ALTAI
Super WiFi

Altai M360-X
Industrial Dual-Band Wi-Fi 6 CPE/AP

Quick Setup Guide

Version 1.0

Introduction

Thank you for purchasing the Altai M360-X product. This guide provides instructions to install the product and set it up in CPE (Station) mode with minimal effort.

Package Contents

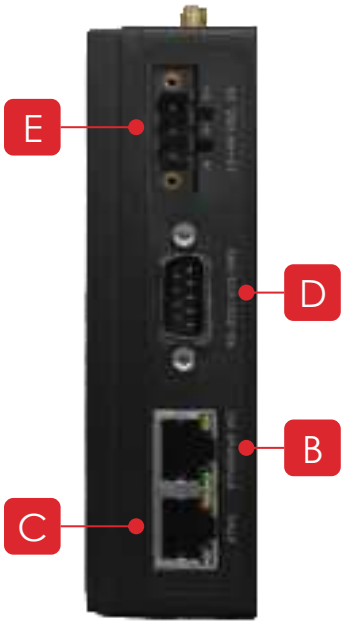
1	M360-X Main Unit	1 pc
2	2.4GHz/5GHz 3dBi Dual Band Omni-Directional Antenna	2 pcs
3	DC Terminal Block Connector (3-Contact)	1 pc
4	Wall-Mounting Plate	2 pc
5	TS35 DIN-Rail Kit	1 pc
6	Short Screw (Phillips, 3 x 5mm), for both DIN-Rail Mount and Wall Mount	6 pcs

FrequencyRange: 2.4–2.5GHz, and 5.150–5.875GHz

Operating Temperature: -20 ℃to +55℃

Hardware Overview

Front View

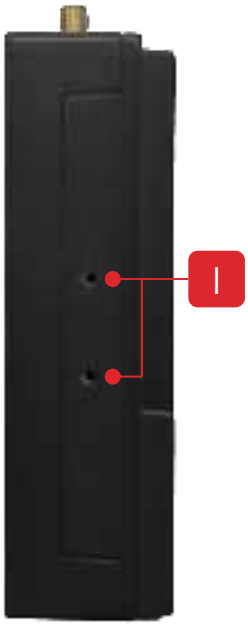


Left Side View

Top View

Bottom View

Back View



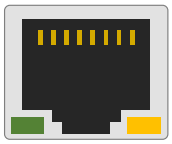
Right Side View

A: LED Panel

LED	Status	Description
PWR	**Off**	Power off
	Flashing (Green)	AP booting up
	On (Green)	AP boot-up finished and ready for service
ETH	**Off**	Both LAN0/LAN1 (Ethernet) disconnected
	On (Green)	LAN0/LAN1 connected
	Flashing (Green)	Data transmitting/receiving via LAN0/LAN1
2.4GHz/ 5GHz	**Off**	Radio disabled
	On (Green)	1. **Station/Repeater Mode** on but not connected to a remote AP; or 2. **AP Mode** on but with no clients associated; or 3. **Bridge Mode** on but not connected to a remote peer
	Flashing (Green)	1. **Station/Repeater Mode** on and connected to a remote AP; or 2. **AP Mode** on with clients associated; or 3. **Bridge Mode** on and connected to a remote peer
SERIAL	**Off**	Link disconnected
	On (Green)	Link connected
	Flashing (Green)	Data transmitting/receiving

B: Ethernet Port 0 (PoE In)

Used for connecting to power source equipment such as a PoE injector (see Option 2 in the Power Options and Cable Connection Instructions section for details) and providing 10/100/1000 Mbps network interface for LAN connection. The LED status is defined in the table below.

	LED Status	Description
	**Green On**	The port is running at **1000Mbps** of Ethernet speed
	Amber On	The port is running at **10/100Mbps** of Ethernet speed
	Both Off	The port is not connected

C: Ethernet Port 1

Provides 10/100/1000Mbps network interface for LAN connection with peripherals. The LED status is defined in the table above.

D: RS-232/RS-422/RS-485 DB9 Serial Port (Male)

Used for connecting with a peripheral RS-232/RS-422/RS-485 serial device so that you can access it via the M360-X, from anywhere over TCP/IP network.

