# Quick Start Guide

## Indoor Wall-Plate Wi-Fi 6 Access Point
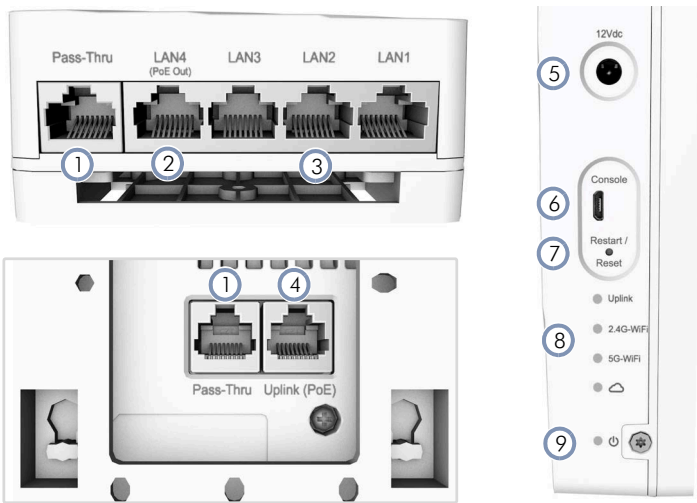### EAP104

**Edge-corE** ®

---

## Package Contents



1. EAP104 access point
2. Mounting bracket accessory
3. Mounting bracket T8 security screw
4. RJ-45 short cable
5. Screw kit—4 screws and 4 plugs
6. QR code card

---

## Overview



1. Pass-Thru Port: Bottom panel to rear panel connection.
2. LAN4 Port: 1Gbps LAN connection and PoE out port.
3. LAN1-LAN3 Ports: 1Gbps connection to LAN devices.
4. Uplink (PoE) Port: 1Gbps connection to 802.3at PoE.
5. 12 VDC power input
6. Console port
7. Restart/Reset button:
   - A quick press restarts the system.
   - Press and hold for 5 seconds resets to factory defaults.
8. System LED Indicators:
   - Uplink: Amber (1G), Green (100M), Blinking (traffic)
   - 2.4G-WiFi: On (radio on), Blinking (traffic)
   - 5G-WiFi: On (radio on), Blinking (traffic)
   - Cloud: On (cloud managed), off (standalone)
9. Power/Status LED: On (power OK), Blinking (boot up)

---

## Installation

⚡ **Warning:** For indoor use only. The access point, AC power adapter, and all connected cables are not for outdoor use.

### 1 Mount the AP

#### a. Mounting on a Wall Junction Box
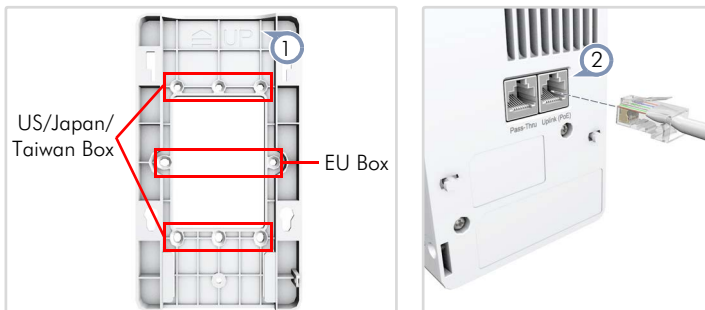


1. At the wall junction box, use two screws to secure the mounting bracket to the box. The bracket must be installed with the marking "UP" at the top.
2. Connect the Ethernet cable from the junction box to the Uplink (PoE) RJ-45 port on the rear of the device. When connected to a PoE source, the Uplink (PoE) port connection provides power to the unit.

ℹ️ **Note:** When not connected to a PoE source, you can power the AP using the optional AC power adapter.



3. With its ports facing down, place the AP over the bracket and then slide it down until it is in its secured position.
4. Use the included security screw to secure the bracket to the AP.
5. (Optional) Connect a local LAN switch or computers to the LAN1 to LAN4 1000BASE-T RJ-45 ports.



---

## b. Mounting on a Wall Without a Junction Box
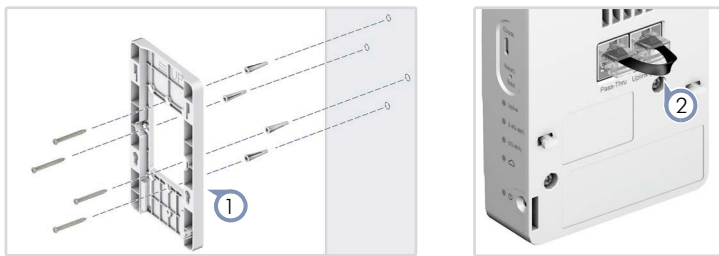


1. At the installation location on the wall, use the mounting bracket to mark four holes for the wall plugs and screws. The bracket must be installed with the marking "UP" at the top.

