



Altai CX200 Outdoor 2x2 802.11ac Wave 2 AP

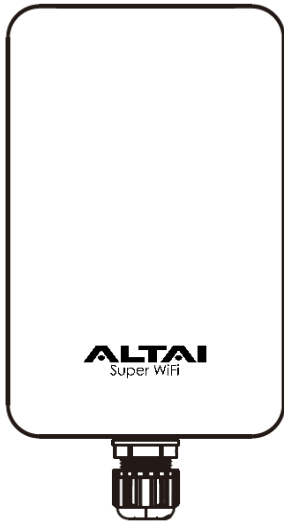
Quick Setup Guide

Version 2.0

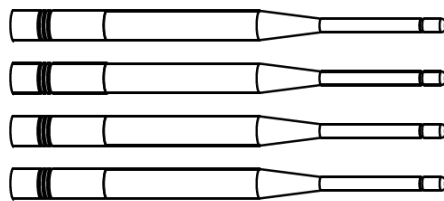
Introduction

Thank you for purchasing the Altai CX200 product. This guide provides instructions to install the product and set it up as AP with minimal effort.

Package Contents



CX200 Main Unit

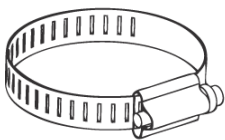


Detachable Antennae

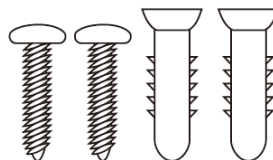
- 2.4GHz Antenna x 2
- 5GHz Antenna x 2



Quick Setup Guide

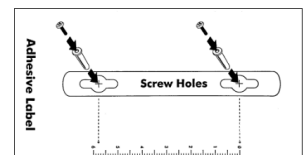


Pole Mount
Hose Clamp

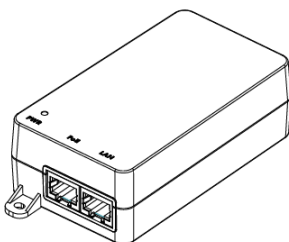


Wall Mount Kit

- Anchors x 2
- Screws x 2



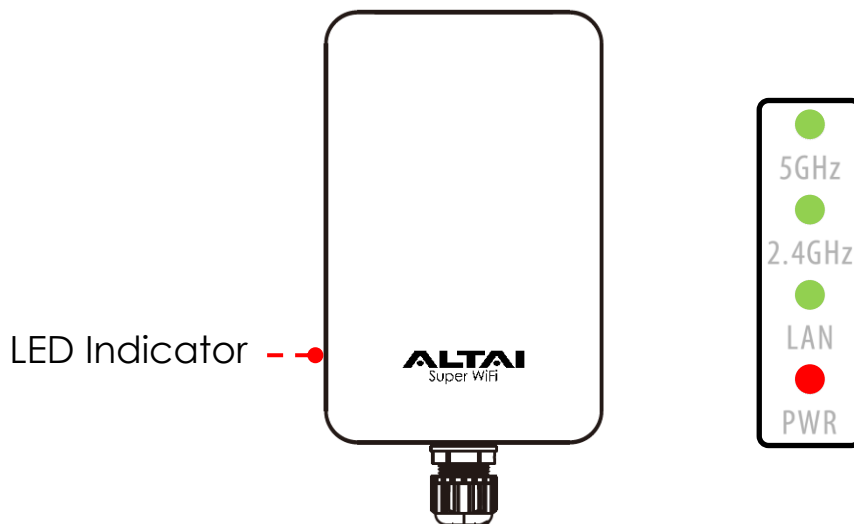
Adhesive Label



PoE Injector
(Optional)

