# Ronto Enterprise Networking Solution

# User Manual

This manual includes the Controller, Enterprise Access Points and Ethernet Switches installation and configuration. All of the Access Points and Ethernet Switches are managed by Controller.

Supports model list

| Type | Description |
|---|---|
| Enterprise Access Point | RAP630C-311G, RAP630W-311G, RAP630W-211G<br><br>RAP7110C-341X |
| Ethernet Switch | RSW226G-1PV, RSW226G-1P, RSW226G-1V RSW226G-1, RSW226G-2PV, RSW210G-2PV, RSW210G-1PV, RSW210G-1V |
| Enterprise Access Point Controller | RCN205G-1PV |

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# 1. Abstract

Our network status dashboard simplifies the task of managing the entire network. With its user-friendly interface, you can effortlessly monitor and control the status of your network in real-time.

The dashboard presents an intuitive overview of key network metrics, such as availability, performance, and security alerts. You can easily navigate through interactive charts and graphs to gain valuable insights and quickly identify any issues.

With just a few clicks, you can take proactive measures to optimize network performance, minimize downtime, and ensure a seamless experience for your users. Our user-friendly network status dashboard empowers you to handle network management with ease and efficiency.

The **Table** below shows the overview of each page.

| Name | Description |
|---|---|
| Dashboard | Offers comprehensive information, including controller details, Traffic Overview, Client Table, Wi-Fi Quality, and Internet Health, all presented through intuitive charts for easy understanding of the network's current status |
| Topology | Displays a network topology, where each node is labeled as either a Controller, EAP, or end-user device. Additionally, each node is identified by name and provides relevant information |
| Connected Devices | lists all connected devices includes EAPs and client-devices and displays detail information about each of them |
| Statistics | provides statistics of upload, download and services |
| Wi-Fi Insights | shows a comprehensive list of Wi-Fi access points (APs) around the network |
| Settings | shows all other setup include Wi-Fi, Network, Internet, Static Route, Firewall, Port Forwarding, and System |

# 2. Installation

## 2.1 RCN205G-1PV Hardware Installation

RCN205G-1PV Indoor Enterprise Network Controller Quick Setup Guide

This Quick Setup Guide provides step-by-step instructions on how to install and begin using your RCN205G-1PV Indoor Enterprise Network Controller (Controller).

### 2.1.1 RCN205G-1PV Hardware Specification

| **Models** | RCN205G-1PV |
|---|---|
| Dimension H x W x D (mm) | 55.1x194.5x140.5 |
| **Ports** | |
| 1GBase-T PoE+ LAN Ports | 4 |
| 1GBase-T WAN Port | 1 |
| Power over Ethernet ports | 4 x 802.3at (30W/port) |
| **LCD** | |
| LCD touch panel | 1.3" |
| **Power and Cooling** | |
| Max. PoE power budget (Watt) | 60 |
| PoE Output | 54VDC · 0.55A, Max.30Watt ( port 1-4 ) |
| Rated Voltage | 54V DC |
| Rated Current | 1.2 A |
| Power options | External Power Adapter 100~240AC input, 54V DC output |
| Airflow | without fan |
| Operating Temperature | $0^{o}$C~$40^{o}$C / $32^{o}$F~$104^{o}$F |
| Operating Humidity | 10% ~ 95% · No Condensation |

### 2.1.2 Overview

Upon following the steps outlined in this guide, you will be able to access the RCN205G-1PV Ronto Controller, allowing you to manage wired and wireless network.

FIGURE 1: RCN205G-1PV Controller: Front View.

### 2.1.3 Package Contents

A complete RCN205G-1PV installation package includes all of the following items:

- RCN205G-1PV Controller.
- 54V 1.2A power adapter.
- Service Level Agreement/Limited Warranty Statement (Optional).
- Declaration of Conformity (Optional).
- Regulatory Statement (Optional).
- This Quick Setup Guide (Electrical).

### 2.1.4 Required Hardware Tools

- Admin PC (computer) with an Ethernet port.
- Cat 5e (or better) Ethernet cable.
- RCN205G-1PV 54V 1.2A power adapter.

### 2.1.5 Installation Steps

**> Step 1:**
**Connecting Your Controller to the Computer**

1. Using the RCN205G-1PV 54V 1.2A Power adapter to connect your Controller. The system power on and then the LCD starts to show the message. FIGURE 2: RCN205G-1PV Controller DC in jack on Rear Panel.

FIGURE 2: RCN205G-1PV Controller DC in jack on Rear Panel

Please note:

1. Please use the power adapter shipped with the device. The different power adapter will damage the device.

2. The Controller has embedded a BT module with internal antennas. When the Controller is installed, the antennas are at least more than 20 centimeters of a person's body.

2. Using an Ethernet cable, connect your computer network port to the LAN port on the Controller. Refer to Figure 3.

FIGURE 3: RCN205G-1PV Controller Ethernet ports on Front Panel.

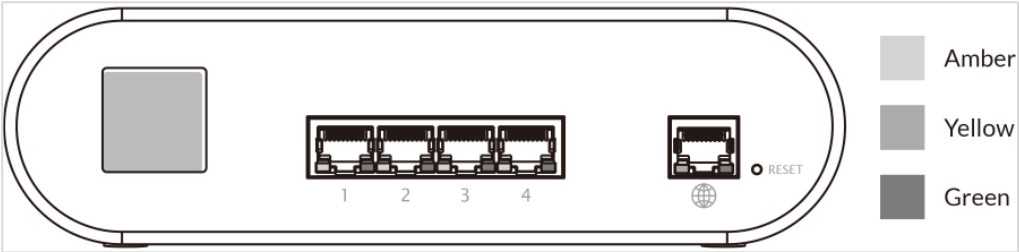
TABLE 1: RCN205G-1PV Front Ports.

| No. | Label | Description |
|---|---|---|
| 1. | | 10/100/1000 Mbps In Port: RJ-45 Ethernet port. |
| 2. | 1,2,3,4 | • 10/100/1000 Mbps In Port: RJ-45 Ethernet port<br>• Support 802.3af/at PoE. |
| 3. | RESET | This is a reset button to reset the Controller to factory default. |

3. Verify that the LCM panel show the “Ready for Setup“.

4. The LED indicators are shown in below TABLE 2.

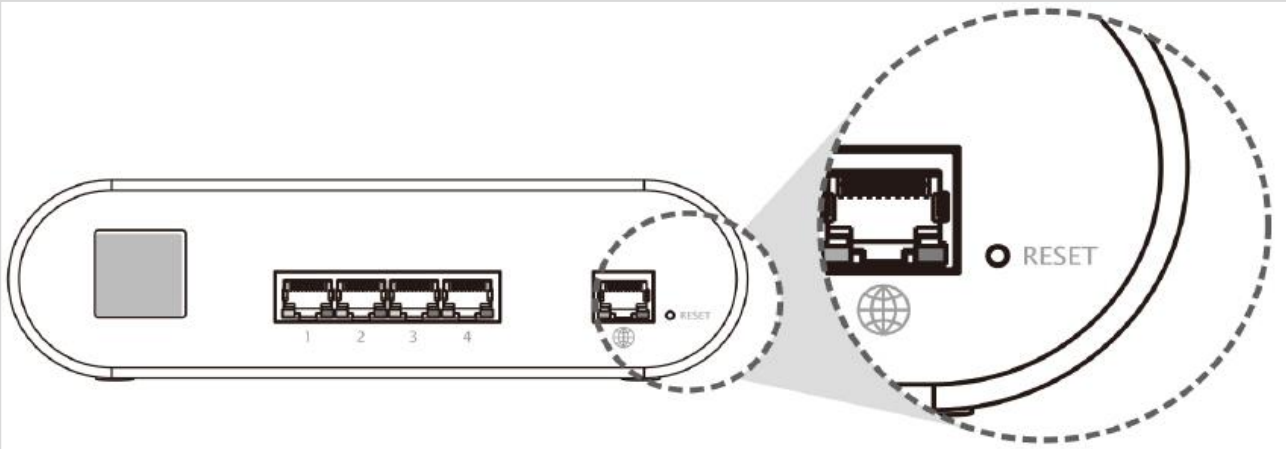
TABLE 2: RCN205G-1PV LED Indicators.



| LED Indicator | Color | Behavior | Function Descriptions |
|---|---|---|---|
| 1, 2, 3, 4 (for LAN ports) | Green | Solid | The port links up. |
| | Green | Blinking | There are transmitting or receiving Ethernet packets in this port. |
| | Green | Solid | The port is providing PoE power to PD. |
| | Amber | Solid | The port links up at 1Gbps speed. |
| | Green | Blinking | There are transmitting or receiving, Ethernet packets in this port. |
| | Green | Solid | The port links up at 10M/100M speed. |
| | Yellow | Blinking | There are transmitting or receiving Ethernet packets in this port. |

5. The RESET button behaviors are shown in below **TABLE 3.**

**TABLE 3**: RCN205G-1PV RESET Button Function Description.



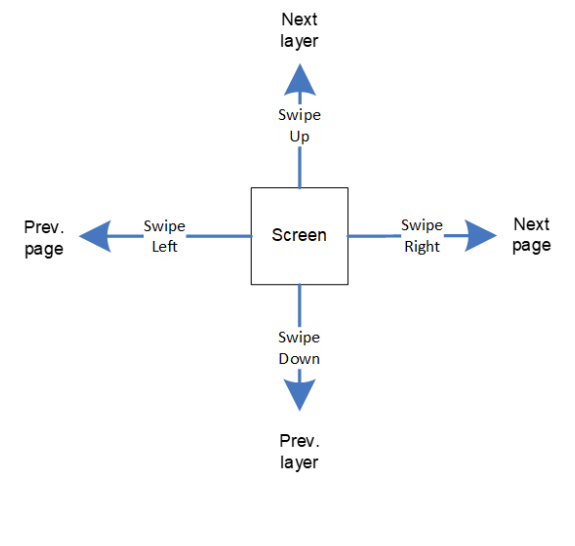

| Press time | Function Description |
|---|---|
| < 1 second | The system will reboot. |
| > 6 seconds | The system will reset the configuration to factory default. |

## 2.1.6 Controller LCD Touch Screen

### 2.1.6.1 Swipe Screen Description

| Swipe Screen | Action | Description/ Function |
|---|---|---|
| Layer I | Press | Type Layer II Screen |
| | Swipe Up/ Download | Next Layer / None |
| | Swipe Right/ Left | Previous / Next Page(Item) |
| Layer II | Press | None |
| | Swipe Up/ Download | Next Layer / Previous |
| | Swipe Right/ Left | Previous / Next Page |
| Screen-Saver[1] | Press | Stop |

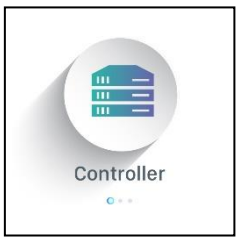
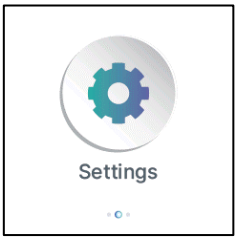
The Controller becomes idle and the screensaver will activate after 5 minutes.

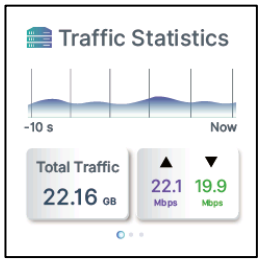


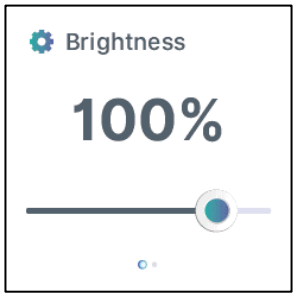

| | |
|---|---|
| Up swipe | Next Layer |
| Down Swipe | Previous Layer |
| Right / Left Swipe | Item Check |
| Click | Enter / Monitor Protection Cancel |

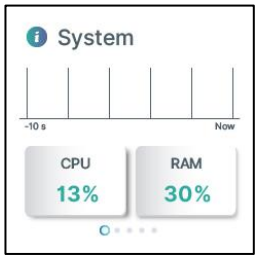
- **Controller**

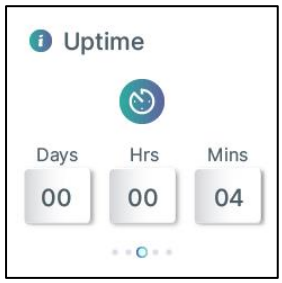
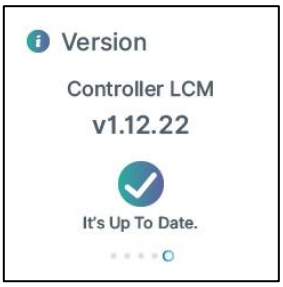
| *Layer0-1 :Starting Controller...* | *Ready for Setup(Web)* |
|---|---|
| | |
| Controller is booting up | Ready for Setup / Install the local interface. |

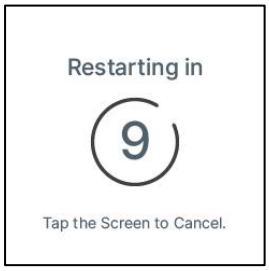
| *Layer1-1 : Controller Screen* | *Controller Screen(Error)* | *Layer1-2 : Settings Screen* |
|---|---|---|
|  | |  |
| | There is a need to update firmware. | |

| *Layer1-3 : About Screen* | *Layer2-1-1 : Traffic Statistics(Controller)* | *Layer2-1-2 : Clients(Controller)* |
|---|---|---|
| |  | |
| | Function 1: Display total traffic, upload, and download traffic (in kB, MB, and GB) (Update every minute)<br><br>Function 2: Display traffic over a period of one month in a chart, with one data point every half day | Function: Display the number of clients for 2.4G, 5G, and Wired connections<br><br>(Update every minute) |

| *Layer2-1-3 : Version(Controller)* | *Layer2-2-1 : Brightness(Settings)* | *Layer2-2-2 : Device Control(Settings)* |
|---|---|---|
| |  | |
| Function: Display the current Controller version | Function: Adjust the LCM screen brightness | Function: Control Controller restart |

| *Layer2-2-3 : Color(Settings)* | *Layer2-3-1 : System (About)* | *Layer2-3-2 : IP Address (About)* |
|---|---|---|
| |  | |
| Function: Adjust LCM background color | Function 1: Display CPU and RAM usage<br><br>(Update every minute)<br><br>Function 2: Display traffic over a period of 5 hours in a chart, with one data point every 5 minutes | Function: Display WAN and LAN IP addresses (WAN IP address displays as 0.0.0.0 if not connected) |

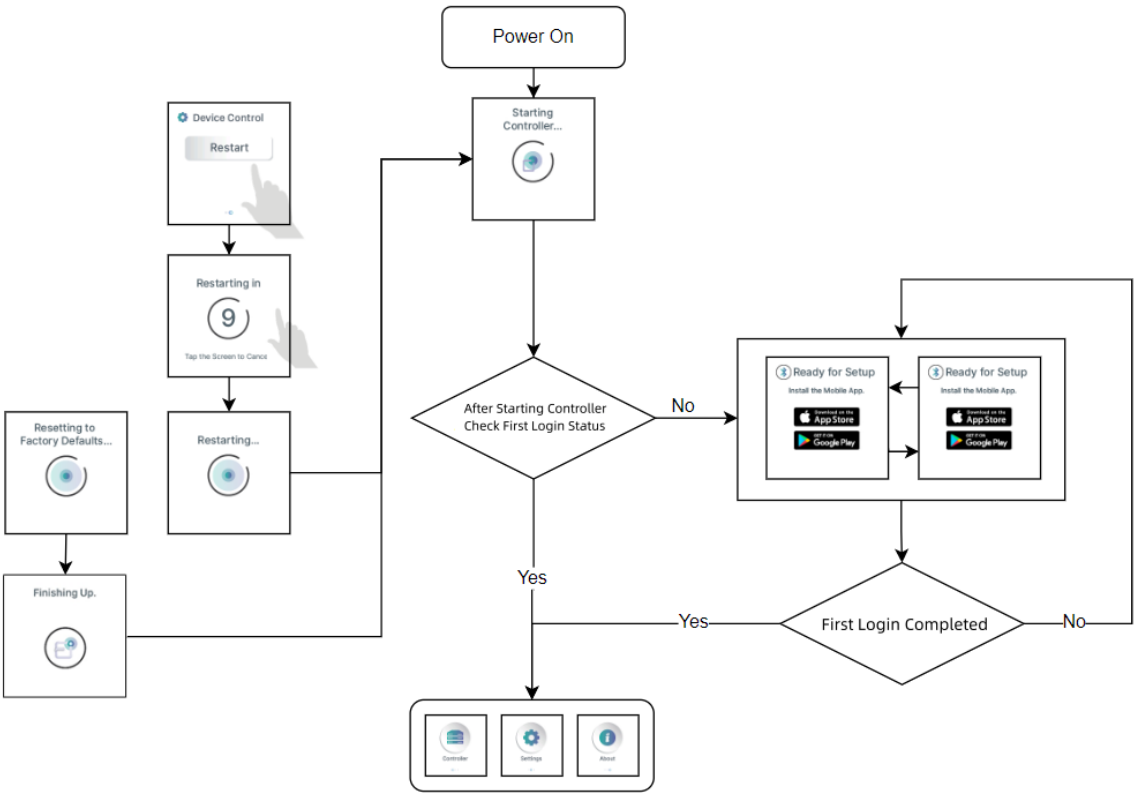
| *Layer2-3-3 : UpTime(About)* | *Layer2-3-4 : Hardware (About)* | *Layer2-3-5 : Version (About)* |
|---|---|---|
|  | |  |
| Function: Up Time (Update every minute) | Display Controller's MAC address | Display Controller's LCM version |

| *Restarting in* | *Restarting…* | *Resetting to Factory Defaults…* |
|---|---|---|
|  | | |
| Function: Touch to cancel restart and return to Device Control screen | Restarting in progress | Function: Displayed when Factory Defaults is initiated. Trigger conditions include physical button on the Controller, LCM button, and web operation. |