E: DC Terminal Block Receptor (3-Contact: Ground/-/+)

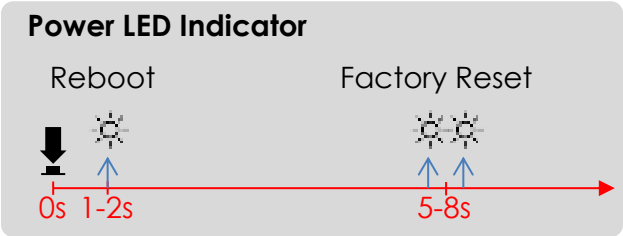
Used for connecting to a DC power source (see Option 1 in the Power Options and Cable Connection Instructions section for details). Always ensure that the ground terminal is connected for proper chassis grounding. It is recommended to use 12-24 AWG for the ground wire.

F: RP-SMA RF Ports (Female)

Used for attaching 2 x 2.4/5GHz dual-band antennas for 2x2 MIMO Wi-Fi connection.

G: Reset Button

It serves two functions:



- **Reboot**: Press the button witthin 5 seconds until the the first signal strength LEDs blink once.
- **Factory Reset**: Press the button for more than 5 seconds until the first signal strength LED blinks twice consecutively.

H: Wall Mounting Holes

Used for attaching the wall-mounting kit to the M360-X unit. See Option 2: Wall Mount in the Mounting Options section for details.

I: DIN-Rail Mounting Holes

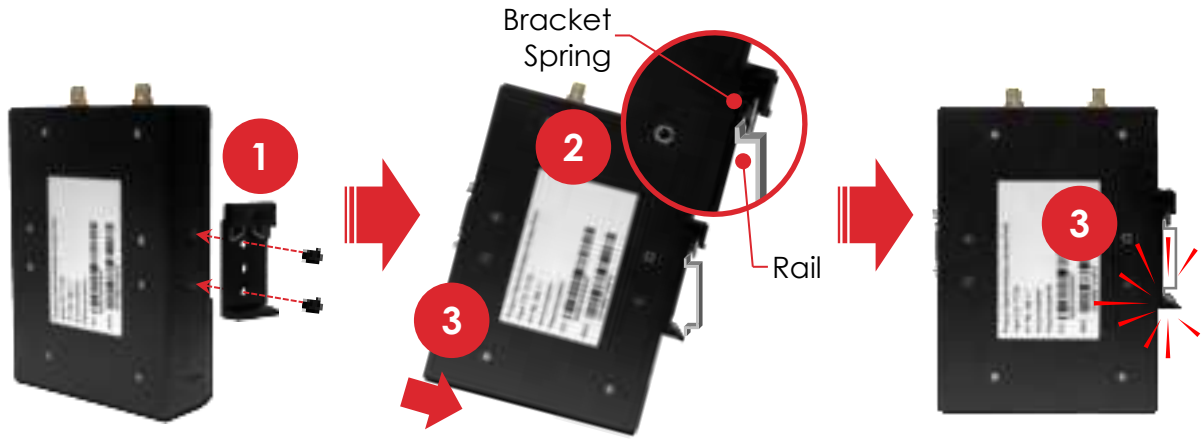
Used for attaching the DIN-rail kit to the M360-X unit. See Option 1: DIN-Rail Mount in the Mounting Options section for details.

Setup Requirements and Preparation

- A computer with a web browser
- Two Cat 5e/6 Ethernet cables
- A 12 – 48V DC power supply to power up the C260-X; alternatively, a PoE injector (purchased separately) and a power cord
- Screwdrivers (Phillips and flat-blade) and a drill
- Wire stripping tool and crimping tool

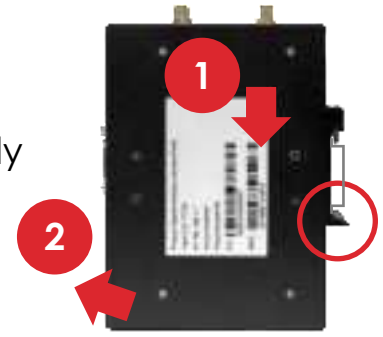
Mounting Options

Option 1: DIN-Rail Mount (For 35mm Rail)



