# Cloud7 2x3x3 Lite

Cloud Lite 802.11be 2×3×3 Tri-Band Managed Indoor Wireless Access Point (ECW516L)

## Introduction

This Quick Start Guide is designed to guide you through the installation of the **Cloud7 2×3×3 Lite** Access Point, model **ECW516L**, including hardware mounting and configuration.

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## Cloud7 2x3x3 Lite

### Cloud Lite 802.11be 2x3x3 Tri-Band Managed Indoor Wireless Access Point

#### Model: ECW516L

- Wi-Fi 6 technology for high-performance Wi-Fi in high-density, multidevice environments.
- Four spatial streams support up to 8,700 Mbps (6GHz), 4,300 Mbps (5GHz) and 700 Mbps (2.4GHz).
- Increase in spectrum bandwidth empowers the newest generation of Wi-Fi 7 devices to achieve faster speed, lower latency and higher capacity.

#### ✓ Content Quick Links

- Hardware Overview
- Hardware Mounting
- Configure with EnGenius Cloud

## **Package Contents**



## **System Requirements**

The EnGenius Cloud is primarily accessible with a web browser or mobile app. Before signing up for the EnGenius Cloud Service or logging on to the EnGenius Cloud Platform to manage your network, ensure that you've downloaded the right app and used the supported browser.

### **Mobile App:**

EnGenius Cloud To-Go (iOS/ Android supported)

Download the Cloud To-Go mobile app here



### Web Browser:

- Google Chrome (57.0.2987.110 and later)
- Microsoft Edge (80.0.361.103 and later)
- Mozilla Firefox (52.0 and later)

## **Network Requirements**

Before you get started, please make sure your network environment is DHCPenabled. EnGenius Cloud Access Points (ECW series) are default assigned an IP address dynamically by the DHCP server.

(i) If you encounter issues with IP address assignment, you may want to change your IP assignment from "**DHCP mode**" to "**Static IP**". Please check the "<u>User Manual: Login to Local Access Page</u>" for more details.

## **Hardware Overview**

### Ports



### (i) Reset Button:

 Reset to default: Press and hold the reset button for over 10 seconds, and the LED(PWR) will start *Fast Flashing* (0.2 sec). Then, the device will be reset to factory default settings.

#### **LEDs**

| Status              | LED Color                |     |                    |          |          | LED Behavior                            |  |  |
|---------------------|--------------------------|-----|--------------------|----------|----------|---|--|--|
| Connecting to Cloud | PWR (Orange)             |     |                    |          |          | Flashing (0.5 Sec)                      |  |  |
| Cloud Connected     |                          |     | PWR (Oran          | ge)      |          | Solid On                                |  |  |
| LAN Connected       |                          |     | LAN (Blue          | ±)       |          | Solid On                                |  |  |
| LAN Transmitting    |                          |     | LAN (Blue          | e)       |          | Flashing                                |  |  |
| 2.4GHz Radio On     |                          | :   | 2.4GHz (BI         | ue)      |          | Solid On                                |  |  |
| 2.4GHz Transmitting | 2.4GHz (Blue)            |     |                    |          |          | Flashing                                |  |  |
| 5GHz Radio On       | 5GHz (Blue)              |     |                    |          | Solid On |   |  |  |
| 5GHz Transmitting   | 5GHz (Blue)              |     |                    |          |          | Flashing                                |  |  |
| 6GHz Radio On       | 6GHz (Blue)              |     |                    |          |          | Solid On                                |  |  |
| 6GHz Transmitting   | 6GHz (Blue)              |     |                    | Flashing |          |   |  |  |
| Firmware Upgrading  | PWR LAN 2.4GHz 5GHz 6GHz |     | Flashing (0.5 Sec) |          |          |   |  |  |
| Reset to Default    | PWR (Orange)             |     |                    |          |          | Fast Flashing (0.2 sec)                 |  |  |
| AP Locating Mode    | PWR                      | LAN | 2.4GHz             | 5GHz     | 6GHz     | Flashing<br>(1.5 sec on -> 0.5 sec off) |  |  |

(i) ECW516L has five LED indicators, PWR/ LAN/ 2.4GHz/ 5GHz/ 6GHz.