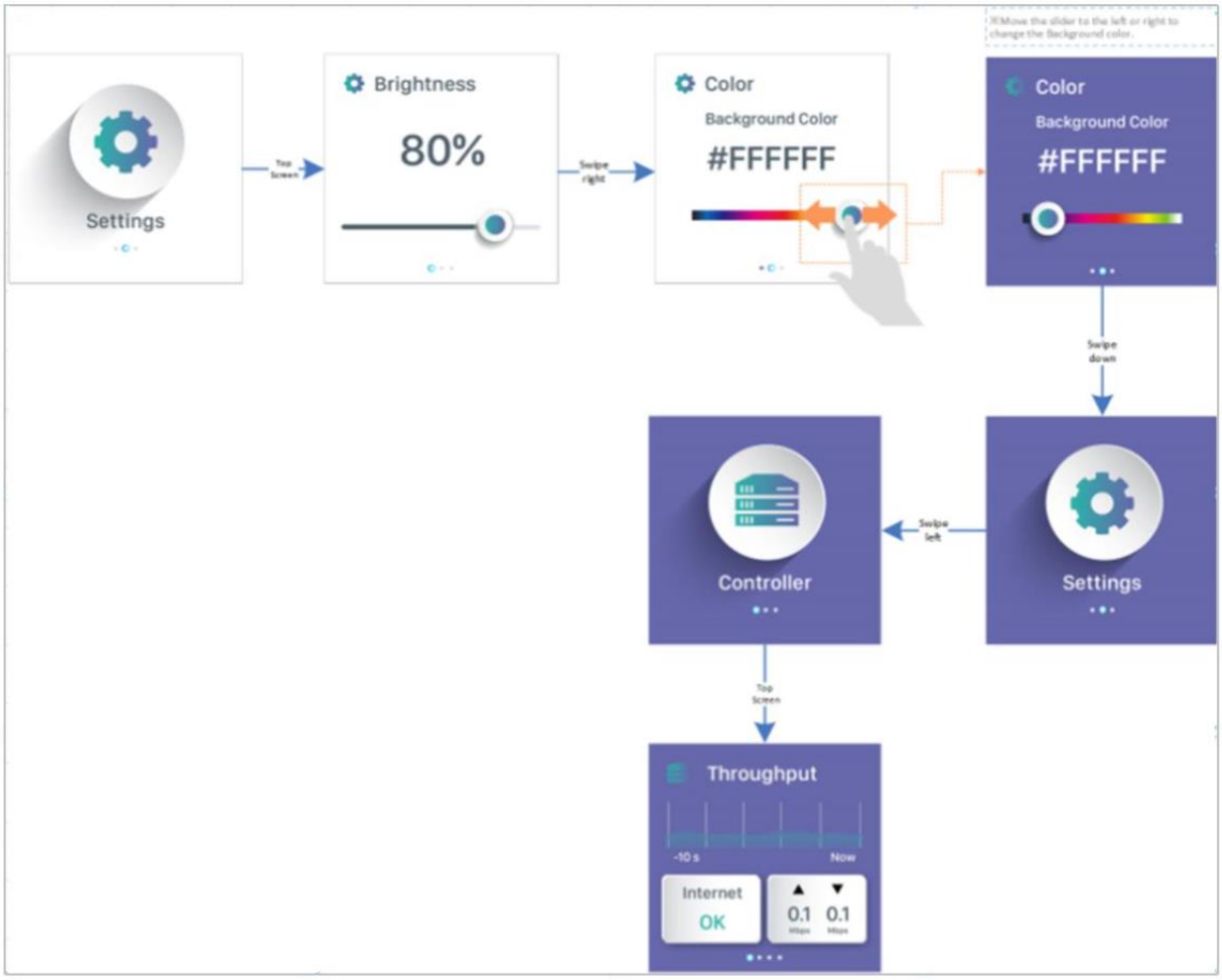
| *Finishing Up* | *Updating…* |
|---|---|
| | |
| | Controller is updating the firmware. |

| *No IP Address Found* | *Screen-Saver* |
|---|---|
| | |
| No IP Address Found | Function: Display current time in 24-hour format (hours:minutes), abbreviated day of the week, month, and date |

## 1. Activation process



- **Change Color**

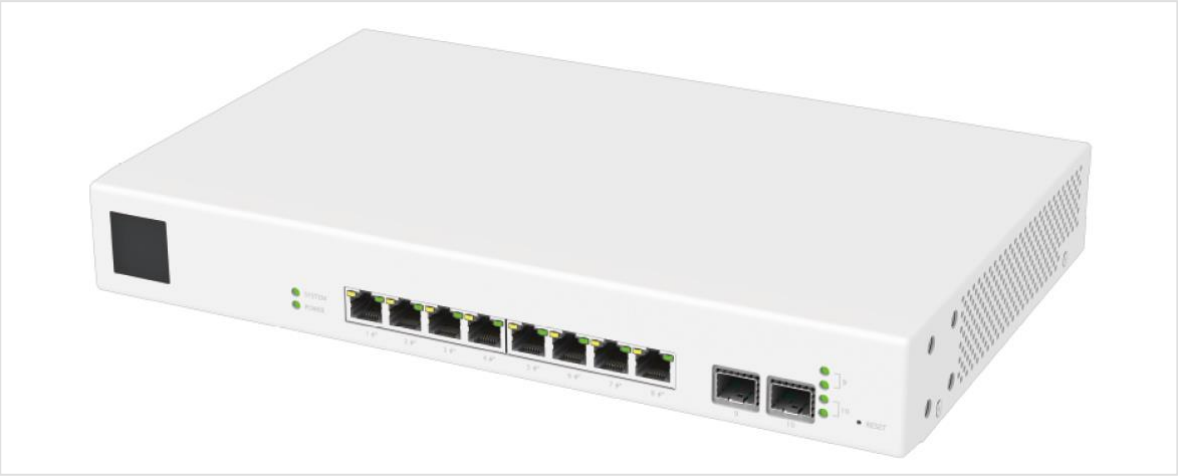


## 2.2 RSW210GSeries Hardware Installation

This Quick Setup Guide provides step-by-step instructions on how to install and begin using your RSW210G-1PV/2PV and RSW210G-1V Ethernet Switch (Switch). The RSW210G-1PV Ethernet switch is a 8 Gigabit PoE ports with 120Watt PoE power budget and two 10G SFP+ port. This is a fanless hardware design.

The RSW210G-2PV Ethernet switch is a 8 Gigabit PoE ports with 240Watt PoE power budget and two 10G SFP+ port. There is a smart fan hardware design. RSW210G-1V is a 8 Gigabit ports and two 10G SFP+ ports. This is a fanless hardware design. These switches also support BT4.1 module for management.

FIGURE 1: RSW210G Series Ethernet Switch Overview.



### Package Contents

A complete RSW210G-1PV/2PV, RSW210G-1V installation package includes all of the following items:

- One Ethernet switch.
- One power cord.
- One set rubber feet.
- One set L bracket with 8 screws.
- Service Level Agreement/Limited Warranty Statement (optional).
- Declaration of Conformity (optional).
- Regulatory Statement (optional).
- This Quick Setup Guide.

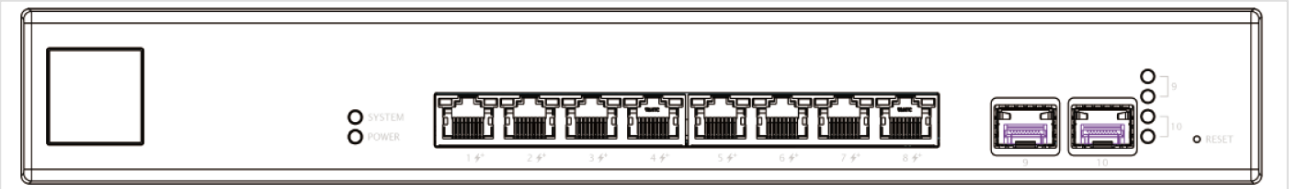
## Required Hardware Tools

- Admin PC (computer) with an Ethernet port.
- Cat 5e (or better) Ethernet cable.
- A controller.

## Overview

The following figures are shown the RSW210G-1PV/2PV's front view and rear view:

FIGURE 2: RSW210G-1PV/2PV & RSW210G-1V Front View.



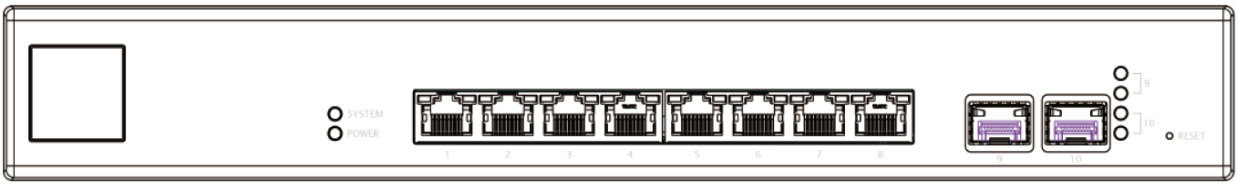




TABLE 1-1: RSW210G-1PV/2PV Front Ports.

| No. | Label | Description |
|---|---|---|
| 1 | 1~8 ⚡+ | • 10/100/1000Mbps RJ-45 ports.<br>• Support 802.3af/at PoE. |
| 2 | 9, 10 | 1Gbps/10Gbps SFP+ port. |
| 3 | RESET | This is a reset button to reset the switch to factory<br>default or do the system reboot. |

TABLE 1-2: RSW210G-1V Front Ports.

| No. | Label | Description |
|---|---|---|

| | | |
|---|---|---|
| 1 | 1~8 | • 10/100/1000Mbps RJ-45 ports. |
| 2 | 9, 10 | 1Gbps/10Gbps SFP+ port. |
| 3 | RESET | This is a reset button to reset the switch to factory<br>default or do the system reboot. |

**FIGURE 3:** RSW210GSeries Rear View.

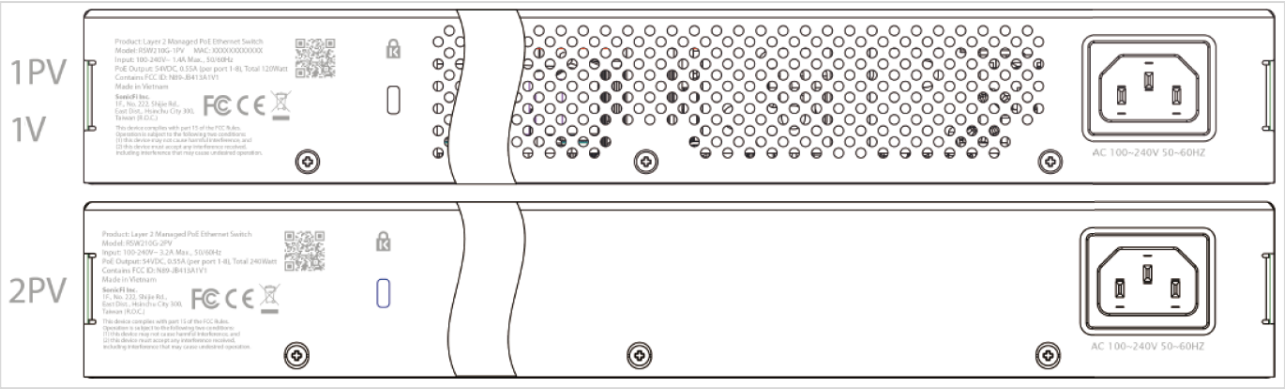



**TABLE 2:** RSW210G-1PV/2PV Rear Panel.

| No. | Label | Description |
|---|---|---|
| 1 | Label Contents | The contents are included model name, power rating, Contains FCC ID and company information. |
| 2 | AC Power Inlet | The power input is 100~240VAC, 50/60Hz. |

| | | |
|---|---|---|
| 3 | | Kensington security slot. |

There is a RESET button on the front panel. The behaviors are shown in below TABLE 3.

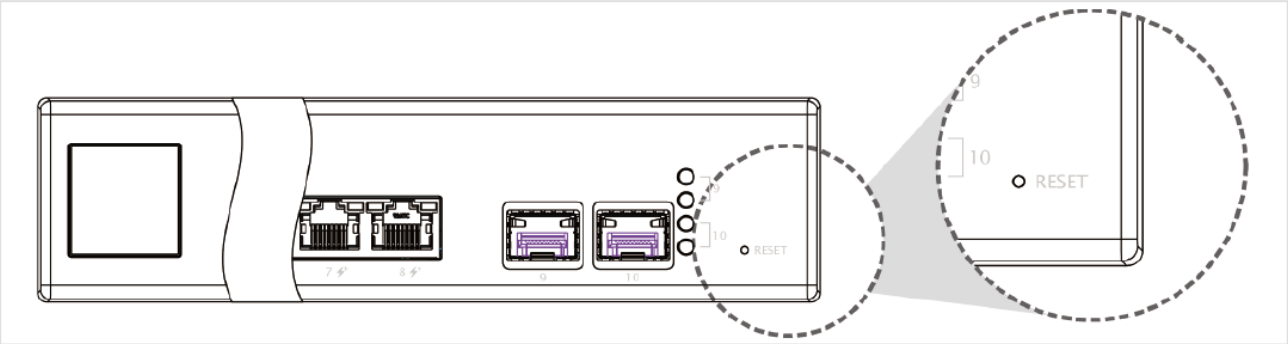



**TABLE 3:** RESET Button Function Description.

| Press time | Description |
|---|---|
| 1~10 second | The system will reboot. |
| > 10 seconds | The system will reset the configuration to factory default. |

## LCD Indicator

When the switch powers on, the LCD turns on automatically. This is a touch screen and support user to swipe screen to have different functions. Please check user manual to have detail function descriptions of LCD.

## LED Indicators

TABLE 4: RSW210G-1PV/2PV and RSW210G-1V LED Indicators.

| LED Indicator | Color | Behavior | Function Descriptions |
|---|---|---|---|
| SYSTEM | Green | Solid | The Switch system is ready |
| | | Blinking | The Switch system is booting up |
| | Red | Solid | There is at least one alert happened |
| | OFF | | The Switch is no longer receiving power. |
| POWER | Green | Solid | The switch has been powered on successfully. |
| | | OFF | The switch is no longer receiving power. |
| PoE ports | Green | Solid | The port links up |
| | | Blinking | There are transmitting or receiving Ethernet packets in this port |
| | | OFF | No link is detected |
| | Yellow | Solid | The port is providing PoE power to PD. |
| | | OFF | No PD is detected |
| Non PoE ports | Green | Solid | The port links up |
| | | Blinking | There are transmitting or receiving Ethernet packets in this port |
| | | OFF | No link is detected |
| | Yellow | Solid | The port links up in 1Gbps speed. |
| | | OFF | The port links up in non 1Gbps speed or no link is |

| | | | |
|---|---|---|---|
| | | | detected |
| 9,10 SFP+ ports | Green | Solid | The port links up |
| | | Blinking | There are transmitting or receiving Ethernet packets in this port. |
| | | OFF | No Link is detected. |
| | | Solid | 10Gbps link speed is detected. |
| | | OFF | 1Gbps link speed is detected or no link. |

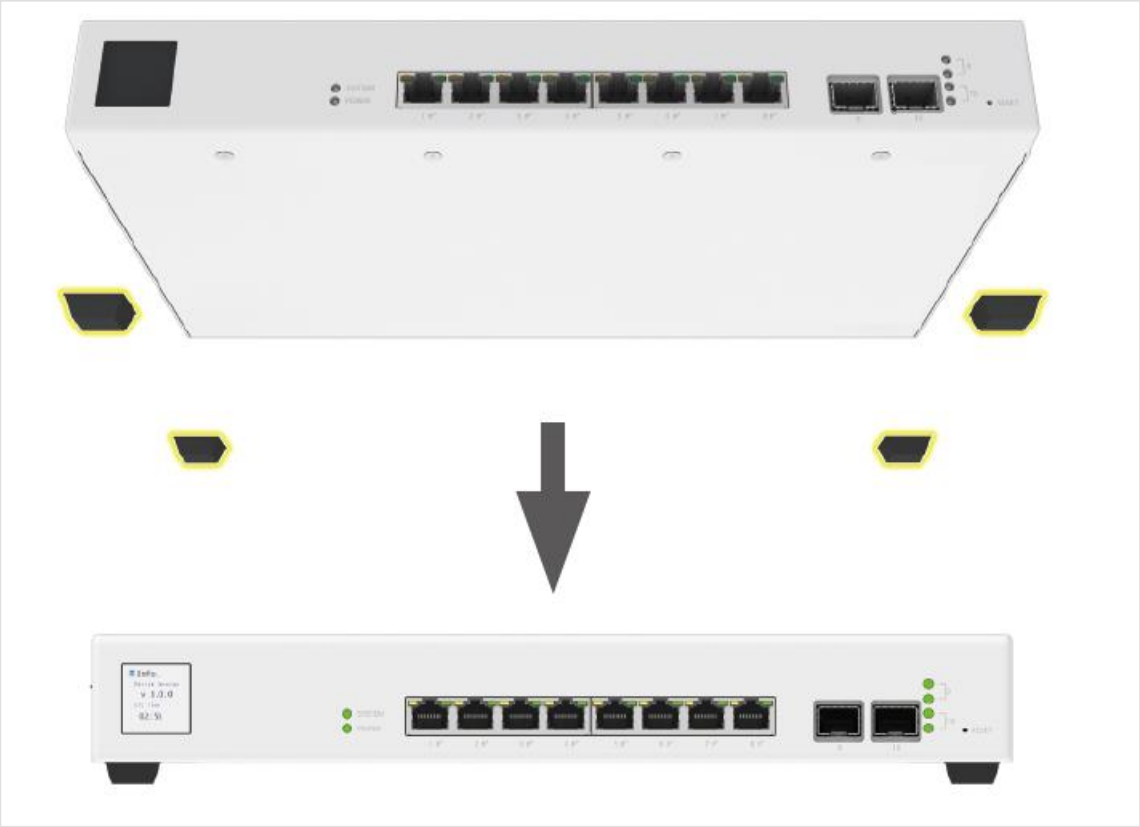
## Installation for RSW210G series

## >Step 1: Mounting the switch

**Type 1: Desktop installation**

Please paste the rubber feet in the back of bottom case. There are four markings for the rubber feet.

**FIGURE 4:** Paste the robber feet.



**Type 2: Wall Mounting**

Please use the included screws with L brackets to attach switch.

**FIGURE 5:** Attach the brackets.

| Please note: |
| --- |
| Using other accessories and screws could damage the switch. The damages occurred by using unapproved accessories are not covered by the warranty. |

After the brackets are installed, please refer below pictures to mount the switches on the wall. We consider the heat dispassion performance to support two directions of wall mounting. Please follow below fi gures to install.

**FIGURE 6:** Two wall mounting directions.

| |
|---|
| Please note:<br>Please follow this guide's installation to mount the switch. It can protect the device without damage. |

**Type 3: Rack Mounting (Optional)**

This switch also supports the rack mounting with special L brackets.

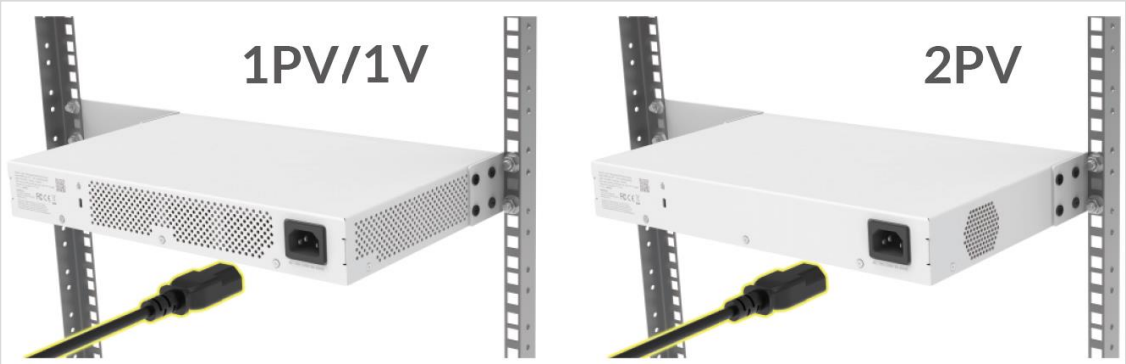
Please contact your sales to order the brackets.

**FIGURE 7:** Rack mounting on the rack.

## >Step 2: Connect the power cord

Please connect the power cord to the switch.

**FIGURE 8:** Connect the power cord of RSW210G-1PV or RSW210G-2PV switch.




Please note:

1. Please turn off the power source before the installation is completed.

2. The switch has embedded a BT module with internal antennas.

When the switch is installed, the antennas are at least more than 20 centimeters of a person's body.

## >Step 3: Connect the Ethernet cable or Fiber transceiver

Please connect the Ethernet cable to the switch. Please also connect to controller in another side.

**FIGURE 9:** Ethernet cable / fiber transceiver connection.

**FCC:**

**Federal Communication Commission 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 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.