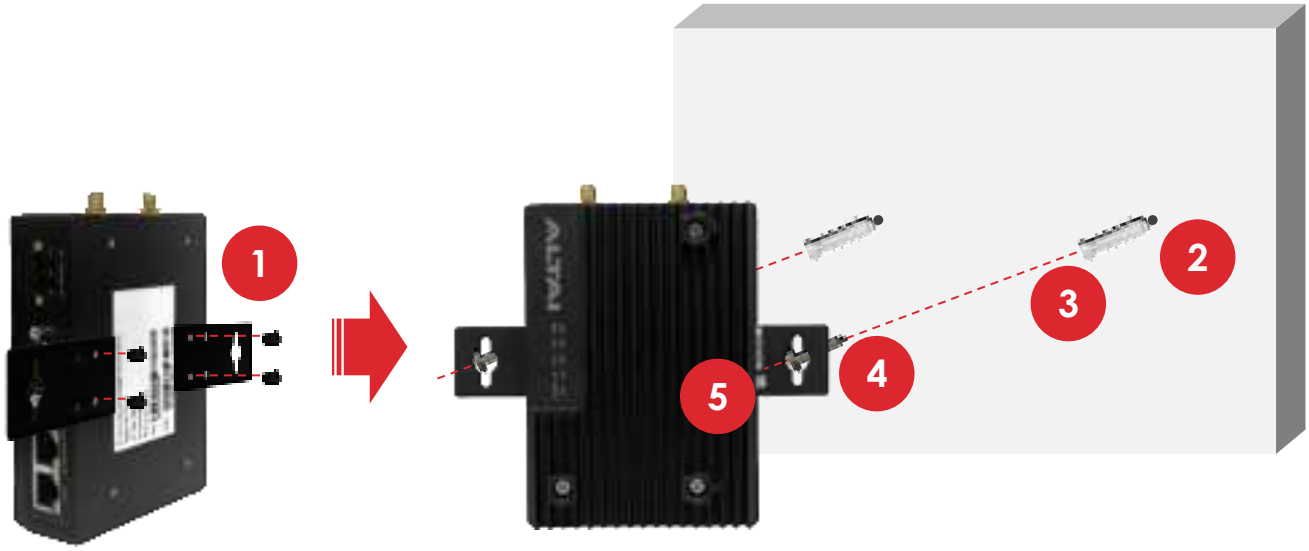
1. Drive the short screws (2 pcs) to attach the DIN-rail mounting bracket to the M360-X unit.
2. Insert the upper bracket lip into the DIN rail. Make sure the rail lies between the bracket body and the spring
3. Press the unit towards the rail until it snaps into place.

To remove the M360-X unit from the rail, follow the steps below.



1. Press the unit down so that the lower bracket lip slightly detaches from the rail.
2. Pull the unit out to remove it from the rail

Option 2: Wall Mount



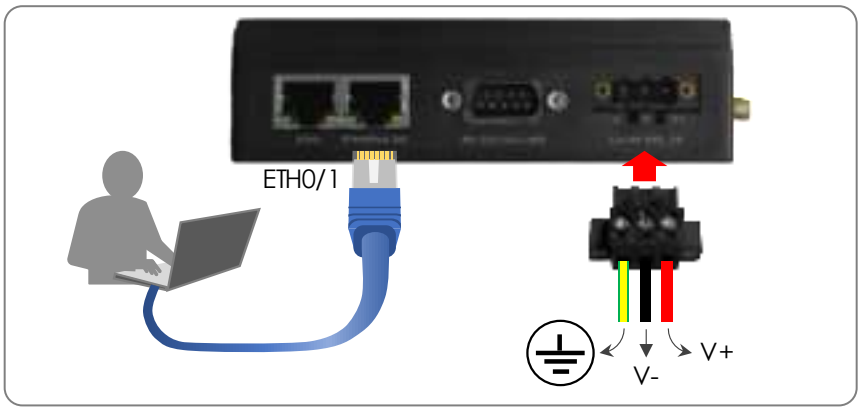
1. Drive the short screws to attach the two wall mounting plates to the unit.
2. Determine where the unit is to be placed and mark the location of the mounting holes on a wall surface. Use an appropriate drill bit to drill the holes, each of 6mm in diameter and 26mm deep, on the markings.
3. Insert the anchors into the holes.
4. Insert the long screws into the anchors.
5. Align the mounting slots of the M360-X with the screw heads. Slide the unit down the slots to secure it in place.

Power Options and Cable Connection Instructions

Follow one of the options below to power up the M360-X for configuration.