## **Hardware Mounting**

The access point can be mounted on the **Ceiling** and **Wall**, and please perform the steps for the appropriate installation:

### **Ceiling Mount**

- T-Rail
- 1. Slide the **Ceiling Mount Base** into the slot of the Access Point.



2. Slightly Hook the ceiling mount bracket onto the T-Rail until you hear a click sound.



#### - Hard Ceiling

1. Screw the included **Screws** into the **Ceiling Mount Base** with **Spacers**, and the **Screws** unto the surface until they are flush with the surface.



2. Slide the Access Point into the **Ceiling Mount Base**.



### Wall Mount

1. Determine where the **Access Point** is to be placed and mark the location on the surface for the two mounting holes. Use the appropriate drill bit to drill two 8.1mm diagram and 26mm depth holes in the markings.

2. Screw the **Anchors** into the holes until they are flush with the wall; screw the included **Screws** into the **Anchors**, but leave the screw head sticking out so you can hang **the Access Point** on it.



4. Hang the **Access Point** against wall onto the **Screw** heads.



## **Configure with EnGenius Cloud**

### **Step1: Register Device and Assign to Network**

You can register the device either by **Cloud To-Go mobile app** or the **EnGenius Cloud platform**.

#### Cloud To-Go Mobile App

- 1. Open and log in to the **EnGenius Cloud To-Go** mobile app.
- 2. Scan the QR code on the back of the device via the app.



Scan QR-code for device registration

3. If the camera successfully scans a QR code, the app will display the device Information. You could tap **"Register**" to complete the Registration.

|             | <u>e</u>          |    |                        |
|-------------|-------------------|----|------------------------|
| Device l    | nformation        | Re | egistration Successful |
| Туре        | Access Point      |    |                        |
| Model       | EW\$350AP         |    |                        |
| MAC Address | 11:22:33:AA:BB:CC |    |                        |
| Serial No.  | 1234567890        |    |                        |
| Re          | gister            |    |                        |
|             | ancel             |    |                        |
|             |                   |    | Finish                 |
|             |                   |    | Register more          |

Device registration

4. Registered devices will be shown on the *Inventory&License* page. Slide left the device and click "Add to Network" add the device to your personalized Network.

(i) Network: Management domain shared same configurations within EnGenius Cloud.



Assign device to a managed Network

#### **EnGenius Cloud Platform**

- 1. Log in to the EnGenius Cloud Platform: https://cloud.engenius.ai/.
- 2. Go to the *home > Inventory&License* page and click "Register Device".
- 3. Enter the **Serial Number** of the device(s) for device registration. Please refer to "User Manual-Registering Devices to Organization".

|                       |                      | Inventory 0 1 : |                     |                     |             |
|-----------------------|----------------------|-----------------|---------------------|---------------------|-------------|
| Registe               | er Device            |                 |                     |                     | ×           |
| Change log            | Manually             |                 | Mobile              |                     | Expire wit  |
| Point PRO AP V Serial | Number (one per row) |                 | Scan to download En | Genius Cloud Mobile |             |
| ٩                     |                      |                 |                     |                     | ster Device |
| Model                 |                      |                 |                     |                     | ıtus Expir  |
| _IQC ECW120           |                      |                 |                     | Download on the     | 2022        |
| _Mee ECW120           |                      |                 | Google Play         | App Store           | 2022        |
| _Med ECW120           | × Cancel             | ✓ Register      |                     |                     | 2022        |
| Lou ECW220            |                      |                 |                     |                     | 2022        |

Register device(s) with device's Serial Number

4. Select the registered device and click "**Assign to Network**" to add the device to your personalized Network.

(i) Network: Management domain shared same configurations within EnGenius Cloud.