**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 20cm between the radiator & your body.

### 2.2.1 RSW210G Series Hardware Specification

| Models | RSW210G-1PV | RSW210G-2PV | RSW210G-1V |
|---|---|---|---|
| Dimension H x W x D (mm) | 44x330x200 | | |
| **Performance** | | | |
| Switch capacity (Gbps) | 56 | 56 | 56 |
| Forwarding capacity (Mpps) | 41.66 | 41.66 | 41.66 |
| **Ports** | | | |
| 1GBase-T | 8 | 8 | 8 |
| 1G/10G (SFP+) | 2 | 2 | 2 |
| Power over Ethernet ports | 8 x 802.3at (30W/port) | 8 x 802.3at (30W/port) | – |
| **LCD** | | | |
| LCD touch panel | 1.3” | 1.3” | 1.3” |
| **Power and Cooling** | | | |
| Max. PoE power budget (Watt) | 120 | 240 | – |
| PoE Output | 54VDC, 0.55A (per port 1-8) | | – |
| Power options | AC 100~240V, 1.74A Max. | AC 100~240V, 3.5A Max. | AC 100~240V, 0.20A Max. |
| Internal power supply | 1 PSU included | | |
| Airflow | Fanless | Smart FAN | Fanless |

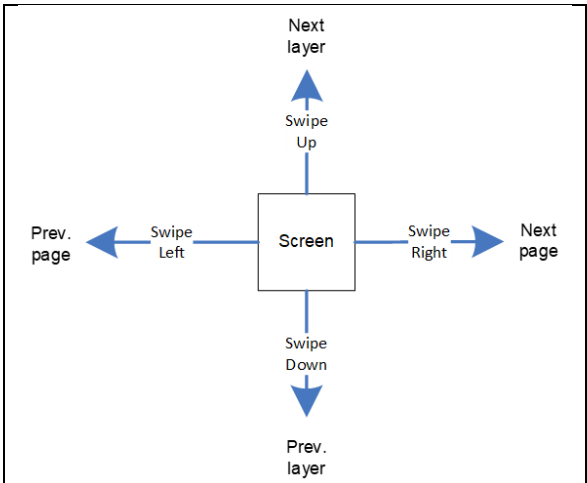
| | | |
|---|---|---|
| Operating Temperature | 0°C~40°C / 32°F~104°F | 0°C~50°C / 32°F~122°F |
| Operating Humidity | 10% ~ 95%, Non-condensing | |

### 2.2.2 Switch LCD Touch Screen

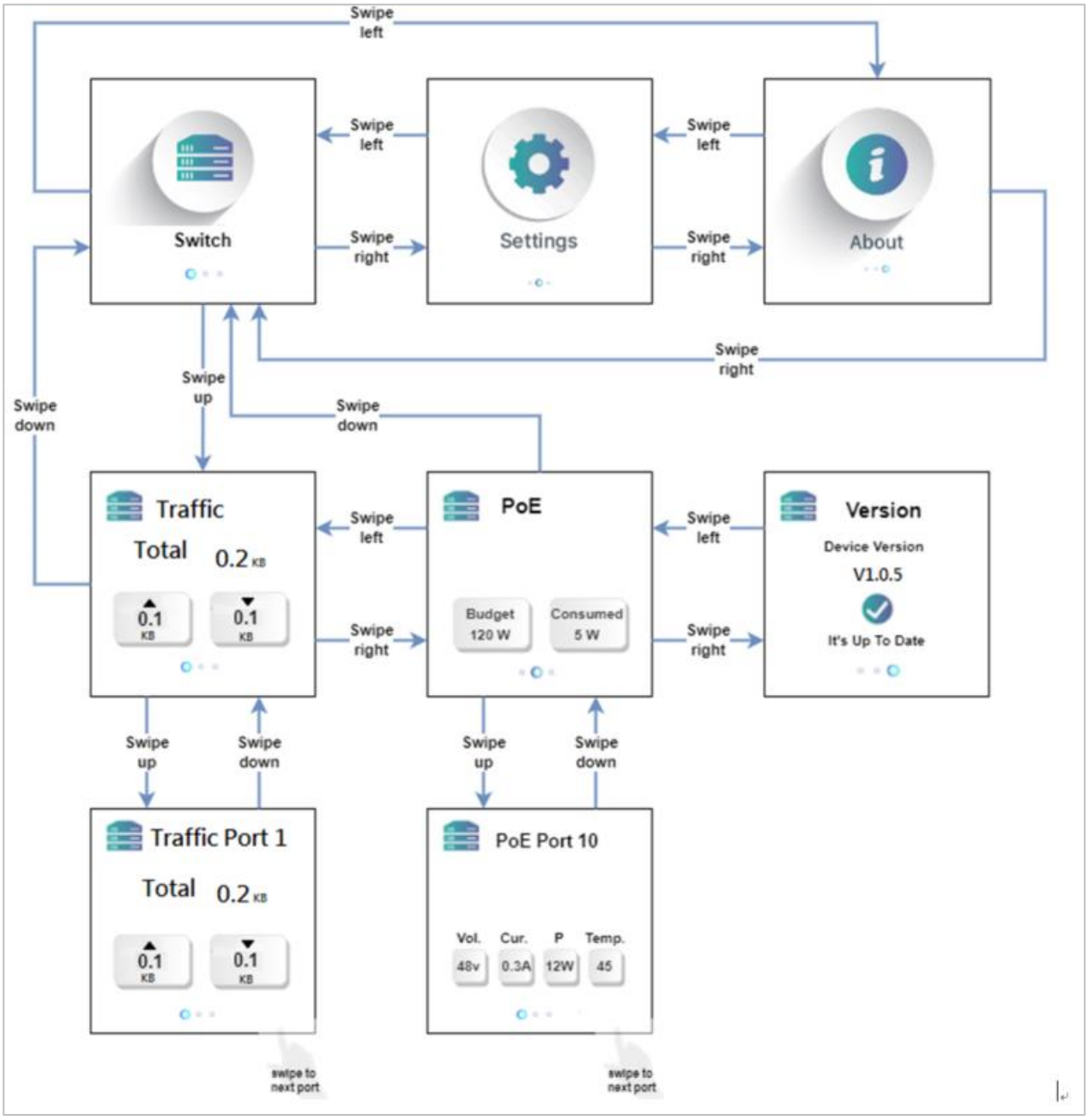
#### 2.2.2.1 Swipe Screen Description

| Swipe Screen | Action | Description/ Function |
|---|---|---|
| Layer I | Press | Type Layer II Screen |
| | Swipe Up/ Download | none |
| | Swipe Right/ Left | Previous / Next Page(Item) |
| Layer II | Press | Start Screen-Saver |
| | Swipe Up/ Download | Next Layer / Previous |
| | Swipe Right/ Left | Previous / Next Page |
| Screen-Saver* | Press | Stop |

* The Controller becomes idle and the screensaver will activate after 5 minutes.

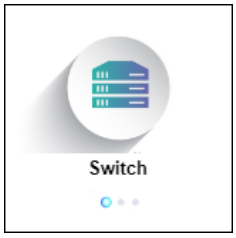



| | |
|---|---|
| Up Swipe | Next Layer |
| Down Swipe | Previous Layer |
| Right / Left Swipe | Item Check |
| Press | Enter and Monitor Protection Cancel |

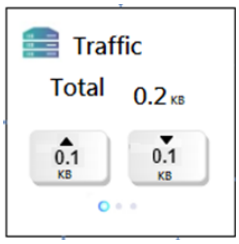
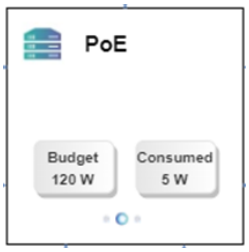

Swipe left
Switch
Swipe left
Settings
Swipe left
About
Swipe right
Swipe right
Swipe right
Swipe up
Swipe down
Swipe down
Traffic
Total 0.2 KB
0.1 KB
0.1 KB
Swipe left
PoE
Budget 120 W
Consumed 5 W
Swipe left
Version
Device Version
V1.0.5
It's Up To Date
Swipe right
Swipe right
Swipe up
Swipe down
Swipe up
Swipe down
Traffic Port 1
Total 0.2 KB
0.1 KB
0.1 KB
PoE Port 10
Vol. Cur. P Temp.
48v 0.3A 12W 45
swipe to next port
swipe to next port

### 2.2.2.2 Switch Label

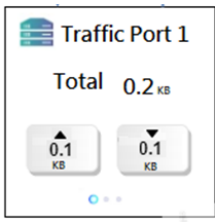
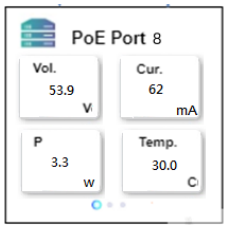
*Layer I*

| *Layer 1-1 : Switch* |
|---|
|  |
| Switch related information group page |

*Layer II*

| *Layer 2-1-1 Switch/Traffic* | *Layer 2-1-2 Switch/PoE* | *Layer 2-1-3 Switch/Version* |
|---|---|---|
|  |  | |
| Function: Display the current Tx and Rx total traffic of 10 ports | Function: Display the current power information of 8 ports | Function: Display the current Switch version |

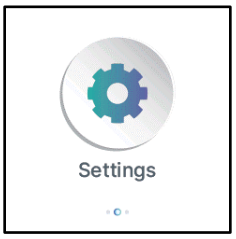
*Layer III*

| *Layer 3-1-1-1*<br>*Switch/Traffic/Port* | *Layer 3-1-2-2*<br>*Switch/PoE/Port* |
|---|---|
|  |  |
| Function: Display the current Tx and Rx traffic for each port | Function: Display the current voltage, current, power, and temperature for each PoE port |

### 2.2.2.3 Setting Label

*Layer I*

*Layer 1-2 : Setting*

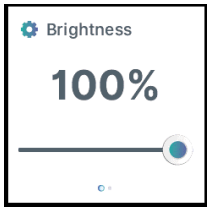



Settings Entrance

*Layer II*

*Layer 2-2-1*

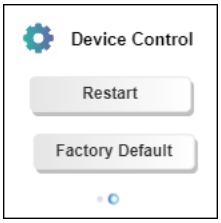
*Setting/Brightness*




Function: Adjust the LCM screen brightness

*Layer 2-2-2*

*Setting/Device Control*




Function: Control Switch restart and factory default

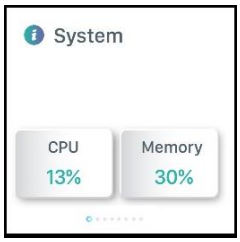
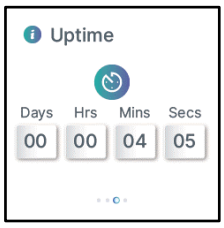
### 2.2.2.4 About Label

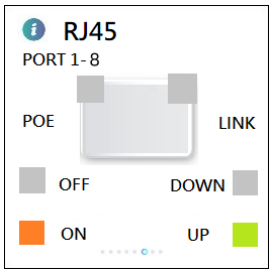
*Layer I*

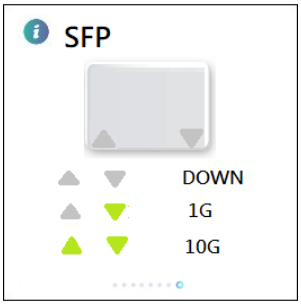
*Layer 1-3 : About*

About Page

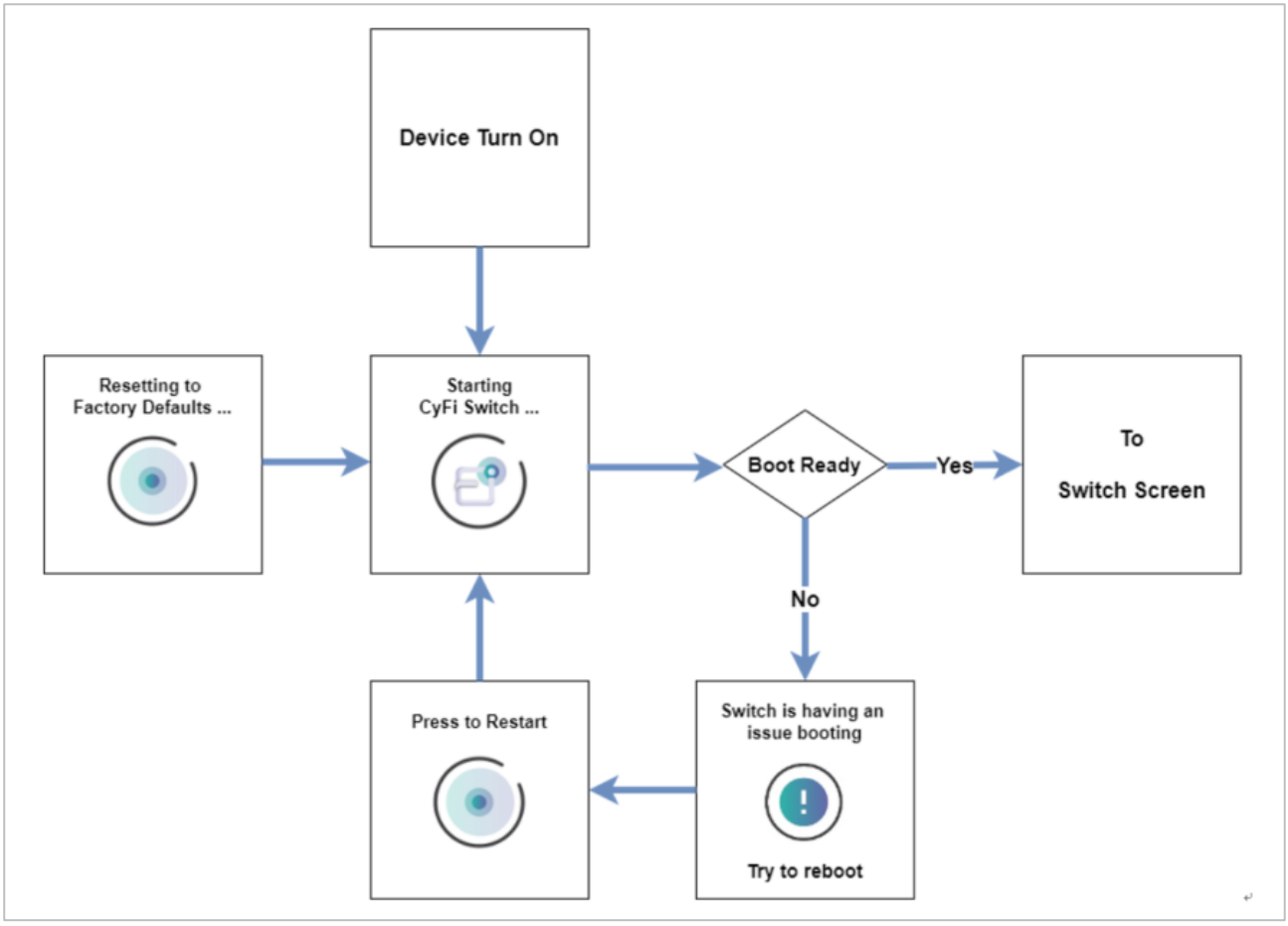
## *Layer II*

| *Layer 2-3-1*<br>*About/System* | *Layer 2-3-2*<br>*About/IP Address* | *Layer 2-3-3*<br>*About/ Uptime* |
|---|---|---|
|  | |  |
| Function: Display CPU, Memory usage | Function: Display Switch IP | Function: Up Time |

| *Layer 2-3-4*<br>*About/MAC* | *Layer 2-3-5*<br>*About/LCM Version* | *Layer 2-3-6*<br>*About/ PoE Port Info* |
|---|---|---|
| | |  |
| Display the device MAC address. | Function: Display *LCM Version* | Function: Display Port 1-8 LED meaning |

| *Layer 2-3-7*<br>*About/SFP* |
| --- |
|  |
| Function: Display SFP LED meaning |

### 2.2.2.5 Active process



## 2.3 RSW226G Series Hardware Installation

The following figures are shown the RSW226G series front view and rear view:

### 2.3.1 Overview

FIGURE: RSW226G-1PV Front View

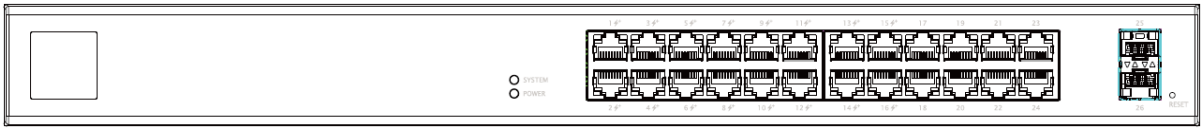


FIGURE: RSW226G-1P Front View

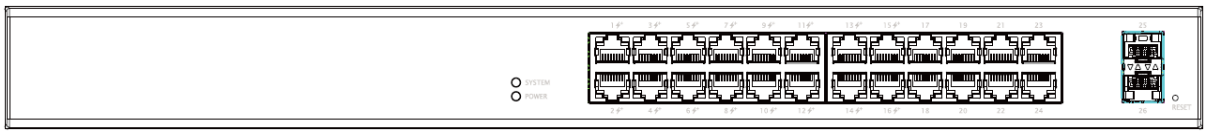


FIGURE: RSW226G-1V Front View

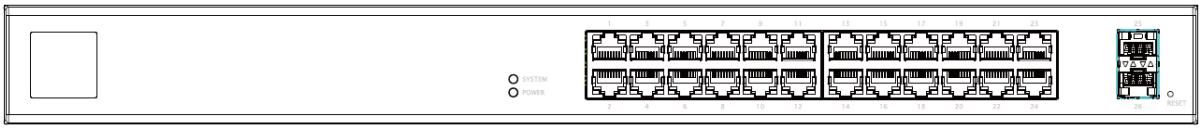


FIGURE: RSW226G-1 Front View

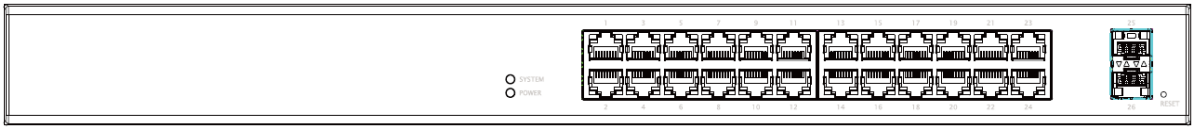


FIGURE: RSW226G-2PV Front View

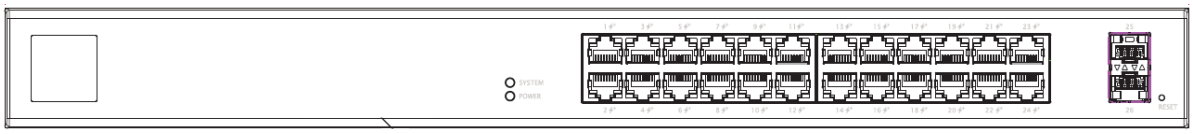


TABLE: RSW226G-1PV/RS226G-1P Front Ports

| No. | Label | Description |
|---|---|---|
| 1 | 1~16 ⚡+ | • 10/100/1000Mbps RJ-45 ports<br>• Support 802.3af/at PoE |
| 2 | 17~24 | 10/100/1000Mbps RJ45 Port |
| 3 | 25,26 | 1Gbps/10Gbps SFP+ port |
| 4 | RESET | This is a reset button to reset the Switch to factory default or do the system reboot. |

TABLE: RSW226G-1V/RS226G-1 Front Ports

| No. | Label | Description |
|---|---|---|
| 1 | 1~24 | 10/100/1000Mbps RJ-45 ports |
| 2 | 25,26 | 1Gbps/10Gbps SFP+ port |
| 3 | RESET | This is a reset button to reset the Switch to factory default or do the system reboot. |

TABLE: RSW226G-2PV Front Ports

| No. | Label | Description |
|---|---|---|
| 1 | 1~24 ⚡+ | • 10/100/1000Mbps RJ-45 ports<br>• Support 802.3af/at PoE |
| 2 | 25,26 | 1Gbps/10Gbps SFP+ port |
| 3 | RESET | This is a reset button to reset the Switch to factory default or do the system reboot. |

TABLE: RSW226G series Rear Panel

| No. | Label | Description |
|---|---|---|
| 1 | Label Contents | The contents are included model name, power rating, Contains FCC ID and company information. |
| 2 | AC Power Inlet | The power input is 100~240VAC, 50/60Hz. |

There is a RESET button on the front panel. The behaviors are shown in below TABLE.