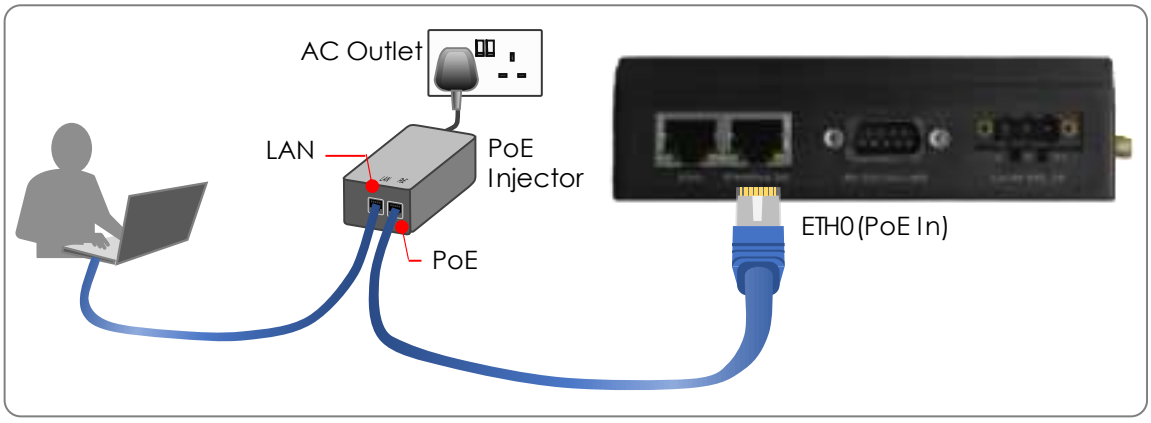
Caution: To prevent any potential damage to the RF components, it is strongly advised to have proper termination of the RF ports by connecting antennas or using dummy loads (impedance: 50 ohms) before powering up the unit. Additionally, it is best practice to turn off any unused radio whenever possible. To turn on/off a radio, refer to the configuration section in this guide.

Option 1: 12 – 48V DC Power



1. Insert ground/DC positive/DC negative wires (recommended AWG range: 12 – 24) into the terminal block. Use a small flat-blade screwdriver to tighten the wire-clamp screws so as to prevent the wires from loosening.
2. Insert the terminal block into the receptor. Use the flat-blade screwdriver to lock the terminal block to the M360-X unit in place.
3. Connect the ground wire to a reliable earth ground point at site, and the other two wires: DC positive/DC negative to a power source.
4. Connect a computer to the M360-X's Eth0/Eth1 port with an Ethernet cable.
5. Turn on the power source. When the Power LED lights up and becomes steady, the unit should be ready for configuration.

Option 2: PoE Injector (purchased separately)



1. Connect the PoE injector's ports as follows with Ethernet cables.
   - **PoE Port**: To the M60-X's Eth0(PoE In) port
   - **LAN Port**: To a computer
2. Connect the PoE injector to the AC power socket using a power cord.
3. When the Power LED lights up and becomes steady, the unit should be ready for configuration.

