

Quick Start Guide

Wi-Fi 6 Access Point
EAP111 (T)



Package Contents



1. EAP111 (T) access point
2. Mounting bracket accessory
3. Mounting bracket security screw
4. Screw kit—4 screws and 4 plugs
5. (Option) AC power adapter with international socket converters
6. (Option) Pole-mount kit—bracket and 2 steel-band hose clamps
7. (Option) PoE injector and power cord
8. QR code card

Overview

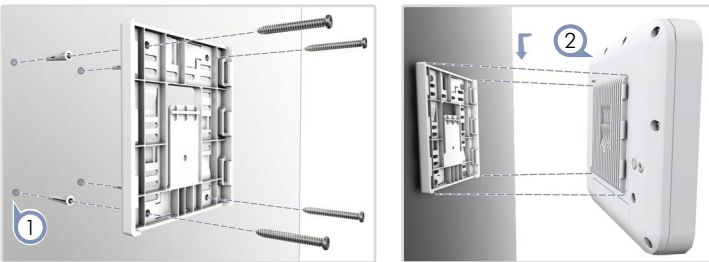


1. 12 VDC power input
2. Restart/Reset button:
 - A quick press restarts the system.
 - Press and hold for 5 seconds resets to factory defaults.
3. Uplink (PoE) Port: 10/100/1000BASE-T, 802.3at PoE
4. LAN Port: 10/100/1000BASE-T
5. Ground screw
6. System LED Indicator:
 - Green: On (power OK), Blinking (boot up)
 - Blue: On (cloud managed)
 - Purple: Blinking (uplink activity in cloud-managed mode)
 - Orange: Blinking (uplink activity in stand-alone mode)
7. Kensington lock slot

Installation

1 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.

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. With its ports facing down, place the AP over the bracket flanges and then slide it down until it snaps into its secured position.

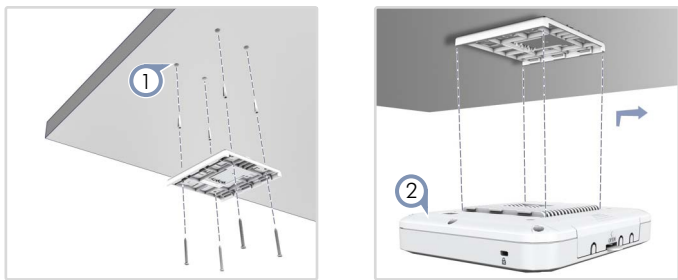
b. Mounting on a Suspended Ceiling T-Bar



1. Slide the bracket accessory onto the base of the AP until it clicks into its locked position.
2. Use the included security screw to 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.

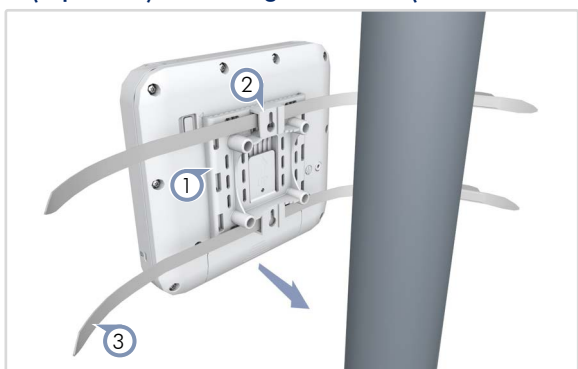
i **Note:** The AP mounting supports two different sizes of suspended ceiling T-bars. The position illustrated above is for 24.5 mm bars. Use the position at a 90 degrees angle for 15 mm bars.

c. Mounting on a Ceiling Without T-Bars



1. At the installation location on the ceiling, use the mounting bracket to mark four holes for the plugs and screws (included in the screw kit). Drill four holes for the plugs, and then insert the plugs and tap them flush with the ceiling surface.
Use the four screws to secure the bracket to the ceiling (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.

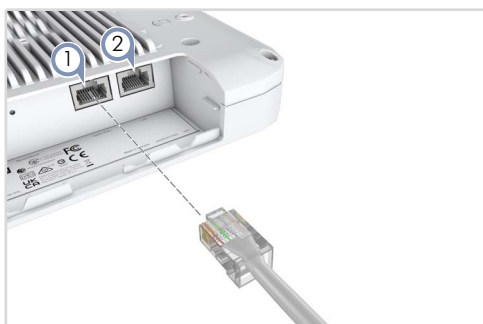
d. (Optional) Mounting on a Pole (max. 2.5 inch diameter)



1. Slide the pole-mount bracket onto the base of the AP until it clicks into its locked position.
2. Feed the two steel-band clamps through the pole-mount bracket mounting points.
3. Fasten the steel-band clamps around the pole to secure the AP to the pole.

2 Connect Cables

a. Connect LAN Cables



1. Connect Category 5e or better cable to the Uplink (PoE) 1000BASE-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



1. When not connected to a PoE source, connect the AC power adapter to the DC power jack on the AP and then plug the adapter into a nearby AC power source.

3 Check the System LED

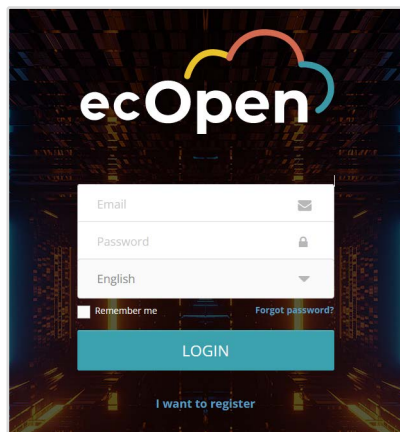


1. When operating normally, the System LED should be on green. Blinking indicates the device is booting up.

4 Initial Setup and AP Registration

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

- When the AP is first connected to the Internet through the Uplink port, it is automatically redirected to ecOpen (<https://cloud.openwifi.ignitenet.com/>). Enter the AP's MAC address and serial number for device registration.