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

   **i** **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. To power the AP from a PoE source, use the included short Ethernet cable to connect the Uplink (PoE) port to the Pass-Thru port on the rear of the device. When the Pass-Thru port on the bottom of the device is connected to a PoE source, it provides power to the unit.

   **i** **Note:** When not connected to a PoE source, you can power the AP using the optional AC power adapter.

3. With its ports facing down, place the AP over the bracket and then slide it down until it is in its secured position.
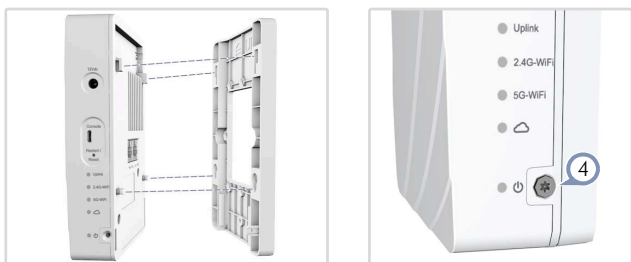


4. Use the included security screw to secure the bracket to the AP.
5. (Optional) Connect a local LAN switch or computers to the LAN1 to LAN4 1000BASE-T RJ-45 ports.

## c. Mounting Using the Optional Desktop Stand



1. At the installation location, slide the AP onto the desktop mounting bracket and then place on the desktop.
2. Connect Ethernet cable from a PoE source to the Uplink (PoE) RJ-45 port on the rear of the AP.

   Alternatively, connect Ethernet cable from a PoE source to the Pass-Thru port on the bottom of the device and then use the included short Ethernet cable to connect the Uplink (PoE) port to the Pass-Thru port on the rear of the device.

**i** **Note:** When not connected to a PoE source, you can power the AP using the optional AC power adapter.

3. (Optional) Connect a local LAN switch or computers to the LAN1 to LAN4 1000BASE-T RJ-45 ports.

## 2 Check AP LEDs



1. Uplink LED — on green or amber for valid RJ-45 Uplink port connection.
2. 2.4G and 5G LEDs — on green for radio enabled.
3. Cloud LED — on green for cloud management operation.
4. Power/Status LED — on green for normal operation.

## 3 Initial Setup and AP Registration

There are three options for setting up the AP for your network:

- Use QR-Code Onboarding to connect to the AP through a web browser on a phone. See section "QR Code Onboarding".
- If your network is already managed by ecCLOUD, you can just register the AP on your network by entering the MAC address and serial number on ecCLOUD.
- Connect to the AP's web interface through a network connection to one of the AP's LAN ports. See section "Connecting to the Web Interface".

The first-time you access the AP's web management interface, it automatically runs the Setup Wizard for initial AP configuration. Follow the Setup Wizard steps to configure the AP for management by ecCLOUD, an EWS-Series controller, a uCentral cloud, or in a stand-alone mode.

## Connecting to the Web Interface

Follow these steps to connect to the AP's web interface through a network connection to one of the AP's LAN ports.

1. Connect a PC directly to one of the AP's LAN ports.

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, a uCentral cloud, 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.
   - **uCentral Cloud Mode:** Set a password and then 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*.

## 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.



   a. **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. **uCentral Cloud Mode:** Set a password and then select the country of operation. Tap "Done" to finish the setup wizard.

d. **Cloud-Managed Mode:** Tap "Done" to finish the setup wizard and the browser is redirected to the ecCLOUD login page.
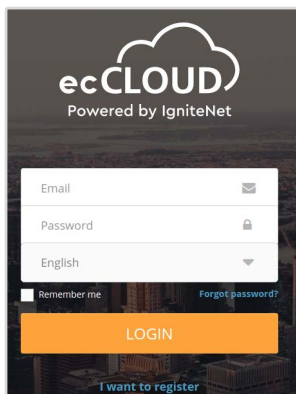


If you already have an ecCLOUD account, log in and select a site for the AP. The AP is automatically registered for cloud management. After you tap "Save," wait about two minutes for the cloud controller to configure the AP.



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 Edgecore *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 harmful 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 turning 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/TV 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 20 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 23 cm away from any nearby persons.

3. External antenna
Use only the antennas which have been approved by the applicant. Using non-approved antenna(s) is prohibited and may produce unwanted spurious or excessive RF transmitting power which may lead to a violation of FCC limits.