1. Change TCP/IP Setting on Your Computer

For Windows 7/Windows 10/Windows 11 users,

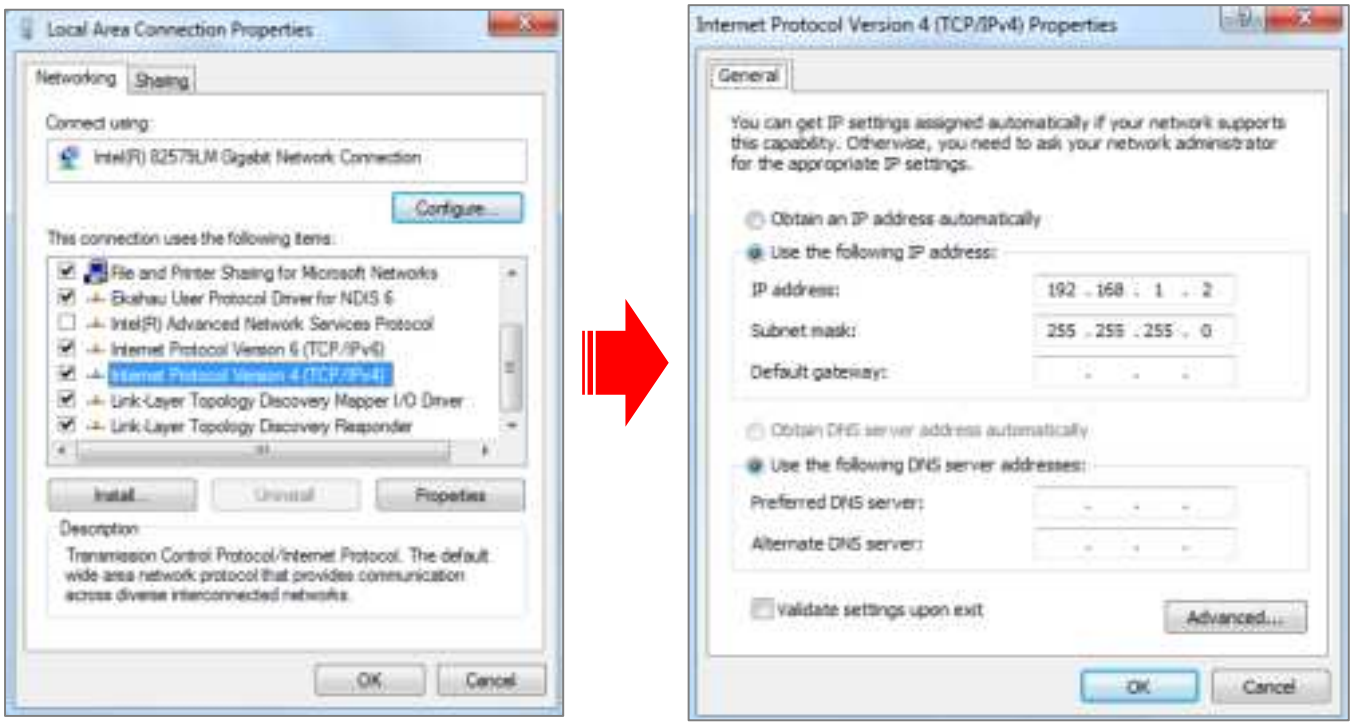
1. Go to **Control Panel**, click **Network and Sharing Center** and then choose the Ethernet adapter that is in connection with the M360-X unit. Click it and then click **Properties**.

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:

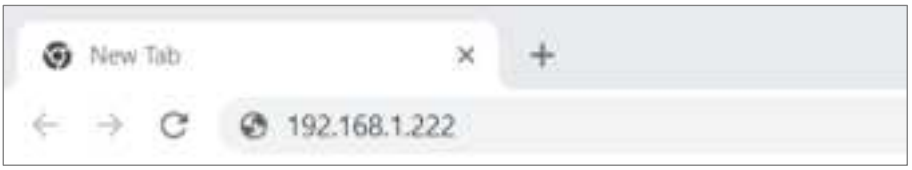
   - IP address: 192.168.1.2
   - Subnet mask: 255.255.255.0