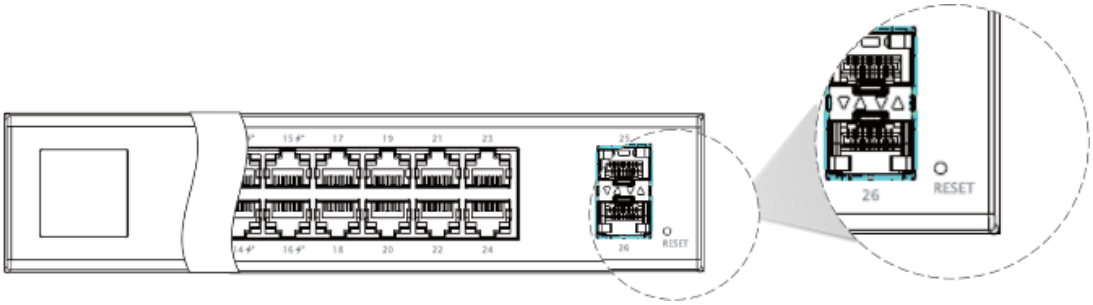



TABLE 3 RESET Button Function Description

| Press time | Function Description |
|---|---|
| < 10 seconds | The system will reboot |
| > 10 seconds | The system will reset the configuration to factory default |

### 2.3.2 LCD Indicator

When the Switch powers on, the LCD turns on automatically. This is a touch screen and support user to swipe screen to have different functions. Please check user manual to have detail function descriptions of LCD.

### 2.3.3 LED Indicators

TABLE: RSW226G Series LED Indicators

| LED Indicator | Color | Behavior | Function Descriptions |
|---|---|---|---|
| SYSTEM | Green | Solid | The Switch system is ready |
| | | Blinking | The Switch system is booting up |
| | Red | Solid | There is at least one alert happened |
| | OFF | | The Switch is no longer receiving power. |
| POWER | Green | Solid | 10Gbps link speed is detected |
| | | OFF | 1Gbps link speed is detected or no link |
| PoE ports | Green | Solid | The port links up |
| | | Blinking | There are transmitting or receiving Ethernet packets in this port |
| | | OFF | No link is detected |
| | Yellow | Solid | The port is providing PoE power to PD. |
| | | OFF | No PD is detected |
| Non-PoE ports | Green | Solid | The port links up |
| | | Blinking | There are transmitting or receiving Ethernet packets in this port |

| | | | |
|---|---|---|---|
| | | OFF | No Link is detected |
| | Yellow | Solid | 1000Mbps link speed is detected |
| | | OFF | 10/100Mbps link speed is detected |
| 25,26 SFP+ ports | Green | Solid | The port links up |
| | | Blinking | There are transmitting or receiving Ethernet packets in this port |
| | | OFF | No Link is detected |
| | Green | Solid | 10Gbps link speed is detected |
| | | OFF | 1Gbps link speed is detected or no link |

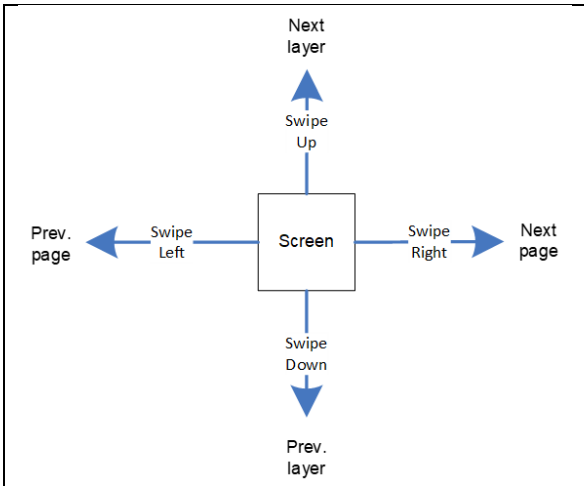
Note: The LED indicator △ means the upper SFP+ port; ▽means the lower SFP+ port.

## 2.3.4 Switch LCD Touch Screen

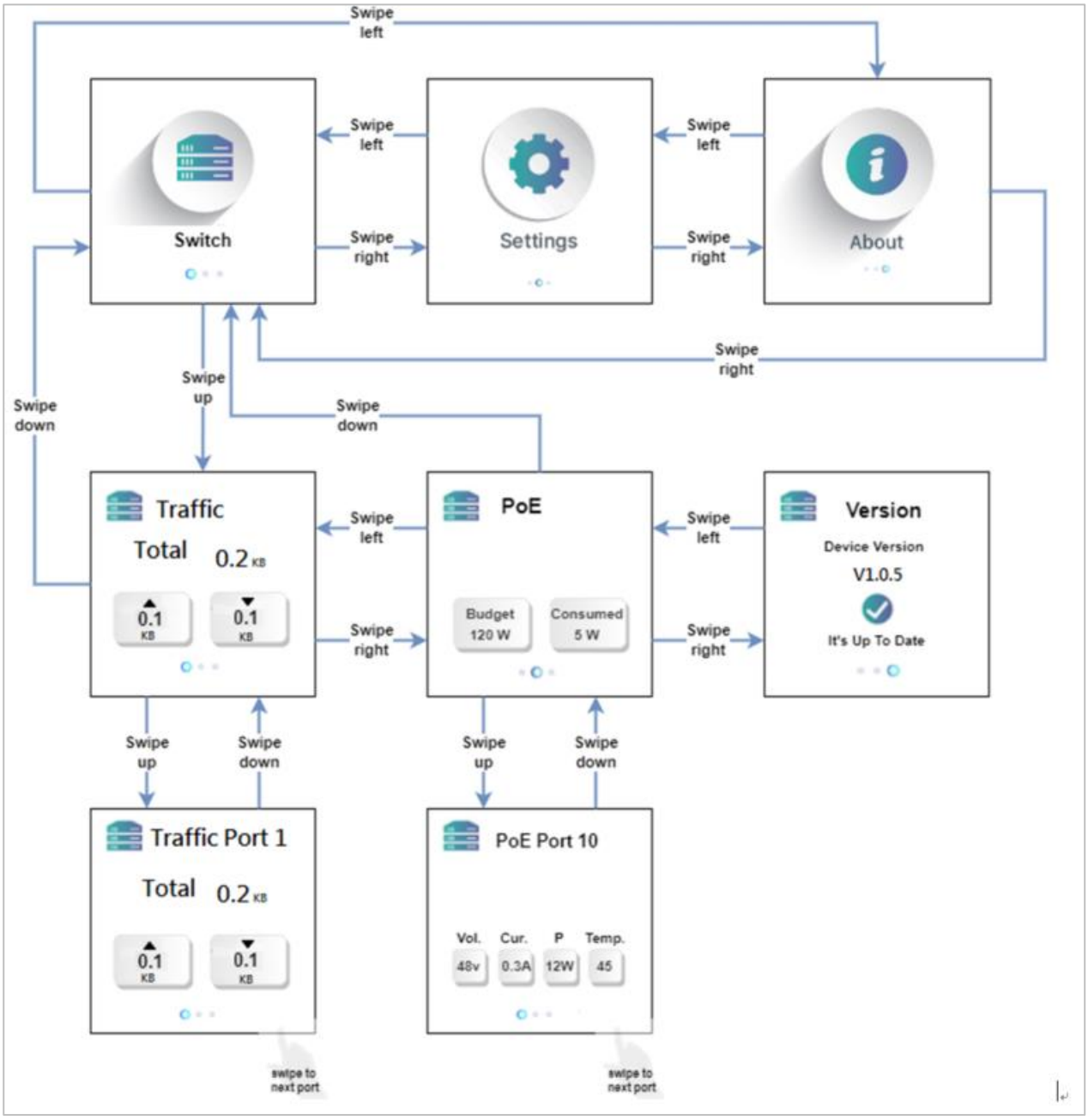
### 2.3.4.1 Swipe Screen Description

| Swipe Screen | Action | Description/ Function |
|---|---|---|
| Layer I | Press | Type Layer II Screen |
| | Swipe Up/ Download | none |
| | Swipe Right/ Left | Previous / Next Page(Item) |
| Layer II | Press | Start Screen-Saver |
| | Swipe Up/ Download | Next Layer / Previous |
| | Swipe Right/ Left | Previous / Next Page |
| Screen-Saver* | Press | Stop |

* The Controller becomes idle and the screensaver will activate after 5 minutes.

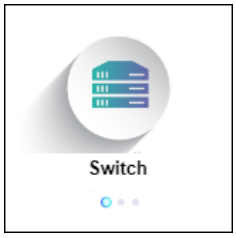



| | |
|---|---|
| Up Swipe | Next Layer |
| Down Swipe | Previous Layer |
| Right / Left Swipe | Item Check |
| Press | Enter and Monitor Protection Cancel |

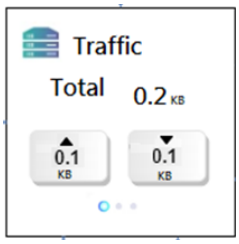
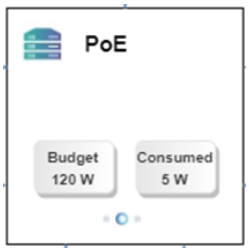

Swipe left
Switch
Swipe left
Settings
Swipe left
About
Swipe right
Swipe right
Swipe right
Swipe up
Swipe down
Swipe down
Traffic
Total 0.2 KB
0.1 KB
0.1 KB
Swipe left
PoE
Budget 120 W
Consumed 5 W
Swipe left
Version
Device Version
V1.0.5
It's Up To Date
Swipe right
Swipe right
Swipe up
Swipe down
Swipe up
Swipe down
Traffic Port 1
Total 0.2 KB
0.1 KB
0.1 KB
PoE Port 10
Vol. Cur. P Temp.
48v 0.3A 12W 45
swipe to next port
swipe to next port

### 2.3.4.2 Switch Label

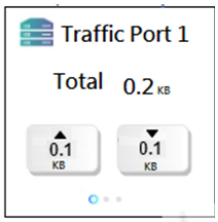
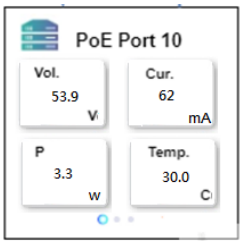
*Layer I*

| *Layer 1-1 : Switch* |
|---|
|  |
| Switch related information group page |

*Layer II*

| *Layer 2-1-1 Switch/Traffic* | *Layer 2-1-2 Switch/PoE* | *Layer 2-1-3 Switch/Version* |
|---|---|---|
|  |  | |
| Function: Display the current Tx and Rx total traffic of 26 ports | Function: Display the current power information of 16 ports | Function: Display the current Switch version |

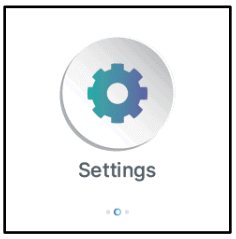
*Layer III*

| *Layer 3-1-1-1*<br>*Switch/Traffic/Port* | *Layer 3-1-2-2*<br>*Switch/PoE/Port* |
|---|---|
|  |  |
| Function: Display the current Tx and Rx traffic for each port | Function: Display the current voltage, current, power, and temperature for each PoE port |

### 2.3.4.3 Setting Label

*Layer I*

*Layer 1-2 : Setting*

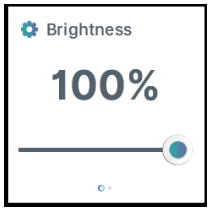



Settings Entrance

*Layer II*

*Layer 2-2-1*

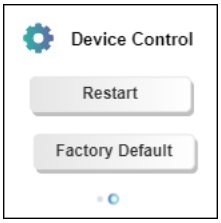
*Setting/Brightness*




Function: Adjust the LCM screen brightness

*Layer 2-2-2*

*Setting/Device Control*




Function: Control Switch restart and factory default

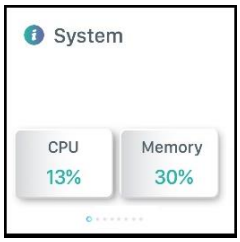
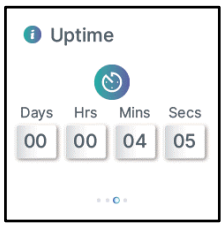
### 2.3.4.4 About Label

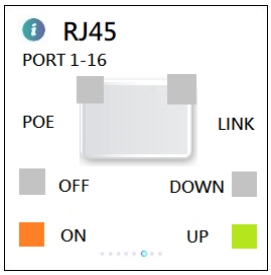
*Layer I*

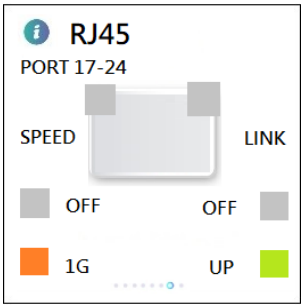
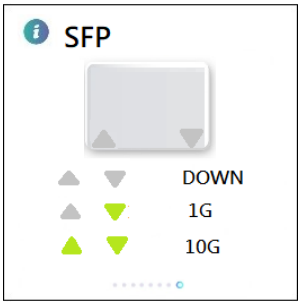
*Layer 1-3 : About*

About Page

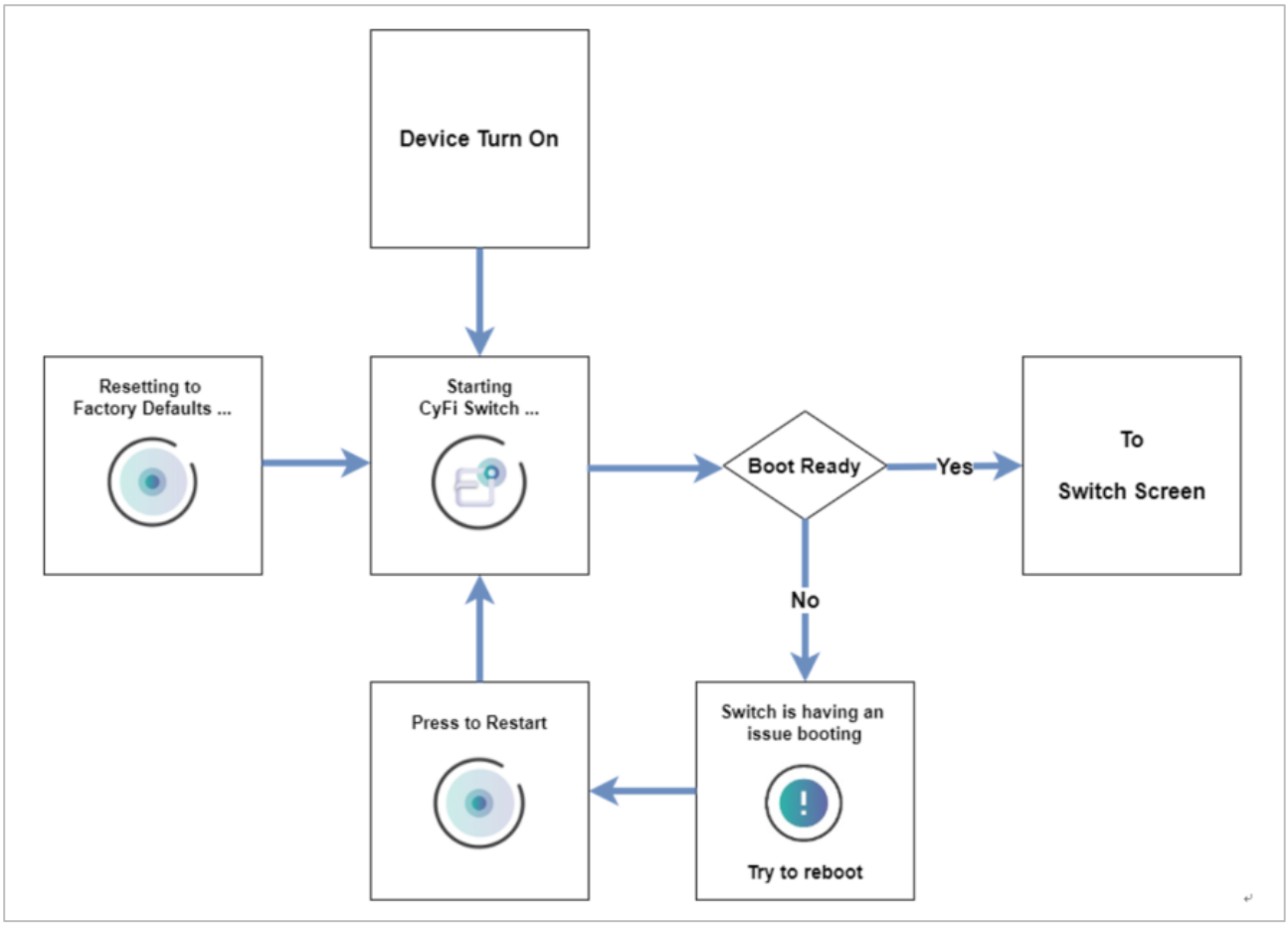
## *Layer II*

| *Layer 2-3-1*<br>*About/System* | *Layer 2-3-2*<br>*About/IP Address* | *Layer 2-3-3*<br>*About/ Uptime* |
|---|---|---|
|  | |  |
| Function: Display CPU, Memory usage | Function: Display Switch IP | Function: Up Time |

| *Layer 2-3-4*<br>*About/MAC* | *Layer 2-3-5*<br>*About/LCM Version* | *Layer 2-3-6*<br>*About/ PoE Port Info* |
|---|---|---|
| | |  |
| Display the device MAC address. | Function: Display *LCM Version* | Function: Display Port 1-16 LED meaning |

| *Layer 2-3-7*<br>*About/ Port Info* | *Layer 2-3-8*<br>*About/SFP* |
|---|---|
|  |  |
| Function: Display Port 17-24 LED meaning | Function: Display SFP LED meaning |

### 2.3.4.5 Active process



### 2.3.5 Rack Mounting

**Step 1:** Attach the Switch with brackets

Please use the included screws with L brackets to attach Switch.

FIGURE: Attach the brackets

| |
|---|
| Please note:<br><br>Using other accessories and screws could damage the switch. The damages occurred by using unapproved accessories are not covered by the warranty. |

**Step 2:** Mount the Switch in the rack

Please use the rack special screws of rack to mount the Switch in the rack. Please contact you rack vender about the screws.

FIGURE: Mount RSW226G series in the rack

Please note:

There are rubber feet in the package to install device on a desktop or shelf.

**Step 3:** Connect the power cord

Please connect the power cord to the Switch.