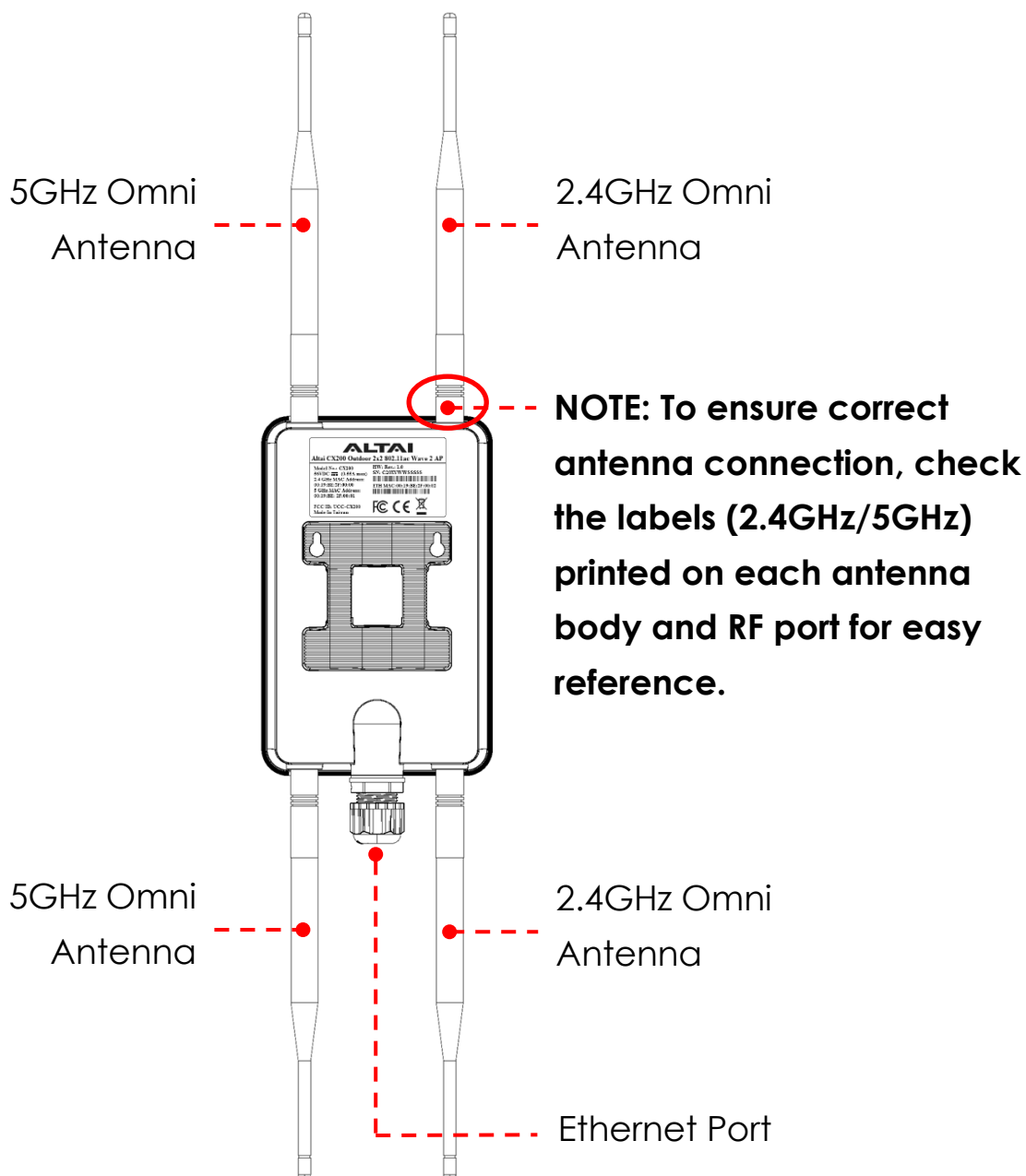
Hardware Overview

LED Indicator



| | | |
|---|--|---|
| Power | <ul style="list-style-type: none"> ○ Off ☀ Flashing Red ● Solid Red | <ul style="list-style-type: none"> AP powered off AP booting up AP boot up finished and ready for service |
| LAN (Ethernet) | <ul style="list-style-type: none"> ○ Off ● Solid Green ☀ Flashing Green | <ul style="list-style-type: none"> LAN disconnected LAN connected Data Transmitting/Receiving |
| 2.4GHz/5G WiFi Radios (AP/Station/ Repeater/Bridge) | <ul style="list-style-type: none"> ○ Off ● Solid Green ☀ Flashing Green | <ul style="list-style-type: none"> Radio Disabled 1. AP mode on but with no client association; OR 2. Station mode on but not connected to remote AP; OR 3. Repeater mode on but not connected to remote AP; OR 4. Bridge mode on but not connected to remote peer Data transmitting/receiving |

Ethernet Port and RF Antenna Port



Ethernet Port:

Used to connect to power source (see the Power Options in the later section) and provides 10/100/1000 Mbps network interface for LAN connection.

RF Antenna Ports:

Used to attach 2.4G and 5G antennae for 2x2 MIMO WiFi access coverage or bridge connection.

Setup Preparation

- Wire stripping tool and crimping tool
- Screwdriver (Slot type and Phillips type)
- Drill and drill bits
- Computer with Web Browser: Google Chrome, Mozilla Firefox, or Microsoft Internet Explorer 8 (or above)
- Two Cat 5e/6 Ethernet cables
- 802.3af-compliant PoE switch
- AltaiCare account (if applicable) for centralized WiFi management

Ethernet Cable Feed-Through

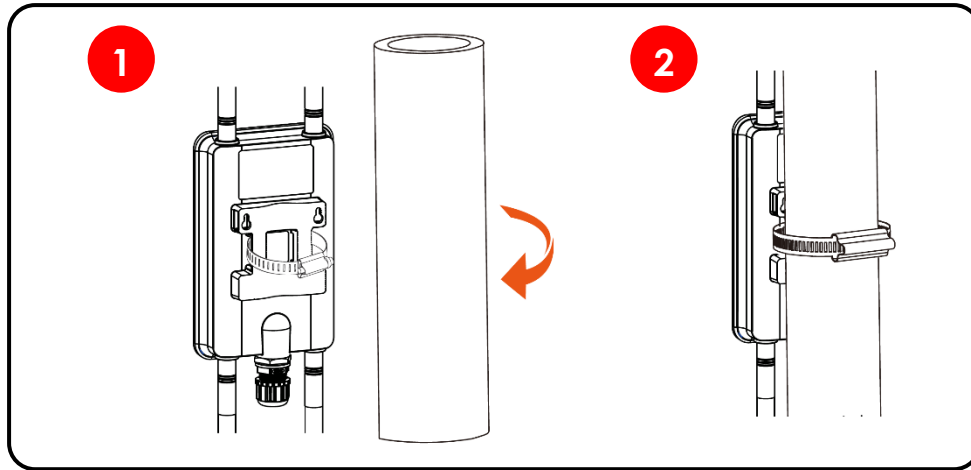
Seal the RJ45 cable Connector with the provided cable gland.

- 1** Feed the end of the cable through the cap nut, sleeve holder, sealing sleeve as shown in the picture.
- 2** Crimp the Ethernet connector with the crimping tool.
- 3** Connect the cable to the Ethernet Port.
- 4** Tighten the cap nut.



