviceable user parts.

Warning: Installation and removal of the unit must be carried out by qualified personnel only.

Caution: Wear an anti-static wrist strap or take other suitable measures to prevent electrostatic discharge when handling this equipment.

Caution: Do not plug a phone jack connector in the RJ-45 port. This may damage this device.

Caution: Use only twisted-pair cables with RJ-45 connectors that conform to FCC standards.

Hardware Specifications

AP Chassis
Size (WxDxH): 195 x 179 x 35 mm (7.48 x 7.05 x 1.38 in.)
Weight: 0.907 kg (1.99 lb)
Temperature
Operating: 0°C to 50° C (32°F to 122° F)
Storage: -30° C to 70° C (-22 F to 158° F)
Humidity Operating: 5% to 95% (non-condensing)
Waterproof Rating: IP41

Network Interfaces
Ports: Uplink (PoE) RJ-45 Port: 5GBASE-T, POE PD LAN RJ-45 Port: 1000BASE-T
2.4 GHz Radio: IEEE 802.11b/g/n/ax/be

5 GHz Radio: IEEE 802.11a/ac/n/ax/be
6 GHz Radio: IEEE 802.11a/ac/n/ax/be
Bluetooth Radio: IEEE 802.15.1
Radio Frequencies:
2.4-2.4835 GHz (US, Canada, ETSI, Japan, TW)
5.15-5.25 GHz (lower band) US/Canada, TW
5.250-5.320 GHz (DFS band) US/Canada, TW
5.470-5.725 GHz (DFS band) US/Canada, TW
5.725-5.825 GHz (upper band) US/Canada, TW
5.925-6.425 GHz (US, Canada, ETSI, Japan, TW)
Europe: 5.15-5.25 GHz, 5.25-5.35, 5.47-5.725 GHz
Japan: 5.15-5.25 GHz, 5.25-5.35, 5.47-5.73 GHz

Power Specifications

PoE Input Power: 25.5 W, 42.5-57 VDC, 0.6 A max., 802.3at compliant
USB Power Delivery: USB PD 3.0 15-20 VDC

Regulatory Compliances

Radio
EN300 328 V2.2.2 (2019-07)
EN301 893 V2.1.1(2017-05)
ETSI EN 303 687 V1.1.1
47 CFR FCC Part 15.247
47 CFR FCC Part 15.407
IC RSS-247 Issue 3, RSS-248 Issue 3, and RSS-Gen Issue 5
NCC LP002 Section 4.10.1 (2024-02-06)
NCC LP002 Section 5.7 (2024-02-06)
NCC LP002 Section 5:13 (2024-02-06)
MIC certification Rule, Article 2 Paragraph 1 item
19 MIC certification Rule, Article 2 Paragraph 1 Item
19-3
MIC Certification Rule, Article 2 Paragraph 1 item
80 (WIFI 6E LPI device)
TELEC ARIB STD-T66
Emissions
EN 55032:2015/A1:2020 Class B
EN 55035:2017/A11:2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.3.1 AS/NZS CISPR 32:2015, Class B
47 CFR FCC Rules and Regulations Part 15
Subpart B, Class B Digital Device
ICES-003, Issue 7 Class B
CNS 15936 Class B
VCCI Class B
Jete Article 9 (WLAN, Bluetooth)
Jete Article 34-8 (Ethernet)

Safety
Low Voltage Directive IEC 62368-1:2014; and/or
EN 62368-1:2014+A11:2017; and/or BS 62368-1:2014+A11:2017
CNS 14336-1
IEC/EN 62368-1, IEC/EN 60950-1
Taiwan RoHS: CNS 15663

Documents / Resources

	Edge-core EAP105 Wi-Fi 7 Access Point [pdf] User Guide HEDEAP105, HEDEAP105, eap105, EAP105 Wi-Fi 7 Access Point, EAP105, Wi-Fi 7 Access Point, 7 Access Point, Access Point, Point

References

- CoreComm | Internet & Web Hosting Solutions
- kgf.cm
- Edgecore Networks – Edgecore Networks, a leading provider of traditional and open network solutions, delivers wired and wireless networking products and solutions through channel partners and system integrators worldwide for data center, service provider,
- User Manual