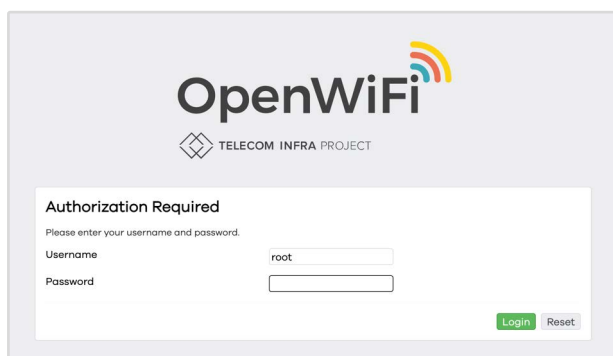
- By default, the AP is assigned an IP address through DHCP. If the AP cannot connect to ecOpen, access the AP's web interface through the AP's LAN port to make configuration changes (for example, to change from DHCP to a static IP). See section "Connecting to the Web Interface".

Connecting to the Web Interface

Note that you can only connect to the AP's web interface when the AP is not connected to the Internet.

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

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 192.168.1.x with subnet mask 255.255.255.0.)
3. Enter the AP's default IP address of 192.168.1.1 into the web browser address bar.
4. Log in to the web interface using the default user name "root" and password "openwifi".



Note: The TIP OpenWiFi SDK default URL of the DigiCert certificate is set to ecOpen: (<https://cloud.openwifi.ignitenet.com>). If you want to register the AP to your own TIP OpenWiFi SDK, contact oxherd@edge-core.com to change the default URL.

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 20 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 20 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 20 cm de distance entre la source de rayonnement et votre corps.

Caution

User should also be advised that:

- (i) the maximum antenna gain permitted for devices in the bands 5250–5350 MHz and 5470–5725 MHz shall comply with the e.i.r.p. limit; and
- (ii) the maximum antenna gain permitted for devices in the band 5725–5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate. High-power radars are allocated as primary users (i.e. priority users) of the bands 5250–5350 MHz and 5650–5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Les utilisateurs devraient aussi être avisés que:

- (i) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250–5 350 MHz et 5 470–5 725 MHz doit se conformer à la limite de p.i.r.e.;*
- (ii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725–5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas. De plus, les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250–5 350 MHz et 5 650–5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.*

This radio transmitter IC: 3857A-EAP111 has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Cet émetteur radio IC: 3857A-EAP111 a été approuvé par Industrie Canada pour fonctionner avec les types d'antennes énumérés ci-dessous avec le gain maximal admissible et impédance d'antenne requise pour chaque type d'antenne indiqué. Types d'antennes n'est pas inclus dans cette liste, ayant un gain supérieur au gain maximal indiqué pour ce type, sont strictement interdits pour une utilisation avec cet appareil.

Antenna List

No.	Manufacturer	Model No.	Type	Gain (dBi)
1	Accton Technology Corporation	KG568-T4-175B17U7S	Dipole	2.4GHz: 4.9 5GHz: 5.53
2	Accton Technology Corporation	KG568-T4-105W17U7S	Dipole	2.4GHz: 4.81 5GHz: 5.53
3	Accton Technology Corporation	KG568-T4-175G17U7S	Dipole	2.4GHz: 5.21 5GHz: 5.82

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 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

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

この装置は、クラスB機器です。この装置は、住宅環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI — B

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 **20cm**。

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) 170 x 185 x 39.45 mm (6.69 x 7.28 x 1.55 in.)

Weight 0.63 kg (1.39 lb)

Temperature Operating: 0° C to 45° C (32° F to 113° F)
Storage: -20° C to 60° C (-4° F to 140° F)

Humidity Operating: 5% to 95% (non-condensing)

Waterproof Rating IP55

Network Interfaces

Ports Uplink (PoE) RJ-45 Port: 1000BASE-T, PoE PD
LAN RJ-45 Port: 1000BASE-T

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

Radio Frequencies 2.4–2.4835 GHz (US, Canada, ETSI, Japan, TW)
5.15–5.25 GHz (lower band) US/Canada, TW
5.725–5.825 GHz (upper band) US/Canada, 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 30 W max, 54–57 VDC, 802.3at compliant

AC Power Adapter AC Input: 100–240 VAC, 50-60 Hz
DC Output: 12 VDC, 2 A

Regulatory Compliances

Radio EN300 328 V2.2.2 (2019-07)
EN301 893 V2.1.1(2017-05)
47 CFR FCC Part 15.247
47 CFR FCC Part 15.407
IC RSS-247 Issue 2 and RSS-Gen Issue 5
NCC LP0002 Section 4.10.1 (2020-07-01)
NCC LP0002 Section 5.7 (2020-07-01)
MIC certification Rule, Article 2 Paragraph 1 Item 19
MIC certification Rule, Article 2 Paragraph 1 Item 19-3

Emissions EN 301 489-1 V2.1.1 (2017-02)
EN 301 489-17 V3.1.1 (2017-02)
EN 55032:2015
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 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
CNS 14336-1
IEC/EN 62368-1, IEC/EN 60950-1

Taiwan RoHS CNS 15663