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

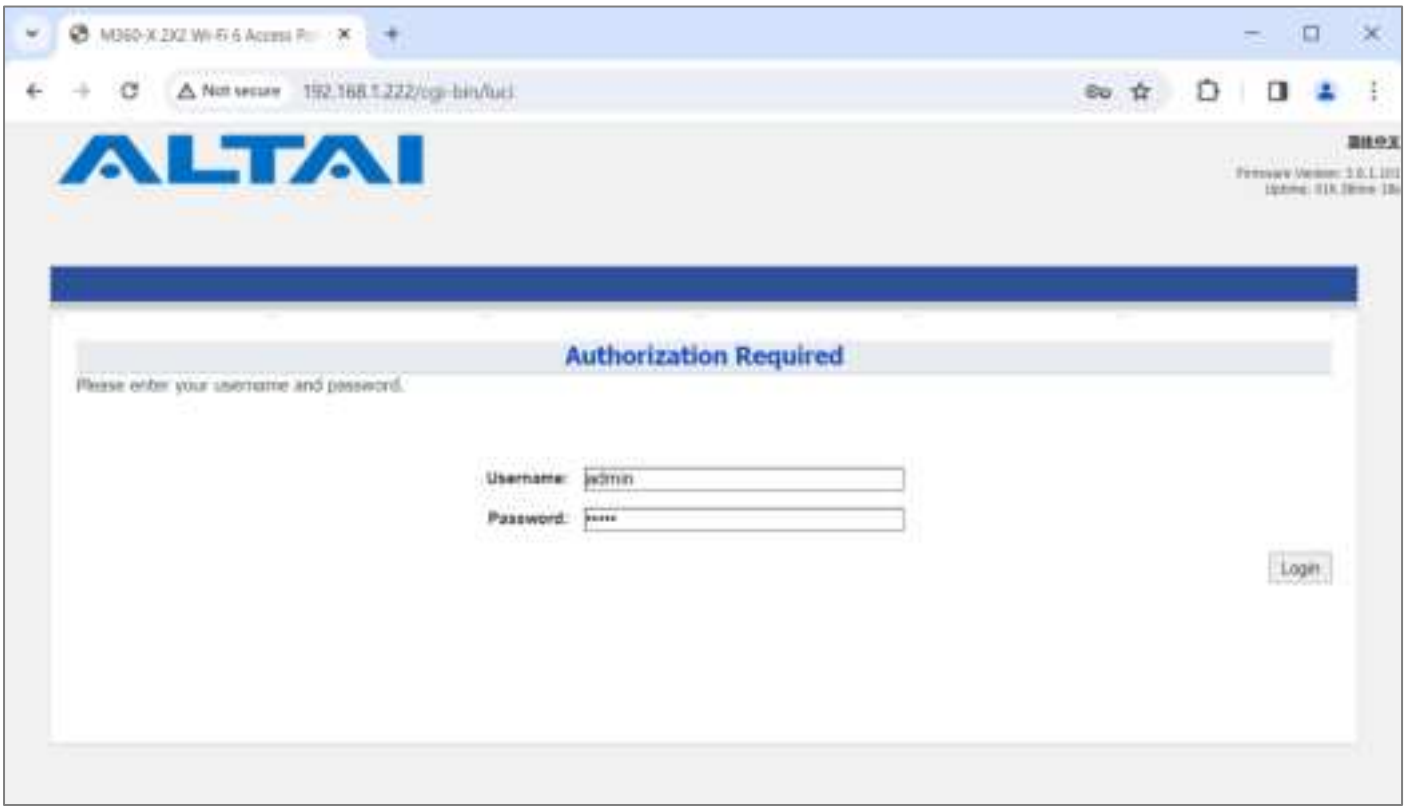
1. Open a web browser, e.g. Google Chrome, Apple Safari, or Microsoft Edge. Type **192.168.1.222** in the address bar and then hit **Enter**.



2. The login page will come up. Enter the default username and password as follows:

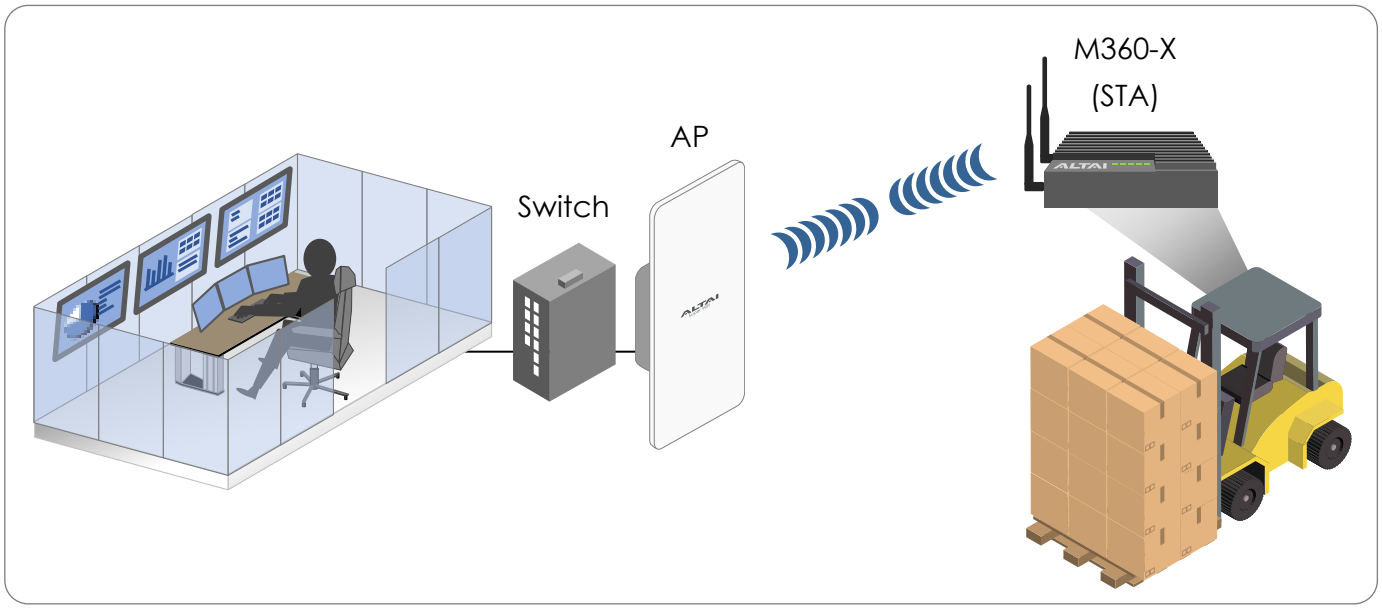
   - Username: **admin**
   - Password: **admin**