FIGURE: Connect the power cord of RSW226G series

Please note:

1. Please turn off the power source before the installation is completed.
2. The means of power cord of adapter should be connected to a socket-outlet with earthing connection.

**Step 4:** Connect the Ethernet cable

Please connect the Ethernet cable to the Switch. Please also connect the Controller in another side.

FIGURE: Ethernet cable connection

Please note:

1. This Switch RSW226G-1PV, RSW226G-1P & RSW226G-2PV are to be connected only to PoE networks without routing to the outside plant.

### 2.3.6 RSW226G Series Hardware Specification

| Models | RSW226G-1PV | RSW226G-1P | RSW226G-2PV |
|---|---|---|---|
| Dimension H x W x D (mm) | 44x440x230 | | |
| **Performance** | | | |
| Switch capacity (Gbps) | 88 | 88 | 88 |
| Forwarding capacity (Mpps) | 65.47 | 65.47 | 65.47 |
| **Ports** | | | |
| 1GBase-T | 24 | 24 | 24 |
| 1G/10G (SFP+) | 2 | 2 | 2 |
| Power over Ethernet ports | 16 x 802.3at (30W/port) | 16 x 802.3at (30W/port) | 24 x 802.3at (30W/port) |
| **LCD** | | | |
| LCD touch panel | 1.3” | – | 1.3” |
| **Power and Cooling** | | | |
| Max. PoE power budget (Watt) | 120 | 120 | 370 |
| PoE Output | 54VDC, 0.55A (per port 1-16) | | 54VDC, 0.55A (per port 1-24) |
| Power options | AC 100~240V, 1.74A Max. | AC 100~240V, 1.74A Max. | AC 100~240V, 4.5A Max. |
| Internal power supply | 1 PSU included | | |
| Airflow | Fanless | Fanless | Fans |
| Operating Temperature | 0°C~40°C / 32°F~104°F | | |
| Operating Humidity | 10% ~ 95%, Non-condensing | | |

| Models | RSW226G-1V | RSW226G-1 |
|---|---|---|
| Dimension H x W x D (mm) | 44x440x230 | |
| **Performance** | | |
| Switch capacity (Gbps) | 88 | 88 |
| Forwarding capacity (Mpps) | 65.47 | 65.47 |
| **Ports** | | |
| 1GBase-T | 24 | 24 |
| 1G/10G (SFP+) | 2 | 2 |
| **LCD** | | |
| LCD touch panel | 1.3” | – |
| **Power and Cooling** | | |
| Power options | AC 100~240V, 0.23A Max. | AC 100~240V, 0.23A Max. |
| Internal power supply | 1 PSU included | |
| Airflow | Fanless | Fanless |
| Operating Temperature | 0°C~40°C / 32°F~104°F | |
| Operating Humidity | 10% ~ 95%, Non-condensing | |

Please note:

1. In SFP+ ports, Laser Class 1 optical transceiver shall be used only.

## 2.4 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.

Caution: A proper grounding system is crucial. To ensure it meets local and national electrical codes, we recommend consulting a qualified installer who can handle the grounding process.

Caution: Secure mounting extends your device's life and prevents hazards. Follow the provided instructions carefully. For complex installations or additional support, consider consulting a qualified installer for proper wall or ceiling attachment.

Important Disclaimer:

Improper mounting of this device can lead to damage to the equipment and potential safety hazards. **We do not install on insecure walls or ceilings.** To ensure the safety and longevity of your device, please follow the provided mounting instructions carefully. If you are unsure about the installation process or require assistance, consult a qualified installer for professional mounting services.

SonicFi will not be liable for any damages or injuries resulting from improper mounting.

### 2.4.1 Regulatory Notice and Statement

**Federal Communication Commission 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 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.

This statement applies to all models. (RAP630 series, RAP7110C-341X, RCN205G-1PV, RSW226G series, RSW210G series)

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.

**IMPORTANT NOTE:**

**RAP7110C-341X 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 42cm between the radiator & your body.

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.

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The frequency and the maximum transmitted power in EU are listed below:

2402-2480MHz (BR/EDR): 8.64 dBm

2402-2480MHz (LE): 9.21 dBm

Hereby, SonicFi Inc. declares that the radio equipment type RSW226G-2PV, RSW226G-1PV, RSW226G-1P, RSW226G-1V, RSW226G-1,RSW210G-1PV,RSW210G-2PV,RSW210G-1V are in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

http://www.SonicFi-networks.com/help-center/download

## EWW631-A1, RAP630C-311G, CAP630C-311G ,RAP630W-311G, Revised CE Notice:

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

The frequency and the maximum transmitted power in EU are listed below:

2412-2472MHz: 19.98 dBm

5180-5320MHz: 22.85 dBm

5500-5700MHz: 29.54 dBm

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz and 5945 to 6425MHz frequency range.

Hereby, CyberTAN Technology Inc. declares that the radio equipment type EWW631-A1, RAP630C-311G, CAP630C-311G, is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

http://www.SonicFi-networks.com/help-center/download

## RAP7110C-341X Revised CE Notice:

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 & your body.

The frequency and the maximum transmitted power in EU are listed below:

2412-2472MHz: 19.87 dBm

5180-5320MHz: 22.97 dBm

5500-5700MHz: 29.73 dBm

5945-6425Mhz : 22.99 dBm

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz and 5945 to 6425MHz  frequency range.

Hereby, CyberTAN Technology Inc. declares that the radio equipment type RAP7110C-341X is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

http://www.SonicFi-networks.com/help-center/download

# IC

## EWW631-A1, RAP630C-311G, CAP630C-311G, RAP630W-311G Revised IC Notice:

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.*

For indoor use only.
*Pour une utilisation en intérieur uniquement.*

**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 25cm 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 25 cm de distance entre la source de rayonnement et votre corps.

## 2.5 RAP630W-311G/211G Quick Setup Guide

RAP630W-311G / 211G is a dual band Wi-Fi 6 2x2 Wall Mount Indoor Access Point with 4 gi-gabit interfaces with 1 gigabit interface supporting 802.3at/af POE in and 1 gigabit interface sup-porting 802.3f POE out to other POE device, providing in-room wired and wireless connectivity for hotel rooms, multi-tenant dwellings, school classrooms and dormitories.

This part provides step-by-step instructions on how to install and begin using your RAP630W-311G/211G

### 2.5.1 RAP630W-311G/211G Hardware Specification

| Model | RAP630W-311G/211G |
|---|---|
| Dimension H x W x D (mm) | 178x90x25(mm) |
| **Ports** | |
| 1GBase-T PoE+ LAN Ports | 3 |
| 1GBase-T WAN Port | 1 |
| Power over Ethernet ports | PoE-in 1 x 802.3at (30W/port)<br>PoE-out 1 x 802.3af (15W/port) (One of the ports supports PoE output. The PoE output function requires 802.3at PoE+ input) |
| Wireless specification | |
| Antennas | **RAP630W-311G** Two dual-band antennas<br>2.4 GHz 2 x3.3dBi<br>5GHz 2 x 4 dBi<br>**RAP630W-211G** Two dual-band and one single band antennas<br>2.4 GHz 2 x3.1.0dBi<br>5GHz 2 x 4.8 dBi |
| Maximum number of wireless device connections | 256 |
| Wireless networking standards | IEEE 802.11ax/ac/n/g/b/a |
| Wireless network frequencies | 2.4GHz / 5GHz |
| Signal rates | 2.4 GHz: 574 Mbps<br>5 GHz : 2402 Mbps |
| **Power supply** | |
| Max. PoE power budget (Watt) | 30 |
| Rated Voltage | 54V DC |
| Rated Current | 0.55 A |
| Operating Temperature | 0°C~40°C / 32°F~104°F |
| Operating Humidity | 10% ~ 95%， Non-condensing |

### 2.5.2 Overview

Upon following the steps outlined in this guide, you will be able to access the RAP630W-311G / 211G Access Point Wall Switch, allowing you to offer wired and wireless network access to users. Subsequently, this document will refer to the RAP630W-311G / 211G Access Point Wall Switch as the RAP630W-311G / 211G.

FIGURE 1: RAP630W-311G / 211G Access Point: Top View and Back View.

### 2.5.3 About Peripheral Devices

The RAP630W-311G / 211G can provide power to PoE-powered devices, with the supplied power contingent on the PoE power delivered to the RAP630W-311G / 211G. The LAN + PoE Out port is designated for PoE-powered peripheral devices, such as IP Phone and IP camera.

TABLE 1: RAP630W-311G / 211G AP Ports

| No. | Label | Description |
|---|---|---|
| 1. | 1G ETH PoE | 1 x 10/100/1000 Mbps RJ-45 Ethernet port (supports 802.3af/at PoE in) |
| 2. | 1G ETH PoE | 1 x 10/100/1000 Mbps RJ-45 Ethernet port (supports 802.3af PoE out) |
| 3. | 1G ETH | 2 x 10/100/1000 Mbps RJ-45 Ethernet port |
| 4. | Reset Switch | Resets the AP |

### 2.5.4 Package Contents

A complete RAP630W-311G / 211G installation package includes all of the following items:

- RAP630W-311G / 211G Access Point.
- One mounting kit, including Two 1-inch No. 8 steel pan-headPhillips sheet metal screws, two anti-theft screws, two coupling nuts and wall-mount anchors.
- One wall plate bracket.
- Service Level Agreement/Limited Warranty Statement (Optional).
- Declaration of Conformity (Optional).
- Regulatory Statement (Optional).
- This Quick Setup Guide (Electrical). Required Hardware Tools
- A Controller (Confirm that "Controller" has completed the first registration).
- Cat 5e (or better) Ethernet cable.
- Customer-supplied IEEE 802.3af/at-compliant PoE Switch and customer-supplied Ethernet cable.
- Customer-supplied IEEE 802.3af/at-compliant PoE injector and customer-supplied Ethernet cable.
- No. 2 Phillips screwdriver and T10 Torx driver for the mounting bracket screws.
- (Optional) One or two separate bypass cables run through the outlet box.

### 2.5.5 Required Hardware Tools

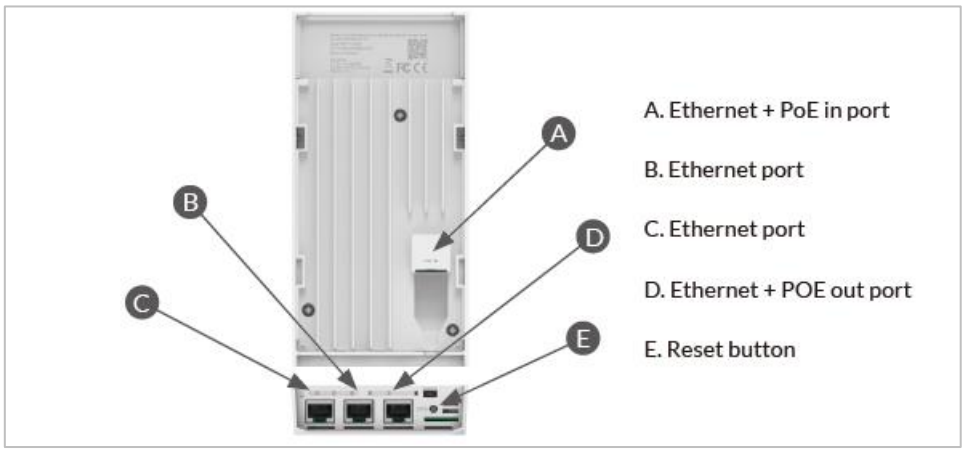
- A Controller (Confirm that "Controller" has completed the first registration).
- Cat 5e (or better) Ethernet cable.
- Customer-supplied IEEE 802.3af/at-compliant PoE Switch and customer-supplied Ethernet cable.
- Customer-supplied IEEE 802.3af/at-compliant PoE injector and customer-supplied Ethernet cable.
- No. 2 Phillips screwdriver and T10 Torx driver for the mounting bracket screws.
- (Optional) One or two separate bypass cables run through the outlet box.

### 2.5.6 Installation Steps

**> Step 1:**
**Connecting Your Controller to the AP**

1. Using an Ethernet cable to connect one of your Controller LAN port to the PoE port of the AP. Refer to Figure2.

FIGURE 2: RAP630W-311G / 211G AP Ports on Bottom Panel.




2. Verify that the PWR LED (front side) on the AP is lit a steady blue.

**> Step 2:**
**Login Controller website for setting**

1. Using an Ethernet cable to connect your computer network port to one of the LAN ports on the Controller.
2. Open a browser (we recommend Chrome) on the computer to visit https://192.168.1.1. You will be directed to the Controller login page.
3. Access the login page, input your registered account password, and then click "Sign in" to access the Controller dashboard.

**> Step 3:**
**Checking and find your EAP**

> Please note:
> The Controller must be directly connected to the EAP through one of the Ethernet ports.

1. Navigate to the "Topology" section in the left menu. The EAP you intend to adopt will be shown in the "Pending Adoption" block at the bottom of the page.
2. Click "Connected Devices/EAP" on the left Menu.
3. The EAP will appears in the EAP list with the status as “Pending”.
4. Navigate to the "Topology" section located in the left menu.
5. Locate the EAP icon and its corresponding MAC address in the pending adoption block. Once confirmed, proceed by clicking on the appropriate icon. The onboarding process will start.
6. During the adoption process, the status will indicate "Onboarding...". Once the process is successfully completed, the new EAP will seamlessly integrate into the current "topology" and its machine LED will display a blue light.

> Step 4:
Placing the AP in Your Site

1. Position the AP in its designated location, ensuring it is accessible for network connections. For detailed installation, please consult the "Mounting Instructions" below.
2. Connect the Cat5 cable to the PoE in port of the AP, and to a convenient power source (e.g., Controller LAN port, PoE Ethernet Switch or PoE Ethernet injector).

> Please note:
> To establish the connection between the AP and the convenient power source, it is essential to utilize a Cat 5e (or better) Ethernet cable.

3. Verify that the Uplink port LED is lit. After a short pause to re-establish the connection, you can test the AP.

## > Step 5:
## Verifying the Installation

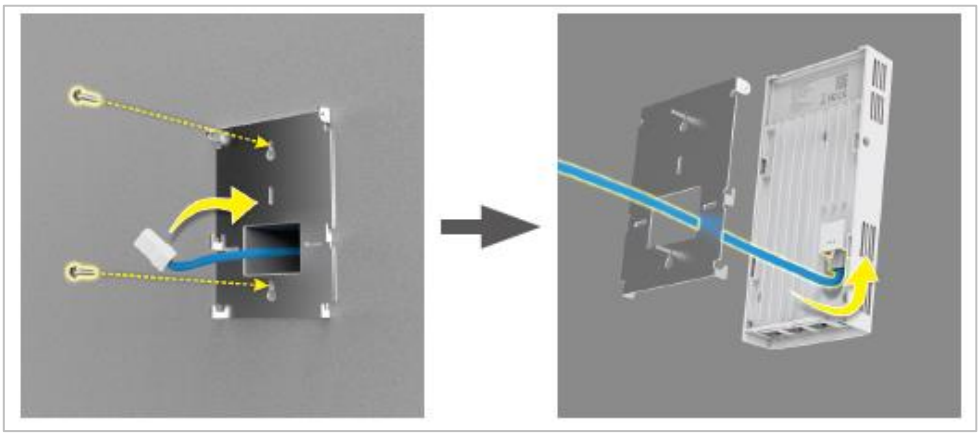
1. Using any wireless-enabled computer or mobile device to search for default SSID cyfi_25g and connect to it.
2. Once connected, open a web browser and access any public website.

**Congratulations! Your wireless network is now active and operational.**

## > Step 6: Mounting Instructions
## Over-the Socket wall mount installation

1. Align the mounting bracket with the screw holes on the wall outlet box, and insert screws through both the bracket and the screw holes.
2. Make sure that the mounting bracket is securely fastened on the wall.

FIGURE 3>4: Attaching the mounting bracket to a single-gang wall outlet box and plug in the Ethernet cable coming out of the wall to the RJ45.

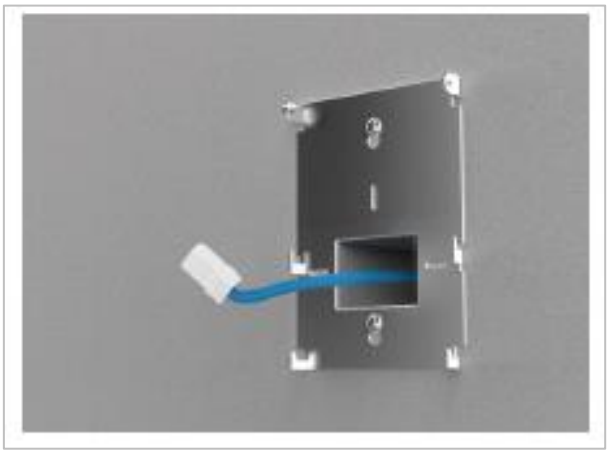


**> Step 7:**

## Attaching the RAP630W-311G / 211G to the Mounting Bracket

1. Make sure that the mounting bracket is securely fastened as described in Step 6.
2. If you have bypass cables (usually one or two, if any), make sure that they are draped across one or both of the two upper hooks on the mounting bracket.

FIGURE 5: Make sure the mounting bracket is securely.

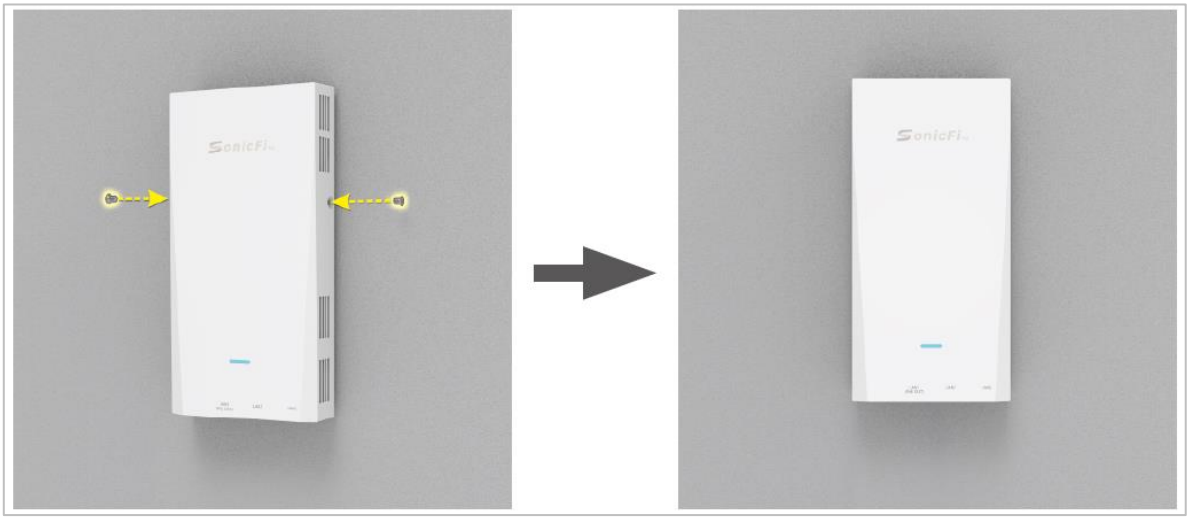


3. Pull the uplink Ethernet cable from the outlet box, and insert it into the Ethernet port in the back panel of the RAP630W-311G / 211G.
4. The mounting bracket has two lower hooks that fit into slots on the bottom of the RAP630W-311G / 211G. Rest the bottom of the RAP630W-311G / 211G on the lower hooks, and tilt the RAP630W-311G / 211G until it is up against the mounting bracket.
5. Align the screw holes on the left and right sides of the RAP630W-311G / 211G with the corresponding screw holes on both sides of the bracket.