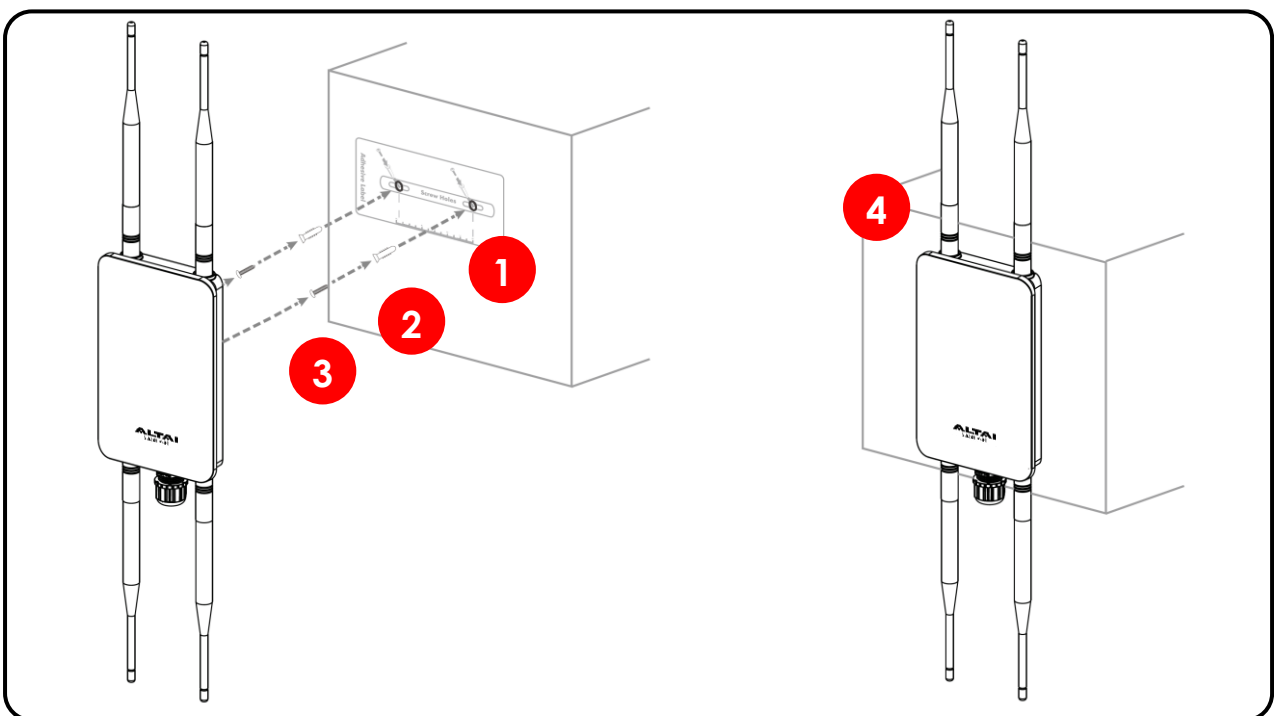
Mounting Options

Option 1: Pole Mount (For 1.5 to 2.5 inches of pole diameter)



- 1 Thread the open end of the hose clamp through the two slots of the mount base.
- 2 Determine where the AP is to be placed. Tighten the hose clamp to secure the base to the pole.

Option 2: Wall Mount

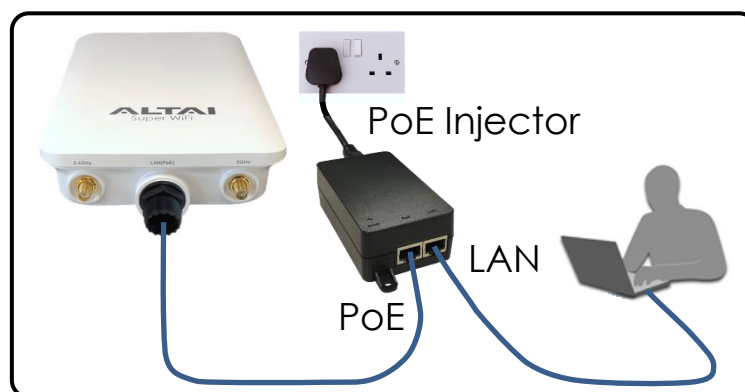


- 1 Determine where the AP is to be placed and use the adhesive label to mark location of the two mounting holes on the wall surface.
- 2 Use an appropriate drill bit to drill two holes, each with 1/3" (8.1mm) in diameter and 1" (26mm) deep, on the markings.
- 3 Remove the label. Drive the anchors into the holes and then the screws into the anchors.
- 4 Align the mounting slots with the screw heads and attach the AP to the wall in place.

Power Options and Cable Connection Instructions

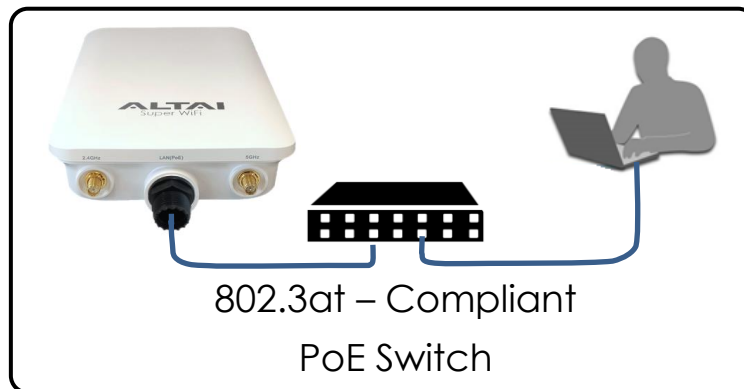
Follow one of the options below to power up the CX200 for configuration.

Option 1: PoE Injector (purchased separately)



1. Connect the PoE injector ports as described below via Ethernet Cables.
 - **PoE Port:** Go to the CX200
 - **LAN Port:** Go to a computer
2. Connect the PoE Injector to AC power socket using a power cord.
3. Make sure the Power LED turns into a solid light for AP configuration.