| C        | 📃 🕫 S       | enao_Linko           |        | Щ                           | Inventory & License             |                 |
|----------|-------------|----------------------|--------|-----------------------------|---------------------------------|-----------------|
| Q        | Devices     | Licenses Chan        | ge log | E                           | Earliest expired date of device | e on 2022/12/0  |
| •        | FEATURE PL/ | AN: Access Point PRO | AP 🗸 S | Switch PRO SW 🗸 Gateway     | Basic V                         |                 |
|          | Search      | Q.                   |        | 1 1-81 of 81 → Change Organ | nization 😙 Assign to Netw       | rork 🛅 Remove f |
| <b>G</b> | 📃 Туре      | Name                 | Model  | Serial Number               | MAC                             | Network         |
| 4        | AP          | Linko_B1_IQC         | ECW120 | 1950C211WFFD                | 88:DC:96:77:98:04               | TrialZones      |
|          | AP          | Linko_2F_Mee         | ECW120 | 1950C2111D71                | 88:DC:96:7B:E6:11               | TrialZones      |
|          | AP          | Linko_1F_Med         | ECW120 | 1950C2111DET                | 88:DC:96:7B:E6:0B               | TrialZones      |
|          | AP          | Linko_7F_Lou         | ECW220 | 1990X211K2TW [〕             | 88:DC:96:81:53:26               | RD_TEST         |
|          |             |                      |        |                             |                                 |                 |

Assign selected device(s) to a managed Network

### **Step2: Power On Device**

The EnGenius Cloud AP devices can be powered by any of the following:

- EnGenius Cloud PoE Switch or 802.3af/ 802.3at PoE+ compliant Switch
- EnGenius PoE adaptor (EPA5006GP/EPA5006GAT/EPA5060XBT)
- Power Adapter (DC 12V/2A power input)

 $\triangle$  Do not use both power sources at the same time.

#### **Connecting to a PoE Switch**

Connect the Ethernet cable from the EnGenius Cloud AP directly to the PoE port of the PoE switch.



AP is powered by a PoE Switch

#### Powered with a PoE Adapter

(A) Connect one end of the Ethernet cable into the LAN (PoE) port of EnGenius Cloud AP and the other end to the PoE port on the PoE Adapter.

(B) Connect the power cord with the PoE Adapter and plug the other end into an electrical outlet. (C) Connect the second Ethernet cable into the LAN port of the

PoE Adapter and the other end to the Ethernet port on the computer.

(i) Please ensure to use cat5/cat5e UTP/STP RJ45 Ethernet cables.



#### Powered with a Power Adapter

Connect the Power Cord to the adapter, and then plug the Power Cord into the power outlet.



AP is powered with a power adapter

### **Step3: Connect to the EnGenius Cloud**

Once the device is powered on and ready to connect to the Internet, the **LED indicator** will stay *Solid On*, which means the device is now connected to the

EnGenius Cloud Platform. It will automatically download the default configuration settings from EnGenius Cloud for automated provisioning.

When the Access Point is connected to the EnGenius Cloud Platform for the first time, it will automatically check the latest firmware version available. If the **firmware upgrade** is required, it might take **8~10 minutes** to complete the process. The **LED** indicator will be *Flashing (0.5 sec)* till the process is finished.

### Step4: Manage with the EnGenius Cloud

Log in to the **EnGenius Cloud platform** to configure detailed settings. For more information, please refer to User Manual.



EnGenius Cloud Dashboard

## Troubleshooting

If your AP cannot be managed by the EnGenius Cloud Platform, there might be a problem with connecting to EnGenius Cloud.

To troubleshoot the connection issue, you may log in to the **Device Local Access** page:

- Use your client device (e.g., a laptop, mobile device, or tablet) to find the SSID: "EnMGMTxxxx" (xxxx is the last four digits of MAC - MAC would be found on the back of the device) and connect to it.
- 2. Under your web browser, enter the URL: <u>http://EnGenius.local</u> or http://192.168.1.1 to access the device's user interface.
- 3. You can review the device status after logging into the AP with the default admin account/password (admin/admin).
- 4. Check the information on **Network Connectivity** and take action if necessary.