4. Installation procedure
Please refer to this equipment's user manual for the procedure details.

5. Warning
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.

## 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.

*Cet appareil contient des émetteurs / récepteurs exempts de licence qui sont conformes au (x) RSS (s) exemptés de licence d'Innovation, Sciences et Développement économique Canada. L'opération est soumise aux deux conditions suivantes:*

*(1) Cet appareil ne doit pas provoquer d'interférences.*

*(2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.*

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.

*Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.*

**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 28 cm between the radiator & your body.

*Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 28 cm de distance entre la source de rayonnement et votre corps.*

## 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 24 cm between the radiator and your body.

The device is restricted to indoor use only when operating in the 5150 to 5350 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), 802.11ac (VHT20), 802.11ac (VHT40), 802.11ac (VHT80), 802.11ax (HE20), 802.11ax (HE40), 802.11ax (HE80)

BLE 2.4 GHz: 802.15.1

ZigBee 2.4 GHz: 802.15.4

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

| 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 table, where any restrictions on putting into 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.edge-core.com -> support -> download.

## Japan VCCI Statement

本装置は、ＶＣＣＩ協会の運用規程に基づく技術基準に適合した文言、又はマークを画面に電子的に表示しています。表示の操作方法は、取扱説明書の＊＊＊＊に記載しております。

5 GHz band (W52, W53): Indoor use only

## NCC Statement (Taiwan)

**NCC 警語**

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

**MPE**

本產品電磁波曝露量 (MPE) 標準值 **1mW/cm2**，送測產品實測值為 **0.32982mW/cm2**，建議使用時至少距離人體 **24cm**。

## 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 (LxWxH) | 160.5 x 89.5 x 34 mm (6.32 x 3.52 x 1.34 in.) |
| Weight | 450 g (0.99 lb) |
| Temperature | Operating: 0° C to 45° C (32° F to 113° F)<br>Storage: -20° C to 60° C (-4° F to 140° F) |
| Humidity | Operating: 5% to 95% (non-condensing) |

## Network Interfaces

| | |
|---|---|
| Ports | Uplink(PoE) RJ-45: 1000BASE-T, PoE PD<br>LAN1-LAN3 RJ-45: 1000BASE-T<br>LAN4 RJ-45: 1000BASE-T, PoE out (PSE)<br>Pass-Thru RJ-45: Rear to bottom |
| 2.4 GHz Radio | IEEE 802.11b/g/n/ax |
| 5 GHz Radio | IEEE 802.11a/ac/n/ax |
| Bluetooth Radio | IEEE 802.15.1 |
| ZigBee Radio | IEEE 802.15.4 |
| Radio Frequencies | 2.4–2.4835 GHz (US, Canada, ETSI, Japan, TW)<br>5.15–5.25 GHz (lower band) US/Canada, TW<br>5.725–5.825 GHz (upper band) US/Canada, TW<br>Europe<br>5.15–5.25 GHz, 5.25–5.35, 5.47–5.725 GHz<br>Japan<br>5.15–5.25 GHz, 5.25–5.35, 5.47–5.73 GHz |

## Power Specifications

| | |
|---|---|
| PoE Input Power | 22.4 W max, 48 VDC–55 VDC;<br>802.3at-compliant |
| AC Power Adapter | AC Input: 100–240 VAC, 50-60 Hz<br>DC Output: 12 VDC, 2 A |

## Regulatory Compliances

| | |
|---|---|
| Radio | EN300 328 V2.2.2 (2019-07)<br>EN301 893 V2.1.1(2017-05)<br>47 CFR FCC Part 15.247<br>47 CFR FCC Part 15.407<br>IC RSS-247 Issue 2 and RSS-Gen Issue 5<br>NCC LP0002 Section 4.10.1 (2020-07-01)<br>NCC LP0002 Section 5.7 (2020-07-01)<br>MIC certification Rule, Article 2 Paragraph 1 Item 19<br>MIC certification Rule, Article 2 Paragraph 1 Item 19-3 |
| Emissions | EN 301 489-1 V2.1.1 (2017-02)<br>EN 301 489-17 V3.1.1 (2017-02)<br>EN 55032:2015<br>AS/NZS CISPR 32:2015, Class B<br>47 CFR FCC Rules and Regulations Part 15 Subpart B, Class B Digital Device<br>ICES-003, Issue 7 Class B<br>CNS 13438 terminal equipment design certification, Article 3, Article 4, Article 6, Article 9 and Article 34 regulation |
| Safety | Low Voltage Directive IEC 62368-1:2014;and/or EN 62368-1:2014+A11:2017; and/or BS 62368-1:2014+A11:2017<br>CNS 14336-1<br>IEC/EN 62368-1, IEC/EN 60950-1 |
| Taiwan RoHS | CNS 15663 |