Option 2: 802.3af-Compliant PoE Switch



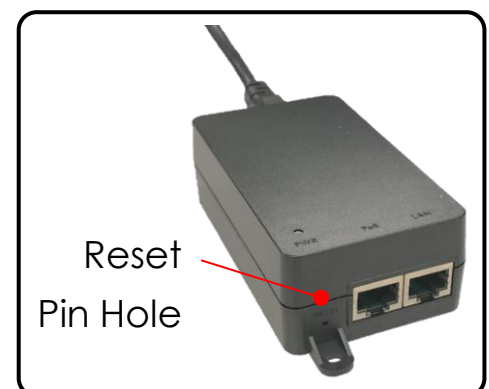
1. Connect the CX200 Ethernet port to an 802.3af-compliant PoE switch with an Ethernet Cable.
2. Connect a computer to the switch.
3. Make sure the Power LED turns into a solid light for AP configuration.

Factory Reset

Besides the software-based reset via AP WebUI, there are the two options to restore the CX200 to factory default settings.

Option 1: Using Reset Button of PoE Injector

1. Power up the CX200 with the PoE injector as illustrated in the power option #1 above.
2. Locate the **Reset Pin Hole** on the injector.
3. Insert a sharp-pointed object, e.g. paper clip, into the hole and press for **10-20 seconds**.



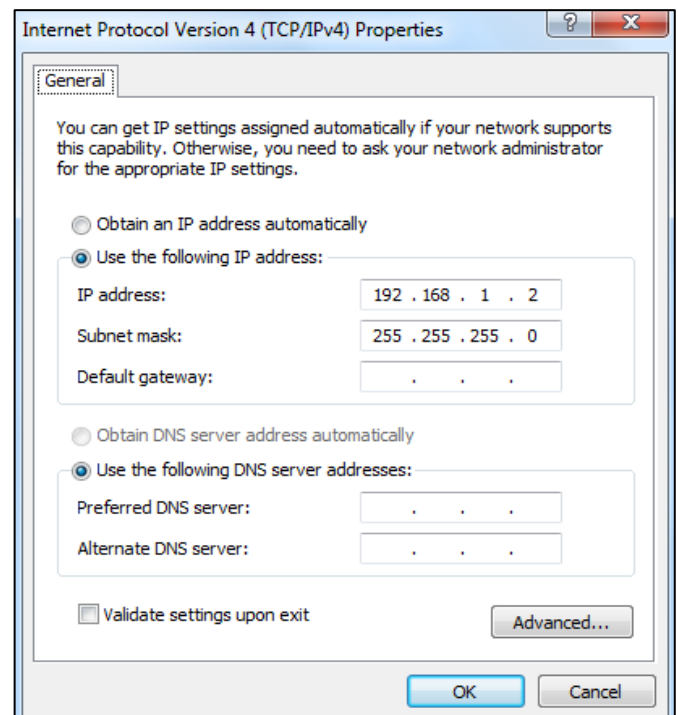
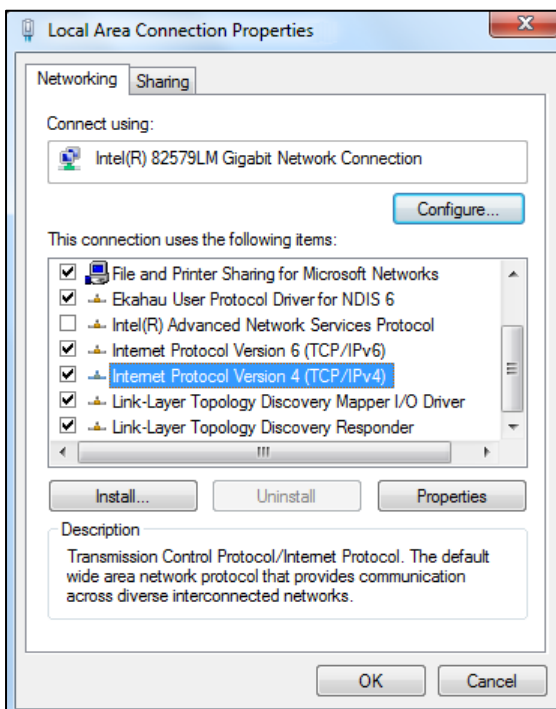
Option 2: Using AP Factory-Reset Tool

For details, please visit <https://www.altatechnologies.com/tools-and-utilities/>

1. Change TCP/IP Setting on Your Computer

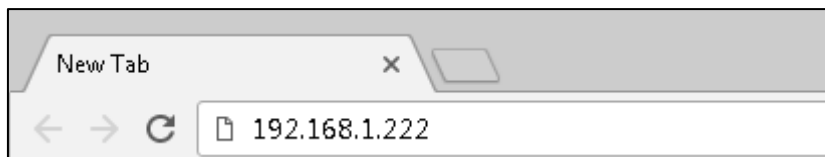
For Windows 7/Windows 10 users,

1. Go to **Control Panel**, click **Network and Sharing Center** and then choose the Ethernet adapter that is in connection with the CX200 unit. Click it and then click **Properties**.
2. Under the **Networking** tab, select **Internet Protocol Version 4 (TCP/IPv4)** in the list box “**This connection uses the following items**”, and then click **Properties**.
3. Type in the following IP address and Subnet mask:
 - IP address: 192.168.1.2
 - Subnet mask: 255.255.255.0
4. Click **OK** to close the **Internet Protocol Version 4 (TCP/IP) Properties** dialog box and click **OK** again to close the adapter **Properties** dialog box.