3. Click Login.



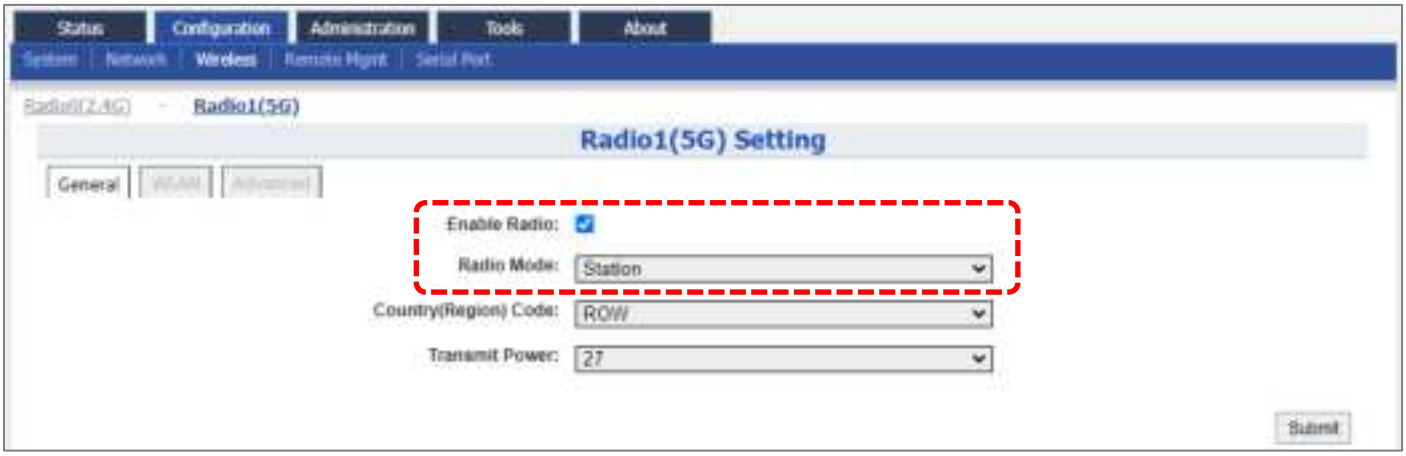
3. Configure AP Mode (2.4G/5G)

Network Scenario



Go to **Configuration** > **Wireless** > **Radio0(2.4G)/Radio1(5G)** > **General**. The screenshots below show an example for 5GHz radio configuration only. The same procedures apply to 2.4GHz radio configuration.

1. Check the box to **Enable Radio**. Select **Station** for the Radio Mode. Then click **Submit** button.



2. Click **Backhaul** tab. Enter the **Remote SSID** that you want to connect to.

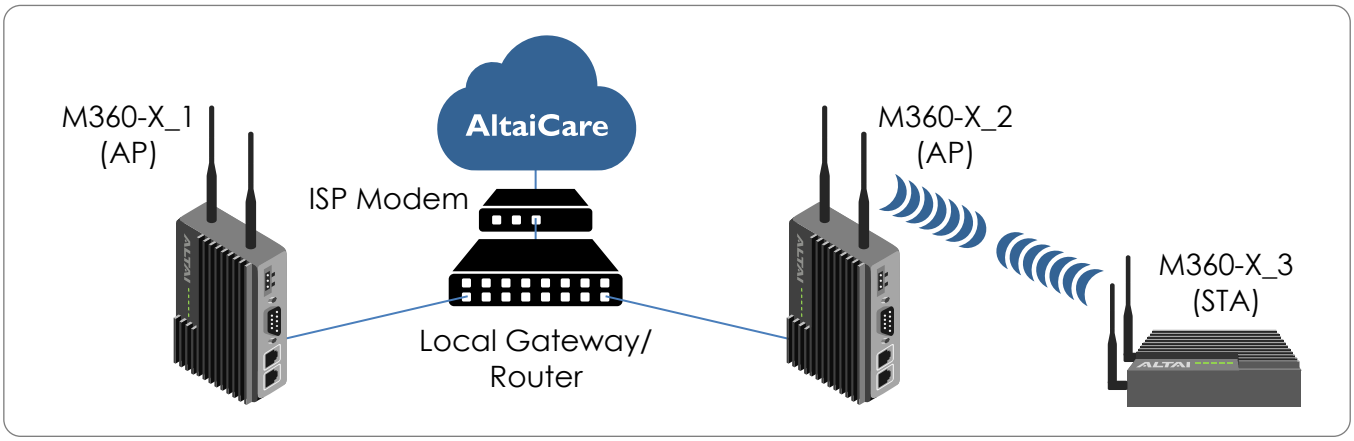
3. Configure security for the Wi-Fi connection. In this example, the WLAN that the M360-X connects to is WPA3-Personal protected, so a passphrase is required. If you are not sure about the authentication mode that the WLAN is using, contact your network administrator. Select **WPA3 Personal** for Authentication Mode and enter a string of 8-64 characters long for **Passphrase**. Then click **Submit** button.