FIGURE 6: Fit into slots on the bottom of the RAP630W-311G / 211G.

6. Use a T10 Torx driver to screw the factory-supplied Torx flat head machine screws through the RAP630W-311G / 211G screw holes into the threaded inserts on the sides of the mounting bracket.
7. Confirm whether it can start normally.

FIGURE 7>8: RAP630W-311G / 211G setup is complete by using screws inserted into the threaded inserts on the sides.



## >Step 8:
## Testing the RAP630W-311G / 211G Operation

After a short pause to re-establish the Internet connection, you can test the RAP630W-311G / 211G.

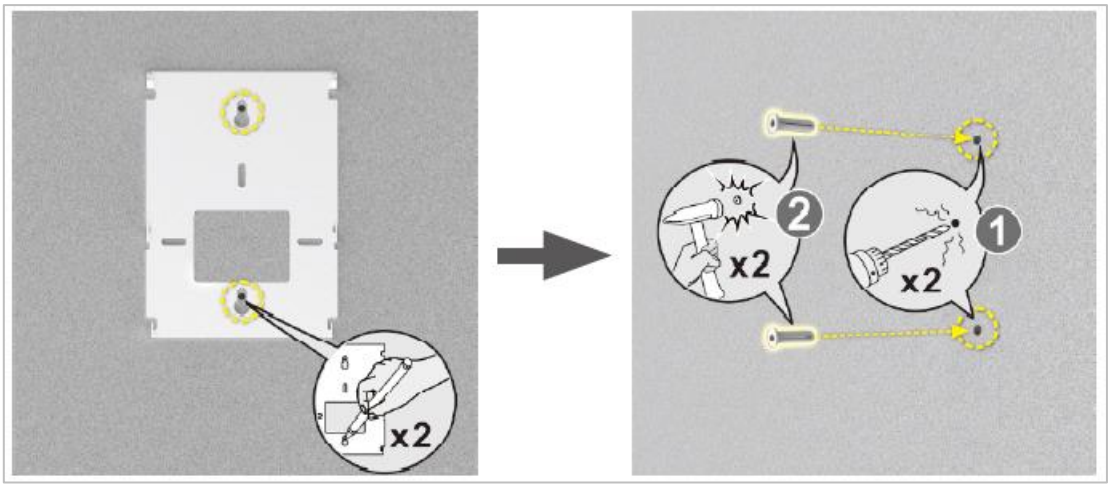
1. Using any wireless-enabled PC or mobile device, search for and select the wireless network you previously confi gured.
2. If you can connect, open a browser and navigate to any public website.
3. Using any wired PC or other device and an Ethernet cable, plug into an Ethernet port on the bottom of the RAP630W-311G / 211G.
4. Open a browser and navigate to any public website.
5. Repeat Step 3 and Step 4 in this procedure for the other Ethernet ports on the bottom of the RAP630W-311G / 211G.
6. Verify that all connected devices are workingcorrectly.

**Congratulations! Your RAP630W-311G / 211G is active and ready for use.**

## >Step 9: Mounting Instructions
## Generic wall mount installation

1. Attach the RAP630W-311G / 211G mounting bracket to a wall.
2. Mark the positions of the two screw holes.
3. After removing the mounting bracket, proceed with drilling.
4. Retrieve two coupling nuts from the kit and use a hammer to secure them into the wall, creating screw holes.

FIGURE 9>10: Mark the positions of the two screw holes and make the screw holes.




5. Align the mounting bracket with screw holes, inserting screws through the holes in the bracket and the newly drilled screw holes.
6. Make sure that the mounting bracket is securely fastened on the wall.
7. Take the uplink Ethernet cable and insert it into the WAN port in the bottom of the RAP630W-311G / 211G.

FIGURE 11>12: Mounting bracket to a wall and insert into the WAN port in the bottom side.

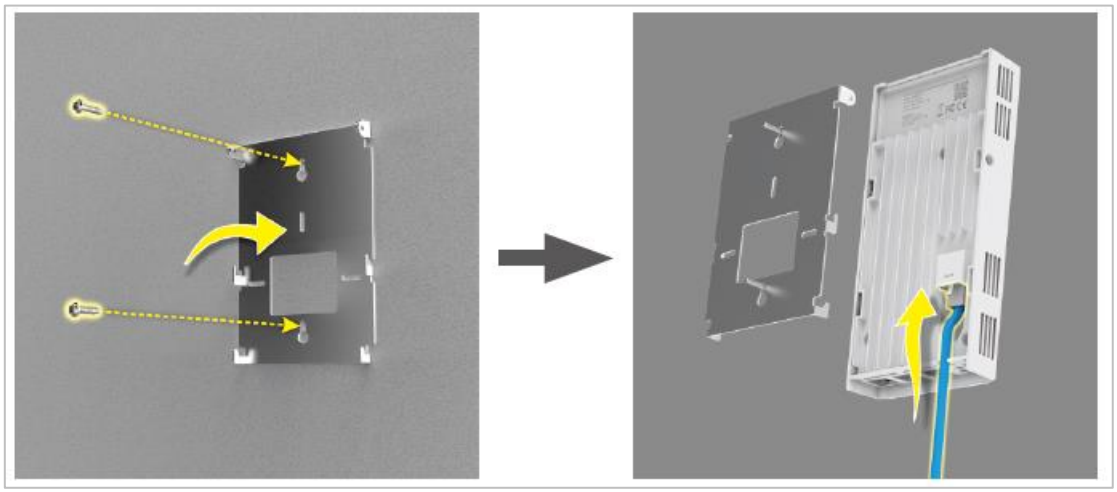
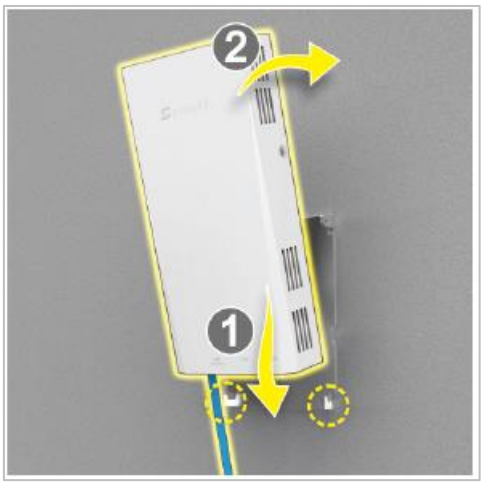


FIGURE 13: Fit into slots on the bottom of the RAP630W-311G / 211G.




8. The mounting bracket has two lower hooks that fi t into slots on the bottom of the RAP630W-311G / 211G. Rest the bottom of the RAP630W-311G / 211G on the lower hooks, and tilt the RAP630W-311G / 211G until it is up against the mounting bracket.
9. Align the screw holes on the left and right sides of the RAP630W-311G / 211G with the corresponding screw holes on both sides of the bracket.
10. Use a T10 Torx driver to screw the factory-supplied Torx fl at head machine screws through the RAP630W-311G / 211G screw holes into the threaded inserts on the sides of the mounting bracket.
11. Confirm whether it can start normally.

FIGURE 14: Using the screw into the threaded inserts on the sides.

## >Step 10:
## Testing the RAP630W-311G / 211G Operation

After a short pause to re-establish the Internet connection, you can test the RAP630W-311G / 211G.

1. Using any wireless-enabled PC or mobile device, search for and select the wireless network you previously confi gured.
2. If you can connect, open a browser and navigate to any public website.
3. Using any wired PC or other device and an Ethernet cable, plug into an Ethernet port on the bottom of the RAP630W-311G / 211G.
4. Open a browser and navigate to any public website.
5. Repeat Step 3 and Step 4 in this procedure for the other Ethernet ports on the bottom of the RAP630W-311G / 211G.
6. Verify that all connected PoE-powered devices and are working correctly.

**Congratulations! Your RAP630W-311G / 211G is active and ready for use.**

FIGURE 15: RAP630W-311G / 211G set up image.

## 2.6 RAP630C-311G Quick Setup Guide

RAP630C-311G is a dual band Wi-Fi 6 2x2 Ceiling Mount Indoor Access Point with 1 gigabit interface supporting 802.3at/af POE in, providing in-room wired and wireless connectivity for hotel rooms, multi-tenant dwellings, school classrooms and dormitories

This part provides step-by-step instructions on how to install and begin using your RAP630C-311G

### 2.6.1 RAP630C-311G Hardware Specification

| Model | RAP630C-311G |
|---|---|
| Dimension H x W x D (mm) | 154x154x21(mm) |
| **Ports** | |
| 1GBase-T PoE+ LAN Ports | 1 |
| Power over Ethernet ports | PoE-in 1 x 802.3at (30W/port) |
| Wireless specification | |
| Antennas | Two dual-band antennas<br>2.4 GHz 2 x 3.9 dBi<br>5GHz 2 x 4.7 dBi |
| Maximum number of wireless device connections | 256 |
| Wireless networking standards | IEEE 802.11ax/ac/n/g/b/a |
| Wireless network frequencies | 2.4GHz / 5GHz |
| Signal rates | 2.4 GHz: 574 Mbps<br>5 GHz : 2402 Mbps |
| **Power supply** | |
| Max. PoE power budget (Watt) | 30 |
| Rated Voltage | 54V DC |
| Rated Current | 0.55 A |
| Operating Temperature | 0°C~40°C / 32°F~104°F |
| Operating Humidity | 10% ~ 95%， Non-condensing |

### 2.6.2 Overview

Upon following the steps outlined in this guide, you will be able to access the RAP630C-311G Access Point, allowing you to offer wired and wireless network access to users.

FIGURE 1: RAP630C-311G Access Point: Top View and Back View.

### 2.6.3 Package Contents

A complete RAP630C-311G installation package includes all of the following items:

- RAP630C-311G Access Point.
- One mounting kit, including two 1-inch No. 8 steel pan-head Phillips sheet metal screws, one anti-theft screw and wall-mount anchors.
- One external plate bracket.
- Service Level Agreement/Limited Warranty Statement (Optional).
- Declaration of Conformity (Optional).
- Regulatory Statement (Optional).
- This Quick Setup Guide (Electrical).

### 2.6.4 Required Hardware Tools

- Controller (Confi rm that "Controller" has completed the fi rst registration).
- Cat 5e (or better) Ethernet cable.
- 802.3at-compliant Power over Ethernet (PoE) Switch or PoE injector.

•

### 2.6.5 Installation Steps

**> Step 1:**
**Connecting Your Controller to the AP**

3. Using an Ethernet cable to connect one of your Controller LAN port to the PoE port of the AP. Refer to Figure2.

FIGURE 2: RAP630C-311G AP Ports on Bottom Panel.

TABLE 1: RAP630C-311G AP Ports

| No. | Label | Description |
|---|---|---|
| 1 | 1G ETH PoE | 1 x 10/100/1000 Mbps PoE In Port: RJ-45 Ethernet port (supports 802.3af/at PoE) |
| 2 | Reset Switch | Resets the AP |

4. Verify that the PWR LED (front side) on the AP is lit a steady blue.

**> Step 2:**
**Login Controller website for setting**

1. Using an Ethernet cable to connect your computer network port to one of the LAN ports on the Controller.
2. Open a browser (we recommend Chrome) on the computer to visit https://192.168.1.1.
3. You will be directed to the Controller login page.
4. Access the login page, input your registered account password, and then click "Sign in" to access the Controller dashboard.

## > Step 3:
## Checking and find your EAP

> Please note:
> The Controller must be directly connected to the EAP through one of the Ethernet ports and powered on, ready for setup.

1. Navigate to the "Topology" section in the left menu. The EAP you intend to adopt will be shown in the "Pending Adoption" block, and located at the bottom of the page.
2. Click "Connected Devices/EAP" on the left Menu.
3. The EAP is linked to the "Controller" network by establishing a connection with the device. This connection status can be viewed on the topology page.
4. Navigate to the "Topology" section located in the left menu.
5. Locate the EAP icon and its corresponding MAC address. Once confi rmed, proceed by clicking on the appropriate option.
6. During the adoption process, the status will indicate "Onboarding...". Once the process is successfully completed, the new EAP will seamlessly integrate into the current "topology" and its machine LED will display a blue light.

## > Step 4:
## Placing the AP in Your Site

4. Position the AP in its designated location, ensuring it is accessible for network connections. For detailed installation, please consult the "**Mounting Instructions**" below.
5. Connect the Cat5 cable to the PoE in port of the AP, and to a convenient power source (e.g., Controller LAN port, PoE Ethernet Switch or PoE Ethernet injector).

> Please note:
> To establish the connection between the AP and the convenient power source, it is essential to utilize a Cat 5e (or better) Ethernet cable.

6. Verify that the Uplink port LED is lit. After a short pause to re-establish the connection, you can test the AP.

## > Step 5:
## Verifying the Installation

3. Using any wireless-enabled computer or mobile device to search for default SSID **cyfi_25g** and connect to it.
4. Once connected, open a web browser and access any public website.

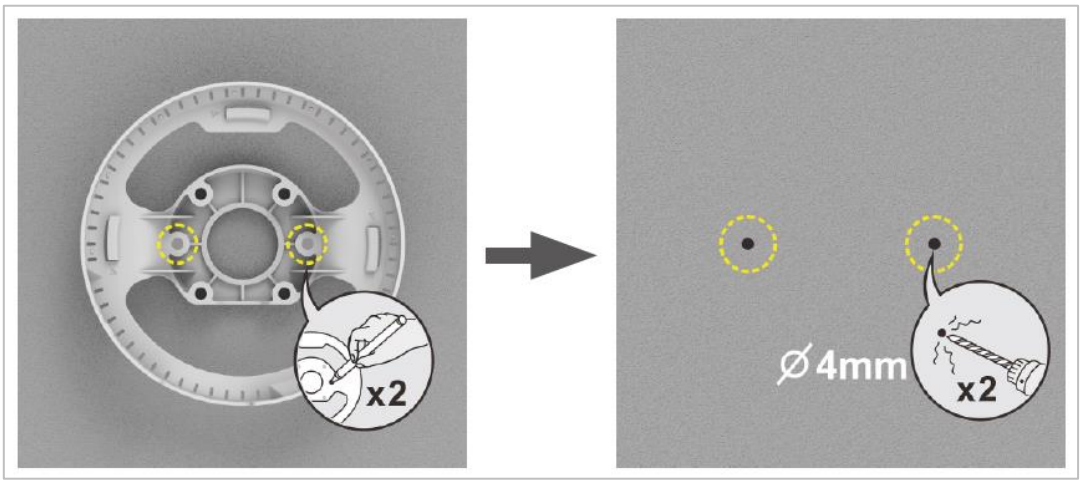
**Congratulations! Your wireless network is now active and operational.**

## > Step 6: Mounting Instructions
## Without an Ethernet outlet

This setting is in the case without Ethernet hole.

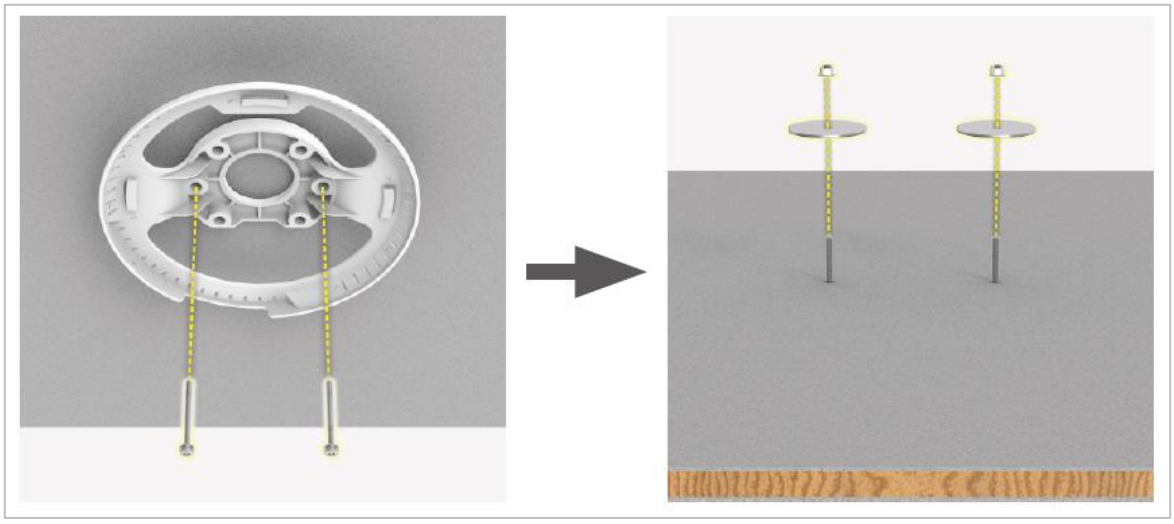
3. Attach the lower cover ceiling plate to the desired ceiling location.
4. Mark the positions of the two screw holes.

FIGURE 3>4



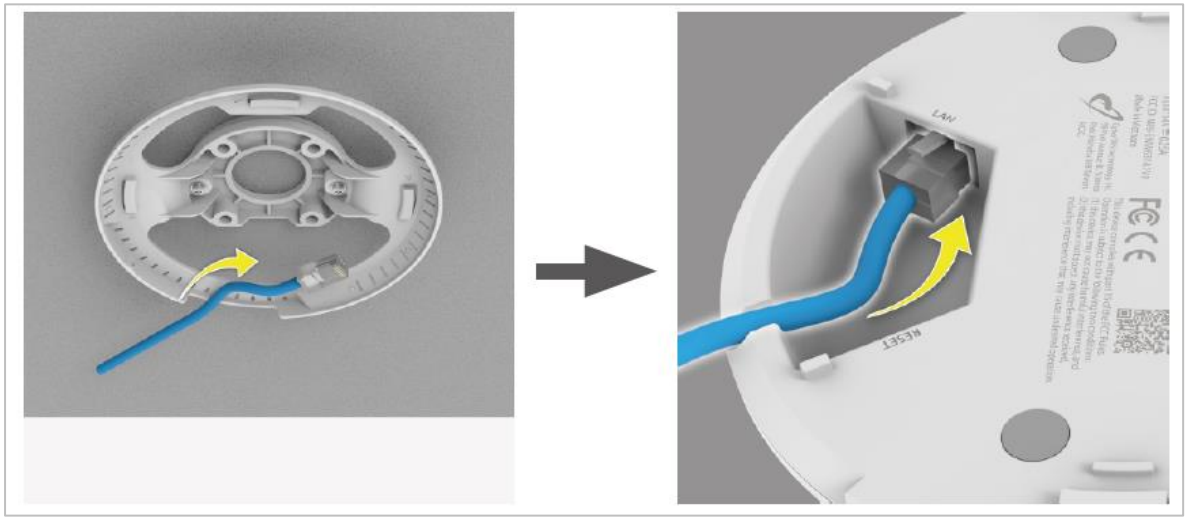

5. After removing the ceiling plate, proceed with drilling.
6. Align the two screws hole and ceiling plates, inserting screws through the holes in the plates and the newly drilled ceiling holes.
7. Place two nuts onto the screws and tighten them securely.