2. Access to Web Interface

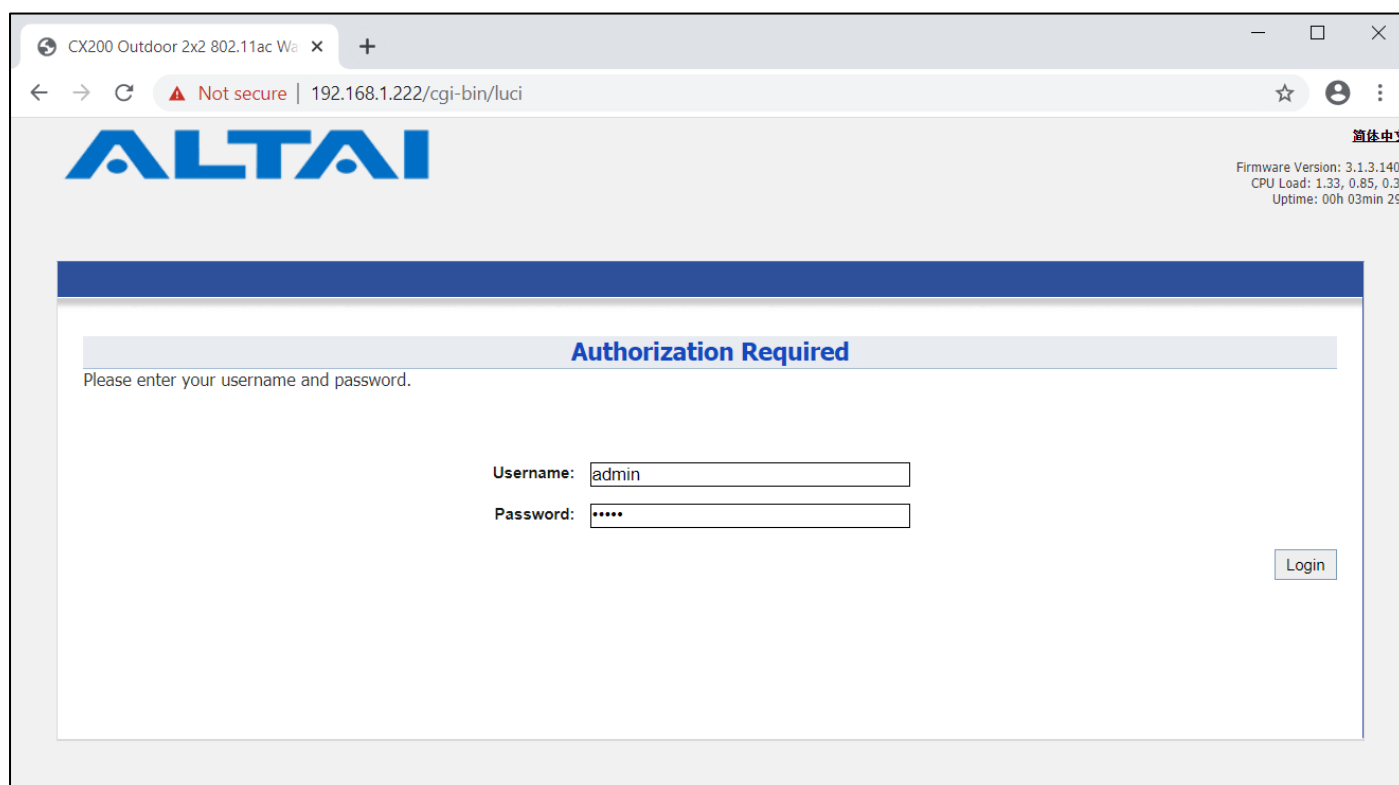
1. Open a web browser. Type **192.168.1.222** in the address bar and then hit **Enter**.



2. Login page will come up and you are required to enter username and password. By default, the credentials are:

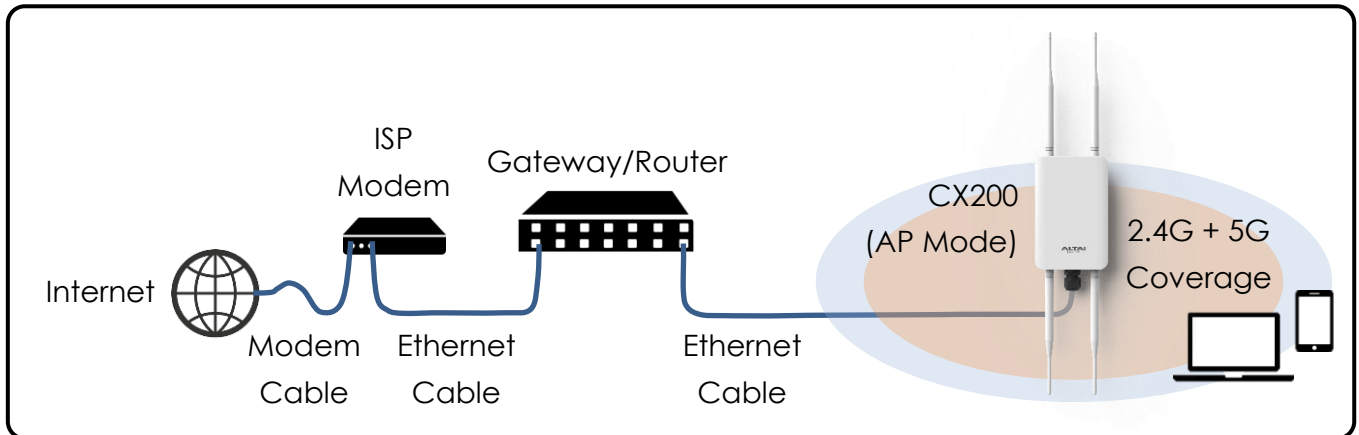
- **Username:** admin
- **Password:** admin