| <b>EnGenius</b>       | local Status Page                                  |                            |                   | English | ~     |
|-----------------------|--|----------------------------|-------------------|---------|-------|
| Network Setting       | <b>JS</b><br>ting                                  |                            |                   | Reboot  | Reset |
| Device Overview       |  |                            |                   |         |       |
| System Name           | ECW336-772C  | IP Address                 | 192.168.8.225     |         |       |
| Model                 | ECW336   | MAC Address                | 88:DC:97:01:77:2C |         |       |
| Serial Number         | 2230E4T1DCRC                                       | Current Firmware           | v1.8.81           |         |       |
| Registration Overview |  |                            |                   |         |       |
| Registration Server   | EnGenius Cloud                                     |                            |                   |         |       |
| Date of Registration  | 6/25/2024, 3:50:08 PM                              |                            |                   |         |       |
| Last Update Time      | 6/27/2024, 3:23:16 PM                              |                            |                   |         |       |
| Network Connectivity  |  |                            |                   |         |       |
| Local Network         | <ul> <li>Connected to local network su</li> </ul>  | ccessfully                 |                   |         |       |
|                       | • IP Address : 192.168.8.225                       |                            |                   |         |       |
|                       | • Gateway : 192.168.8.1                            |                            |                   |         |       |
|                       | Get from LAN DHCP                                  |                            |                   |         |       |
| Device to Internet    | <ul> <li>This AP is connected to the In</li> </ul> | ternet                     |                   |         |       |
| Management Status     | <ul> <li>This AP is successfully conner</li> </ul> | cted to the EnGenius Cloud |                   |         |       |

ECW AP's Local Access Page

#### (i) Change IP Assignment Settings

By default, the EnGenius Cloud Access Point (ECW series) is assigned an IP address dynamically by the DHCP server. If you encounter issues with IP address assignment,

please double-check the IP setting, including IP address, subnet mask, gateway, proxy, and management VLAN. If the issue still exists, you may change your IP assignment from "*DHCP mode*" to "*Static IP*" via the following procedure.

- 1. Go to the **Local Setting** section.
- 2. Change IPv4 settings to "Use Static IP".
- 3. Configure the *IP address, gateway, subnet mask, and proxy* settings.
- 4. Reconnect this device to the LAN network and try again.

| Device Status                                 |   | Reboot Reset |  |  |
|---|---|--------------|--|--|
| IPv4 Settings                                 |   |              |  |  |
| As DHCP Client: Get IP from LAN Use Static IP | DHCP Server (default)                     |              |  |  |
| IPv6 Settings                                 |   |              |  |  |
| ✓ Link-local Address                          |   |              |  |  |
| Management VLAN Settings                      |   |              |  |  |
| Vntagged                                      |   |              |  |  |
| Tagged  |   |              |  |  |
| VLAN ID                                       | 300                                       |              |  |  |
| Web Proxy Settings                            |   |              |  |  |
| HTTP/HTTPS Proxy                              |   |              |  |  |
| Address                                       | 192.168.10.25                             |              |  |  |
| Port  | 80  |              |  |  |
| EPC Controller Settings                       |   |              |  |  |
| Specify EPC Controller IP addres              | ss (if not at the same subnet)            |              |  |  |
| Address                                       |   | Test         |  |  |
| Firmware Upgrade                              |   |              |  |  |
|   | Drag & drop firmware file to upgrade here |              |  |  |
| No. 414 alterations                           |   | lister d     |  |  |

For more details, please refer to the "User Manual-Troubleshooting ECW AP".

#### **FCC Interference Statement**

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 or more 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.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC regulations restrict the operation of this device to indoor use only.

The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that 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.

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 37cm between the radiator & your body.

#### IC : User's Manual:

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.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

Version: 錯誤! 找不到參照來源。

L'exploitation est autorisée aux deux conditions suivantes :

- 1. L'appareil ne doit pas produire de brouillage;
- L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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.

Operation shall be limited to indoor use only. leur utilisation doit être limitée à l'intérieur seulement.

Operation on oil platforms, automobiles, trains, maritime vessels and aircraft shall be prohibited except for on large aircraft flying above 3,048 m (10,000 ft).

leur utilisation à bord de plateformes de forage pétrolier, d'automobiles, de trains, de navires maritimes et d'aéronefs doit être interdite, sauf à bord d'un gros aéronef volant à plus de 3 048 m (10 000 pi) d'altitude.

Devices shall not be used for control of or communications with unmanned aircraft systems. Les dispositifs ne doivent pas être utilisés pour commander des systèmes d'aéronef sans pilote ni pour communiquer avec de tels systèmes.

This equipment complies with ISED RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 37cm 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 37cm de distance entre la source de rayonnement et votre corps.

The transmitter module may not be co-located with any other transmitter or antenna. Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne.

The Country Code Selection feature is disabled for products marketed in the US/Canada.

CAN ICES-003(B) / NMB-003(B)