FIGURE 5>6



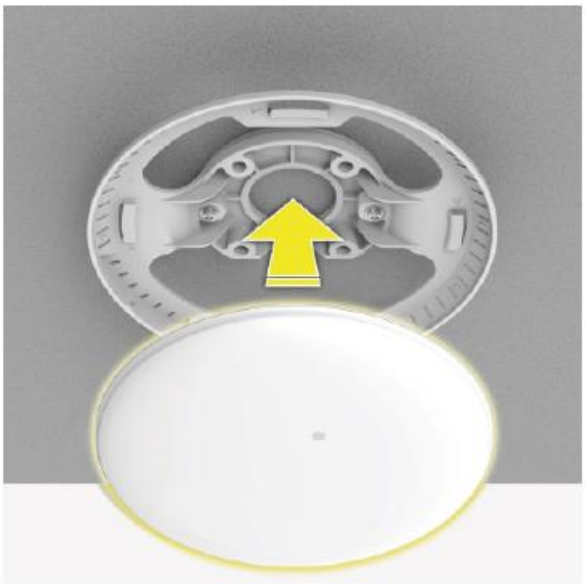
8.

6. Confi rm the stability of the ceiling plate kit.
7. Connect the Ethernet cable with the EAP.
8. Align the EAP with the ceiling plate.



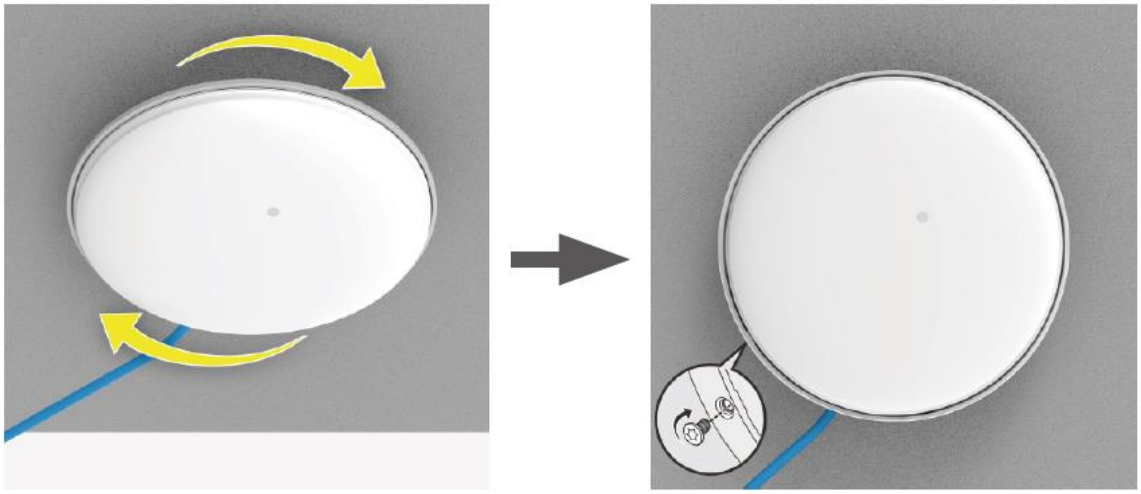

9. Rotate the EAP clockwise to secure it in place.

FIGURE 9:



10. Lock the anti-theft screw into the anti-theft hole to fix the AP and the lower cover ceiling plate.
11. Your EAP setup is now completed.

FIGURE 10>11:

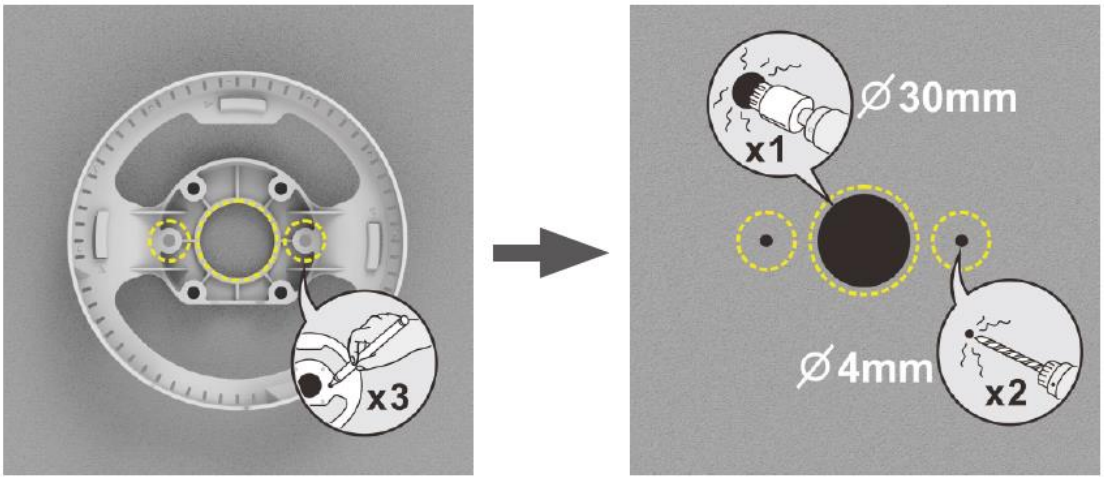


## > Step 7: Mounting Instructions
## Using an Ethernet outlet

Make sure the ceiling you want to use has an Ethernet outlet.

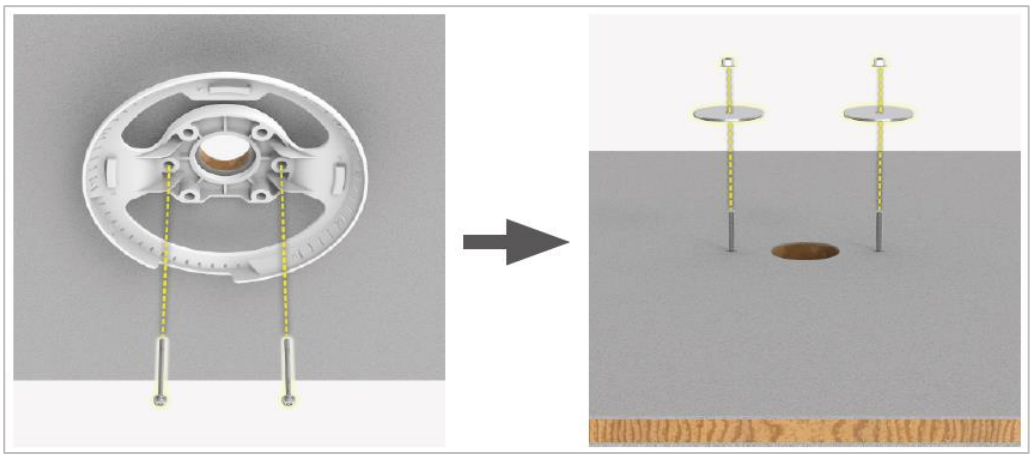
1. Attach the lower cover ceiling plate to the desired ceiling location.
2. Mark two positions for the screw holes and a position for the Ethernet cable hole.

FIGURE 12>13:



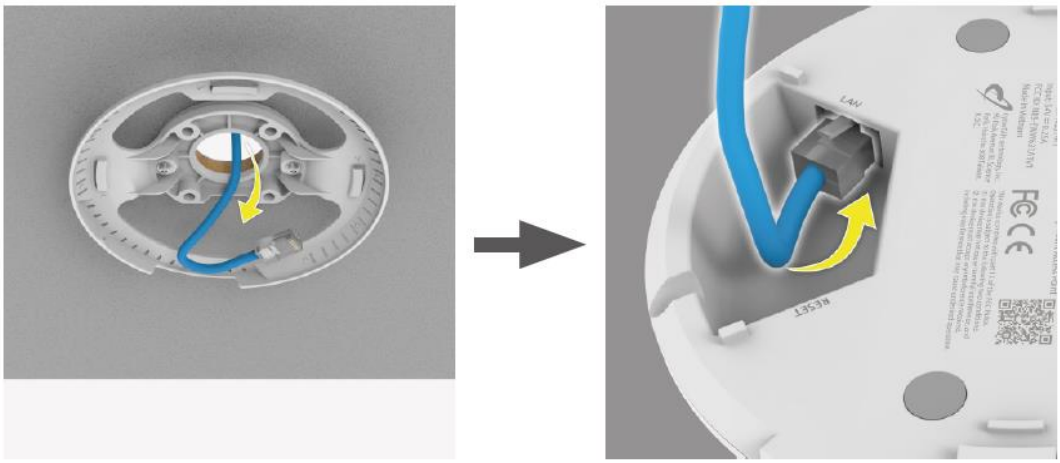

3. After removing the ceiling plate, proceed with drilling.
4. Align the two screws hole and ceiling plates, inserting screws through the holes in the plates and the newly drilled ceiling holes.
5. Place two nuts onto the screws and tighten them securely.

FIGURE 14>15:



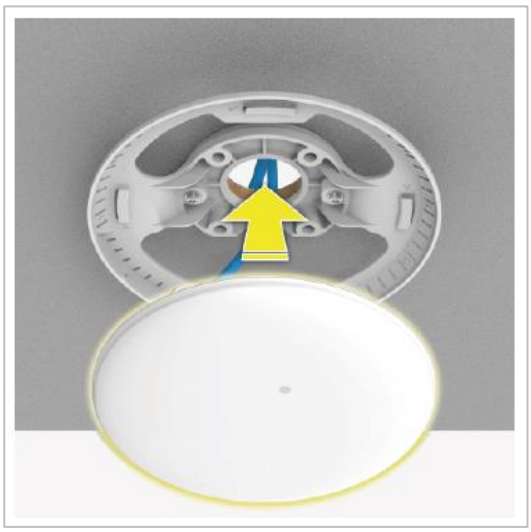
6. Confirm the stability of the ceiling plate kit.
7. Retrieve the Ethernet cable from the Ethernet hole and connect it to the EAP.
8. Align the EAP with the ceiling plate.

FIGURE 16>17:



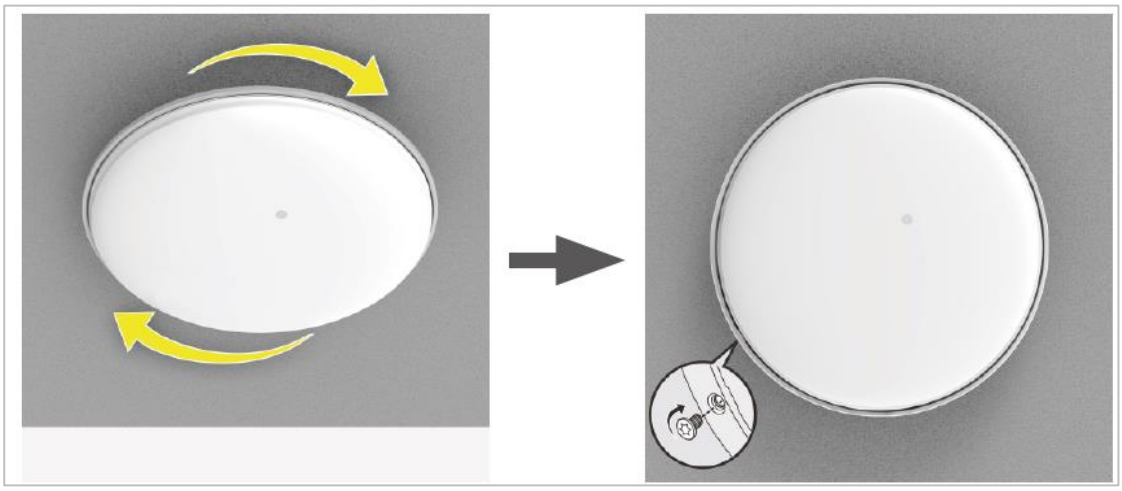
9. Rotate the EAP clockwise to secure it in place.

FIGURE 18:



10. Lock the anti-theft screw into the anti-theft hole to fix the AP and the lower cover ceiling plate.
11. Your EAP setup is now completed.

FIGURE 19>20:



## 2.7 RAP7110C-341X Quick Setup Guide

RAP7110C-341X is a tri-band Wi-Fi 7 2x2 + 2x2 + 2x2 Ceiling Mount Indoor Access Point with a 10-gigabit uplink interface supporting 802.3at/af PoE. The main target market segments for RAP7110C-341X include hotel rooms, multi-tenant dwellings, school classrooms, dormitories, and SOHO, etc.

This part provides step-by-step instructions on how to install and begin using your RAP7110C-341X

### 2.7.1 RAP7110C-341X Hardware Specification

| Model | RAP7110C-341X |
|---|---|
| Dimension H x W x D (mm) | 230.0 mm (Diameter) x 36.0 mm (Depth) |
| **Ports** | |
| 10 GBase-T WAN Port | 1 |
| Power over Ethernet ports | PoE-in 1 x 802.3at (30W/port) |
| Wireless specification | |
| Antennas | Three dual-band antennas<br>2.4 GHz 2 x 2.65 dBi<br>5GHz 2 x 3.55 dBi<br>6GHz 2 x 2.65 dBi |
| Maximum number of wireless device connections | 256 |
| Wireless networking standards | IEEE 802.11 be/ax/ac/n/g/b/a |
| Wireless network frequencies | 2.4GHz / 5GHz / 6GHz |
| Signal rates | 2.4 GHz: 688 Mbps<br>5 GHz : 4323 Mbps<br>6 GHz : 5764 Mbps |
| **Power supply** | |
| Rated Voltage | 54V DC |
| Rated Current | 0.55 A |
| DC Power | External power adapter 100~240AC input, 12V 2.5A output |
| Operating Temperature | 0°C~40°C / 32°F~104°F |
| Operating Humidity | 10% ~ 95%， Non-condensing |

### 2.7.2 Overview

**RAP7110C-341X Access Point Quick Setup Guide**

This Quick Setup Guide provides step-by-step instructions on how to install and begin using your RAP7110C-341X Tri-band 802.11BE Indoor Wi-Fi Access Point (AP).

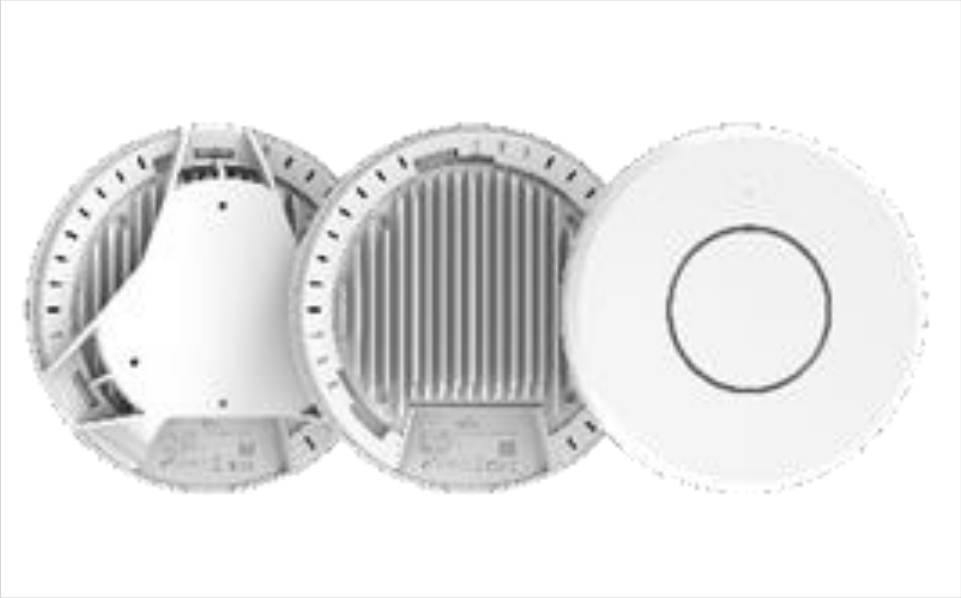


FIGURE 1: RAP7110C-341X Access Point: Top View and Back View.

### 2.7.3 Package Contents

A complete RAP7110C-341X installation package includes all of the following items:

- RAP7110C-341X Access Point.
- One mounting kit, including three 1-inch No. 8 steel pan-head Phillips sheet metal screws, one anti-theft screw and wall-mount anchors.

- One external plate bracket.
- Service Level Agreement/Limited Warranty Statement (Optional).
- Declaration of Conformity (Optional).
- Regulatory Statement (Optional).
- This Quick Setup Guide (Electrical).

### 2.7.4 Required Hardware Tools

- Controller (Confirm that "Controller" has completed the first registration).
- Cat 6 (or better) Ethernet cable.
- 802.3at-compliant Power over Ethernet (PoE) Switch or PoE injector.
- 12V 2.5A Power Adapter (Optional)

### 2.7.5 Installation Steps

> Step 1:

Connecting Your Controller to the AP

1. Using an Ethernet cable to connect one of your Controller LAN ports to the PoE port of the AP. Refer to Figure 2.

FIGURE 2: RAP7110C-341X AP Ports on Bottom Panel.

TABLE 1: RAP7110C-341X AP Ports

| No. | Label | Description |
|---|---|---|
| 1 | Reset Switch | Resets the AP |
| 2 | 10G ETH PoE | 1 x 10/100/1000 / 10000 Mbps PoE In Port: RJ-45 Ethernet port (supports 802.3af/at PoE) |
| 3 | DC IN | 12V 2.5A DC IN |

2. Verify that the PWR LED on the AP is lit a steady blue.

> Step 2:

Login Controller website for setting

1. Using an Ethernet cable to connect your computer network port to one of the LAN ports on the Controller.
2. Open a browser (we recommend Chrome) on the computer to visit https://192.168.1.1.
3. You will be directed to the Controller login page.
4. Access the login page, input your registered account password, and then click "Sign in" to access the Controller dashboard.

> Step 3:

Checking and find your EAP

1. Navigate to the "Topology" section in the left menu. The EAP you intend to adopt will be shown in the "Pending Adoption" block, and located at the bottom of the page.
2. Click "Connected Devices/EAP" on the left Menu.
3. The EAP is linked to the "Controller" network by establishing a connection with the device. This connection status can be viewed on the topology page.
4. Navigate to the "Topology" section located in the left menu.
5. Locate the EAP icon and its corresponding MAC address. Once confirmed, proceed by clicking on the appropriate option.
6. During the adoption process, the status will indicate "Onboarding...".

Once the process is successfully completed, the new EAP will seamlessly integrate into the current "topology" and its machine LED will display a blue light.

> Step 4:

Placing the AP in Your Site

1. Position the AP in its designated permanent location, ensuring it is accessible for network connections. For detailed installation instructions, please consult the "Mounting Instructions" guide.
2. Connect the Cat6 cable to the POE in port of the AP, and to a convenient power source (e.g., Controller LAN port, POE Ethernet Switch or POE Ethernet injector).
3. Verify that the Uplink port LED is lit.

After a short pause to re-establish the Internet connection, you can test the AP.

> Step 5:

Verifying the Installation

1. Using any wireless-enabled computer or mobile device to search for default SSID cyfi_25g and connect to it.

2. Once connected, open a web browser and access any public website.

Congratulations! Your wireless network is now active and operational.

> Step 6: Mounting Instructions

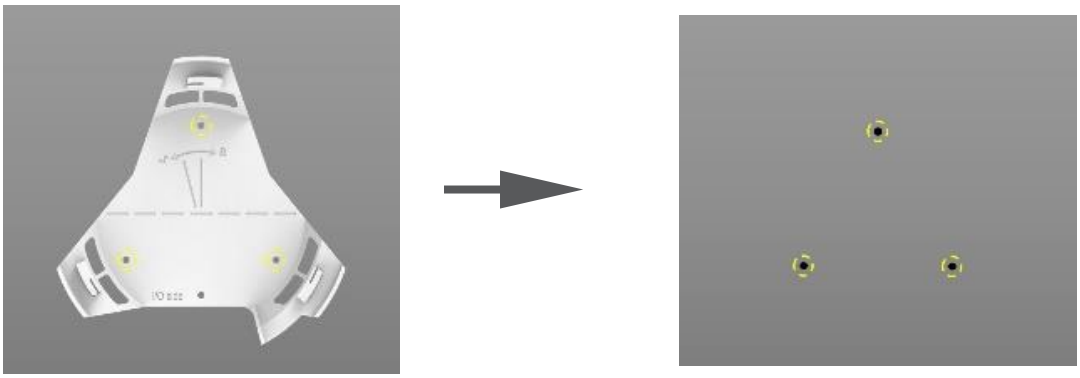
Without an Ethernet outlet

This setting is in the case without Ethernet hole.