3. Click Login.



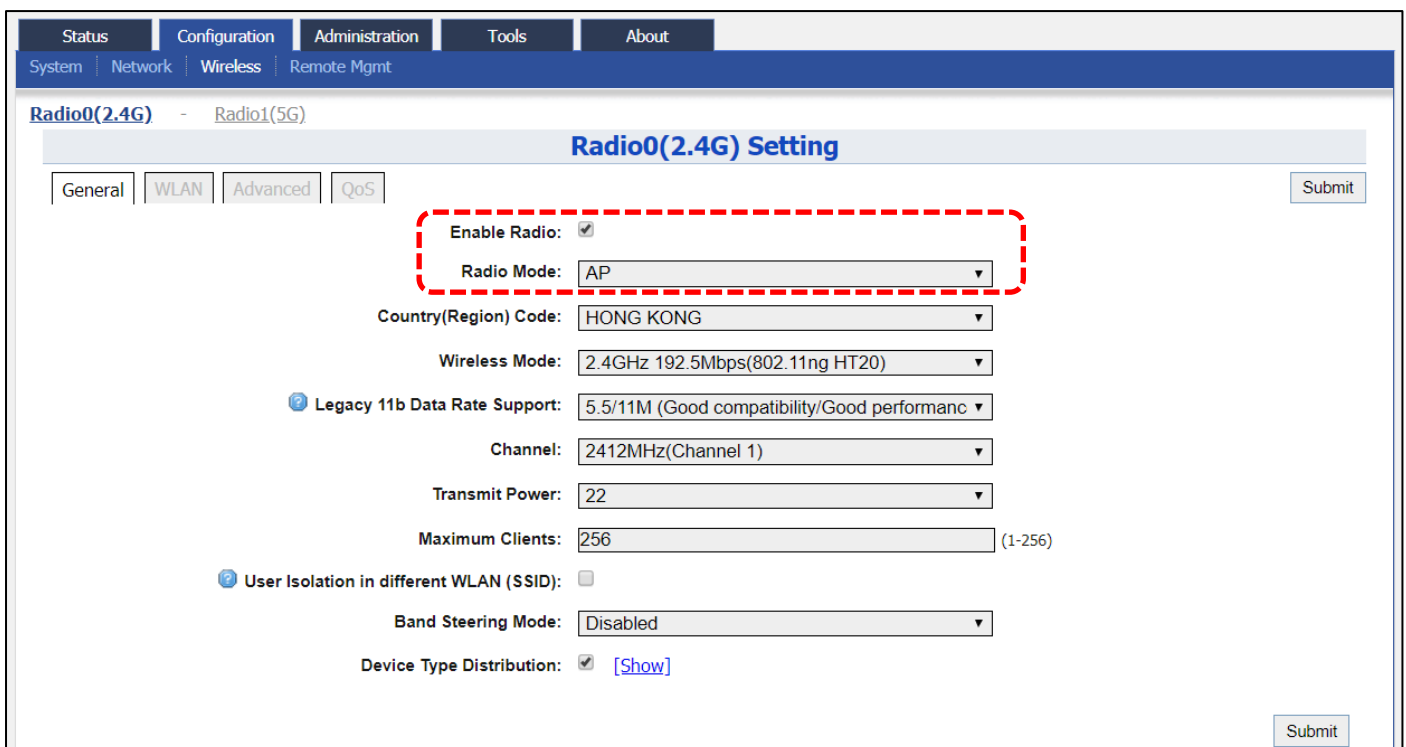
3. Configure AP Mode (2.4G/5G)

Network Scenario



Go to **Configuration > Wireless > Radio0(2.4G)/Radio1(5G) > General**. Below screenshots show an example for 2.4G radio configuration only. Same procedures can be applied to 5G radio configuration.

1. Check the box to **Enable Radio**. Select **AP** in the Radio Mode field. Then click **Submit** button.



- Click **WLAN** tab on the navigation bar. Check the box to **Enable WLAN 0** and enter the **SSID** to name the wireless network you want to advertise, e.g. Altai CX200.

The screenshot shows the 'WLAN Configuration' page with tabs for General, WLAN, Advanced, and QoS. The 'WLAN' tab is active. A table lists WLAN configurations. The first row is highlighted with a red dashed box, showing 'Enable WLAN' checked, SSID 'Altai CX200', Max Clients '256', Isolation checked, Auth Mode 'Open', Cipher Mode 'Disabled', and an empty PassPhrase field. Other columns include WLAN Uplink/Downlink Control, Station Uplink/Downlink Control, and a 'More...' link.

- To secure the network, it is recommended to use WPA2 Personal or WPA2 Enterprise for client connection. For simplicity, select **WPA2 Personal** in the drop down menu of Auth Mode and enter a string of 8-64 characters long for **Passphrase**. Then click **Submit** button.

The screenshot shows the 'WLAN Configuration' page with the same settings as the previous image. The 'Auth Mode' dropdown menu is now set to 'WPA2 Personal' and the 'Passphrase' field contains a string of dots, both highlighted with red dashed boxes. The 'Submit' button is visible in the top right corner.

- Click **Save & Apply** in the top right corner to have all changes take effect.

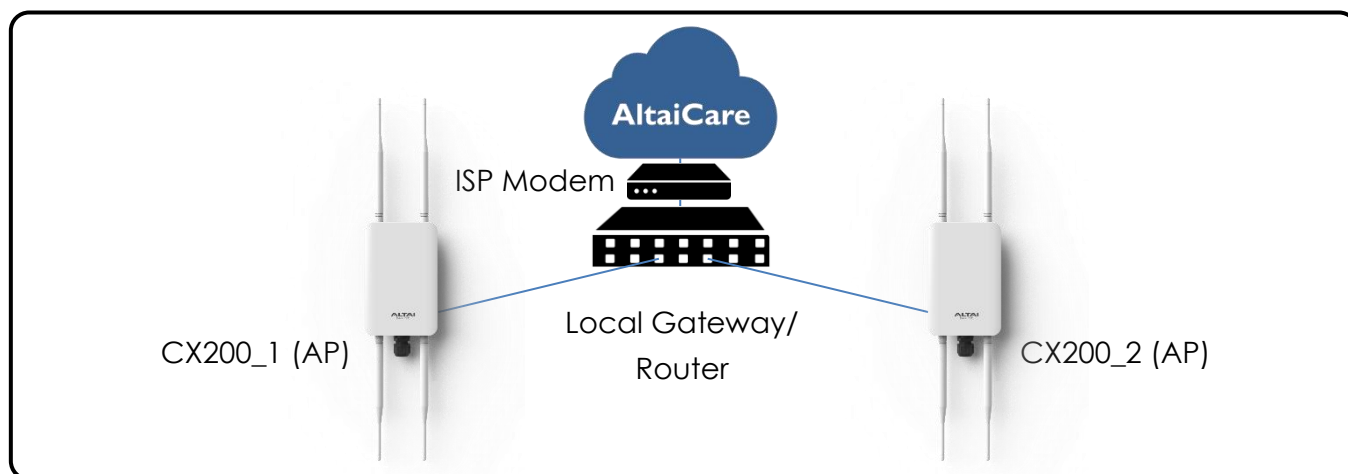
The screenshot shows a system status bar with the following text: '简体中文 | Reboot AP | Logout', 'Firmware Version: 3.1.3.1402', 'CPU Load: 1.10, 1.15, 1.19', 'Uptime: 01h 10min 16s', 'Unsaved Changes: 4 | Save & Apply', and 'Download Logs'. A red arrow points to the 'Save & Apply' button.

- Hook up the CX200 as in the Network Scenario. The SSID should now be broadcast from it and be seen in the computer for wireless connection.

The screenshot shows the 'Wireless Network Connection' section in Windows. It lists 'Altai CX200' as 'Connected' with a signal strength indicator, and 'Altai CX200 5G' with a signal strength indicator. A button at the bottom says 'Open Network and Sharing Center'.

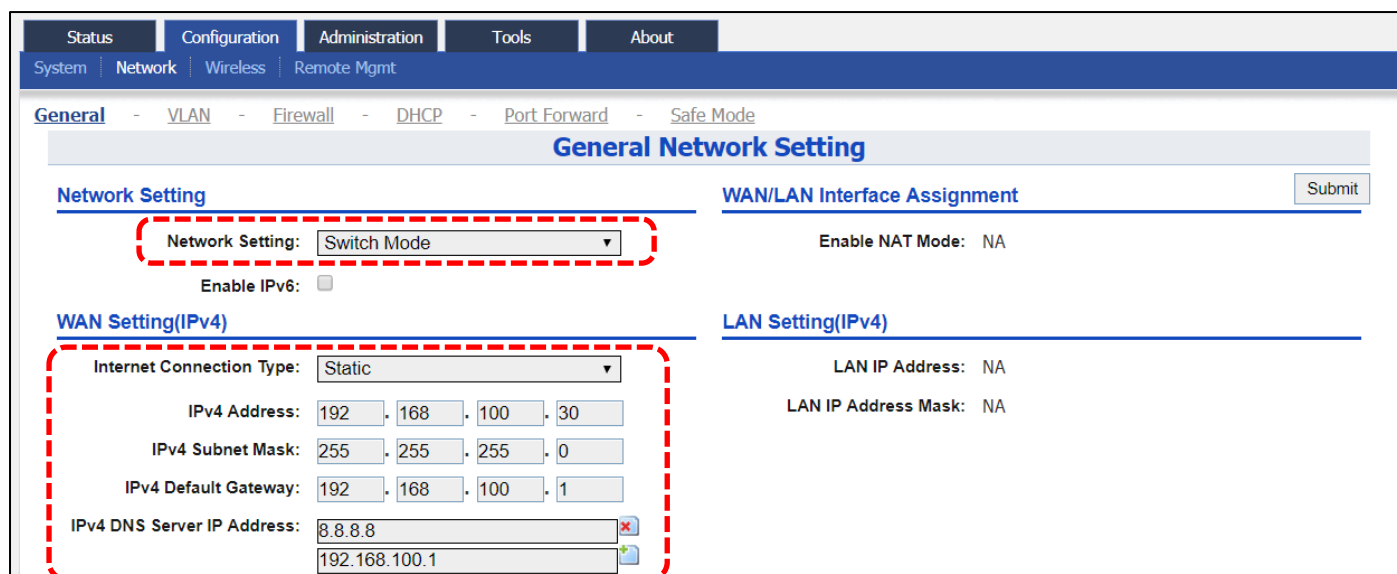
4. Connect with Cloud-Based Controller – AltaiCare