1. Attach the lower cover ceiling plate to the desired ceiling location.

2. Mark the positions of the three screw holes.

FIGURE 3>4:

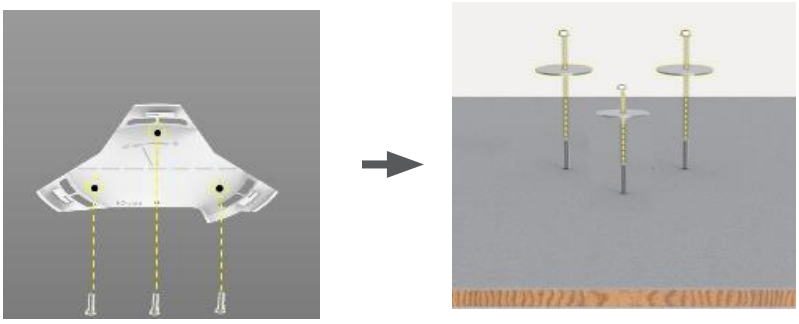


3. After removing the ceiling plate, proceed with drilling.

4. Align the three screws hole and ceiling plates, inserting screws through the holes in the plates and the newly drilled ceiling holes.

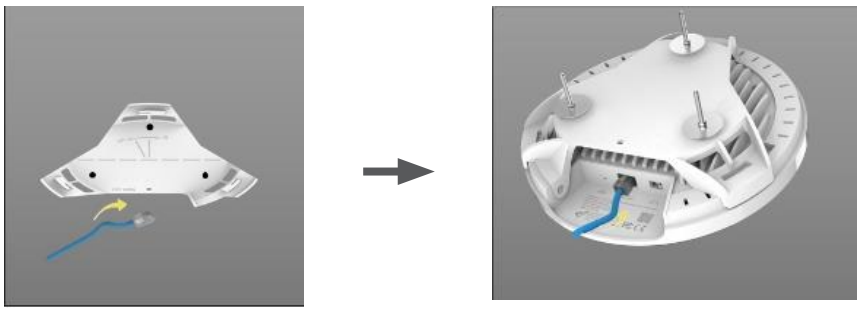
5. Place three nuts onto the screws and tighten them securely.

FIGURE 5>6:



6. Confirm the stability of the ceiling plate kit.
7. Connect the Ethernet cable with the EAP.
8. Align the EAP with the ceiling plate.

FIGURE 7>8:



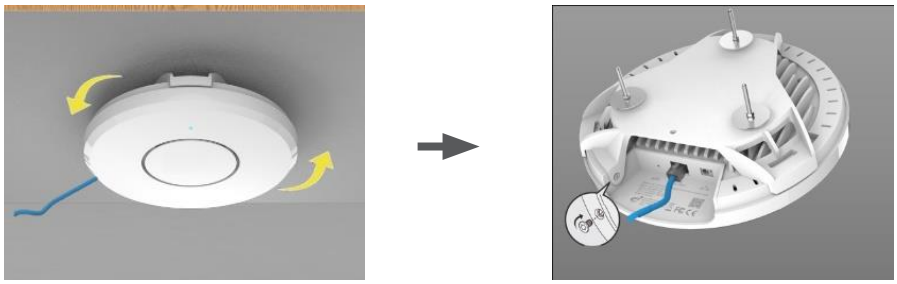
9. Rotate the EAP clockwise to secure it in place.

FIGURE 9:

10. Lock the anti-theft screw into the anti-theft hole to fix the AP and the lower cover ceiling plate.

11. Your EAP setup is now completed.

FIGURE 10>11:



> Step 7: Mounting Instructions

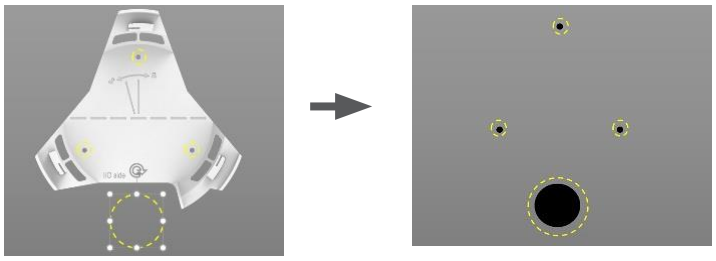
Using an Ethernet outlet

Make sure the ceiling you want to use has an Ethernet outlet.

1. Attach the lower cover ceiling plate to the desired ceiling location.

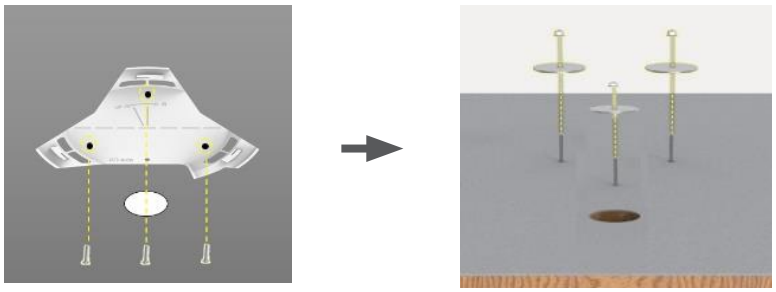
2. Mark three positions for the screw holes and a position for the Ethernet cable hole.

FIGURE 12>13:



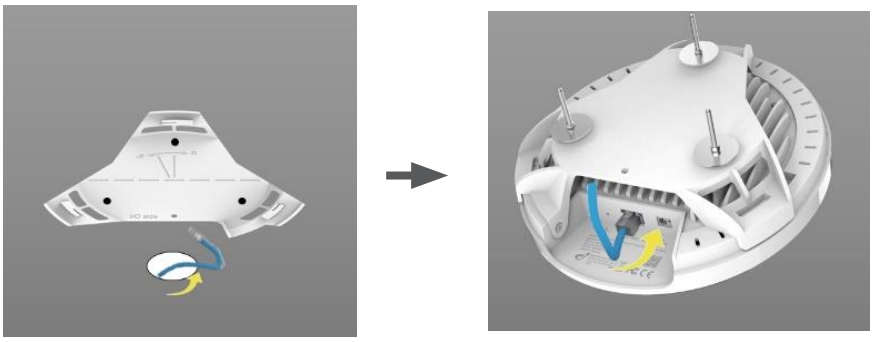
3. After removing the ceiling plate, proceed with drilling.
4. Align the three screws hole and ceiling plates, inserting screws through the holes in the plates and the newly drilled ceiling holes.
5. Place three nuts onto the screws and tighten them securely.

FIGURE 14>15:



6. Confirm the stability of the ceiling plate kit.
7. Retrieve the Ethernet cable from the Ethernet hole and connect it to the EAP.
8. Align the EAP with the ceiling plate.
9. Rotate the EAP clockwise to secure it in place.

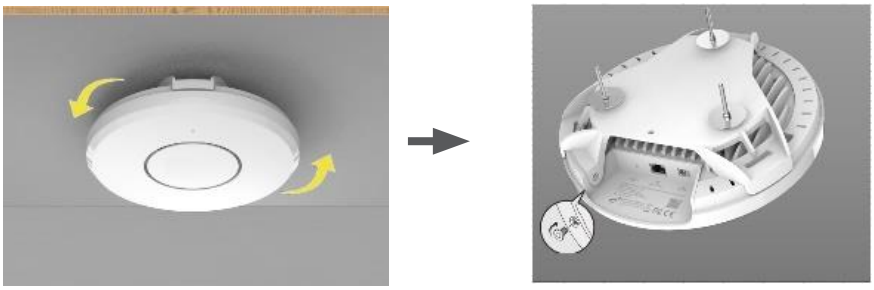
FIGURE 16>17:



10. Lock the anti-theft screw into the anti-theft hole to fix the AP and the lower cover ceiling plate.

11. Your EAP setup is now completed.

FIGURE 18



# 3. Login a Controller

The following are the procedures that how to login the Controller.

> Please note:
> If there is no WAN connection, the account created should be a Local account. If there is a WAN connection, the account created should be a Cloud + Local account.

Step 1, Open a browser (we recommend Chrome) and visit https://192.168.1.1 (or https://sonicfi.wlan.local).

Step 2, You will be directed to the Controller login page.

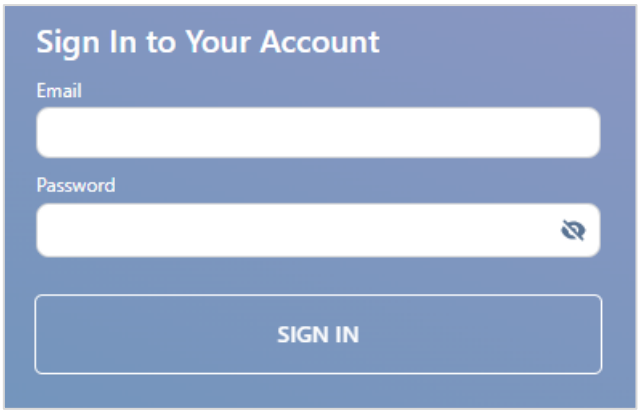



Figure 1. SMB Controller Login Page

Step 3, To initiate the first login, you need to complete the account registration process. Use the default account / password: admin@sonicfi.com.tw / Eap@12345.

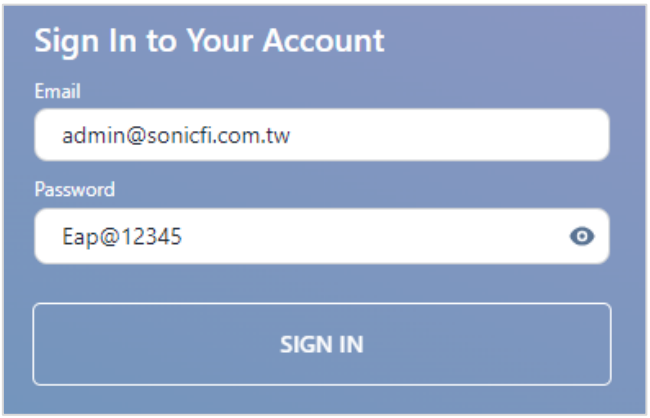


Figure 2. Sign in Page

Step 4, After entering default account / password, click "Sign in" to access the registration page.

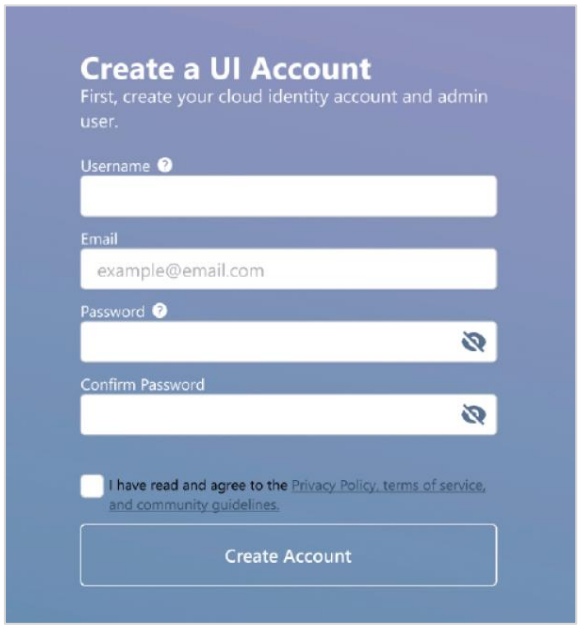



Figure 3. SMB Controller Registration Page

Step 5, On the registration page, you can establish your own new account and password. After entering the required information, simply click "Sign up". It will return to the Login Page.

Step 6, Access the login page, enter your registered account's password, and click "Sign in" to access the Controller dashboard.

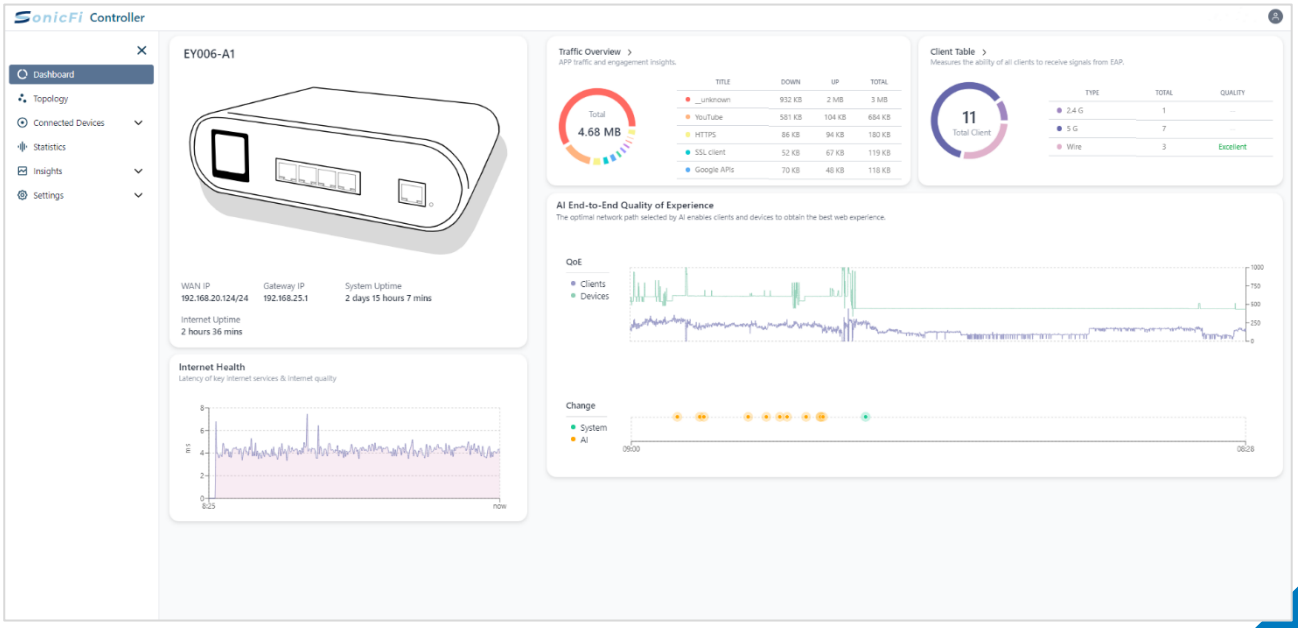



Figure 4. SMB Controller Dashboard Page

# 4. Onboarding the device

## 4.1 Enterprice access point on boarding

Once the dashboard page is visible, please follow the below procedures to install an access point. The installation procedures are shown in below.

> Note: We strongly suggest user to “onboard” the device first and then put the device in the service location.

Step 1, The initial EAP must be connected to the Controller's LAN port using a network cable.

Step 2, After that, on Topology page of the Controller web GUI, you can locate “pending adoptions” in the bottom-left corner.

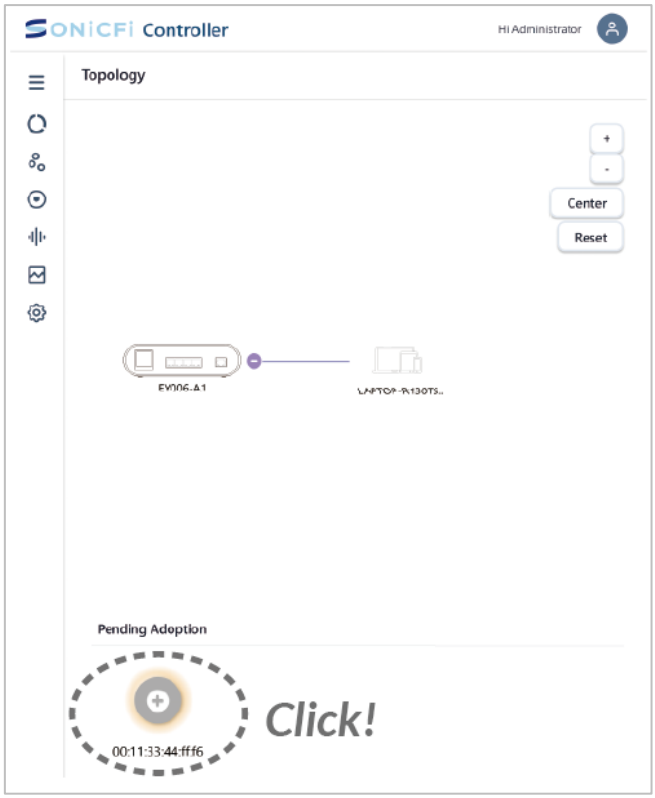



Figure 5. SMB Controller Pending Adoption of Topology Page

Step 3, To adopt the access point, simply click on it and wait for the adoption process to complete. The process may take around two minutes.

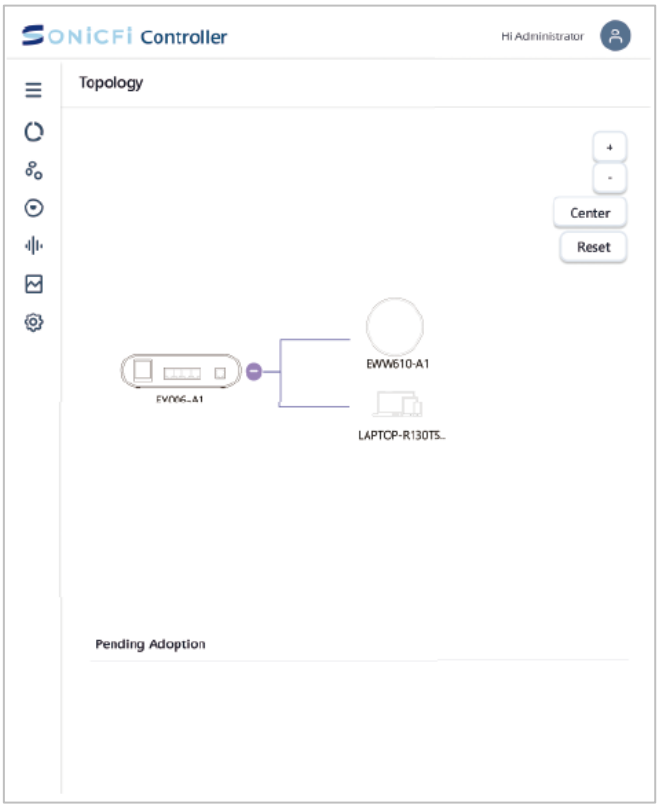



Figure 6. SMB Controller Onboarding of Topology Page

Step 4, For more information about the Controller Web GUI and the usage, please refer to this manual.

Step 5, After setting up the basic network topology, you can adopt other access points through wire or wireless.

The result can setup the first tier access point which is shown on the above topology page. When user would like to use “wireless backhaul” architecture to install the second tier access point, please follow the below procedures.

| |
|---|
| Note: We strongly suggest user to “onboard” the device first and then put the access point in the service location. |

Step 1, The EAP can power on by PoE. Please find a PoE Switch or PoE injector to connect to “UPLink (PoE In)” port of EAP.