Network Scenario

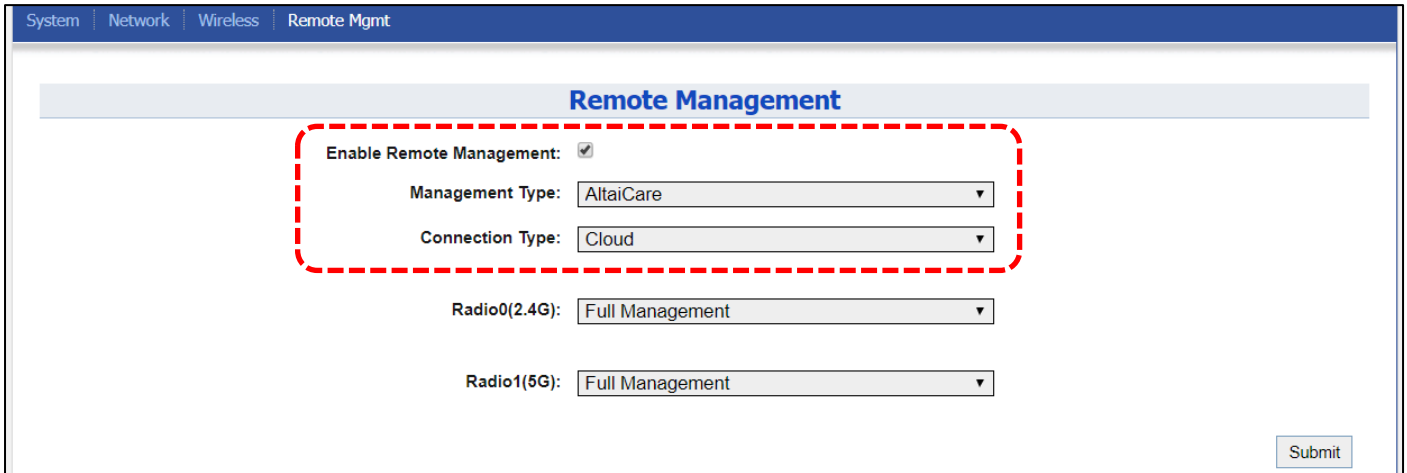


You can opt for AltaiCare cloud-based platform to manage a group of your APs anywhere, anytime. Follow the steps below to join your AP to the system.

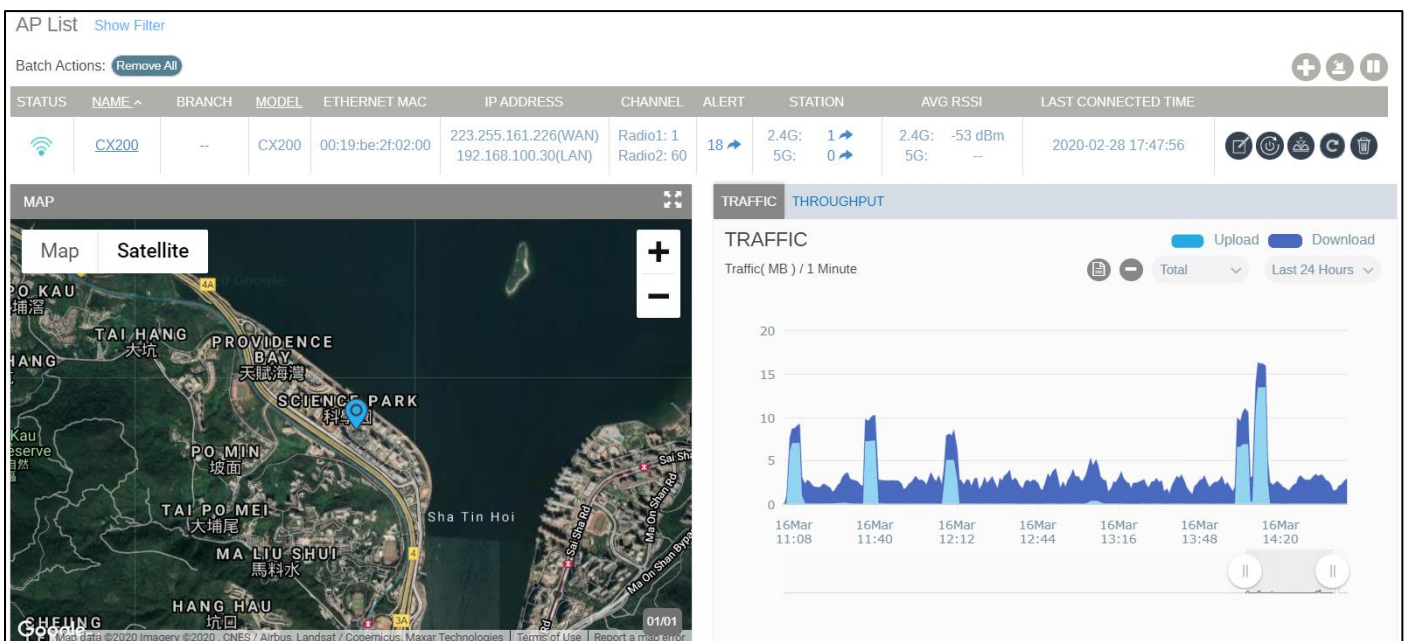
1. Go to **Configuration > Network > General**. Select **Switch Mode** for **Network Setting**. Make sure the CX200 can reach Internet and communicate with AltaiCare by giving **valid** IP settings either via DHCP or with Static IP configuration. You can use Google Public DNS Server, e.g. 8.8.8.8 or 8.8.4.4, if not sure about your ISP DNS's Server IP.



- Click **Remote Mgmt** tab on the navigation bar. Check the box to **Enable Remote Management**. Select **AltaiCare** as Management Type and **Cloud** as Connection Type.



- Select **Full Management** if the radio (2.4G/5G) is running on **AP Mode**. If **Station Mode**, **Bridge Mode** or **Repeater Mode**, select **Monitor Mode** instead.
- Click **Submit** button and then **Save & Apply** in the top right corner to make all the changes take effect.
- Follow AltaiCare Quick Start Guide to register the CX200 in the cloud system.
- The CX200 will come up online in AltaiCare if the connection is successful.



Federal Communication Commission Interference Statement (FCC) – USA

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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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 36cm between the radiator & your body.

European Conformity (CE) – EU

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



Warning

CX200 may require professional installation depending on the deployment scenario.

Only use the power adaptor supplied with CX200. Using a different power adaptor might damage the device.

Disclaimer

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