4. Click **Save & Apply** in the top right corner to make the changes take effect.

5. To view the connection status, go to **Status > Radio0(2.4G)/Radio1(5G) > Connection Info**. If the connection is successful, it should show "Connected" under the **AP Info** table.

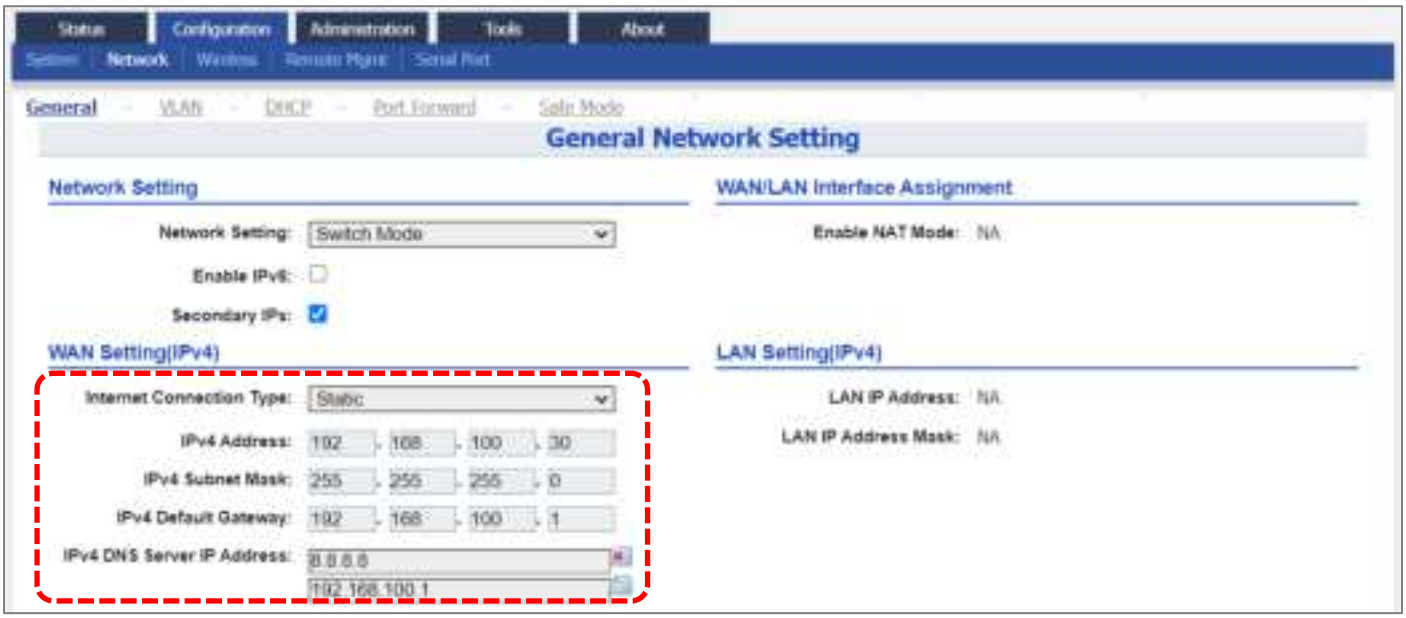
4. Connect with Cloud-Based WLAN Controller – AltaiCare

Network Scenario

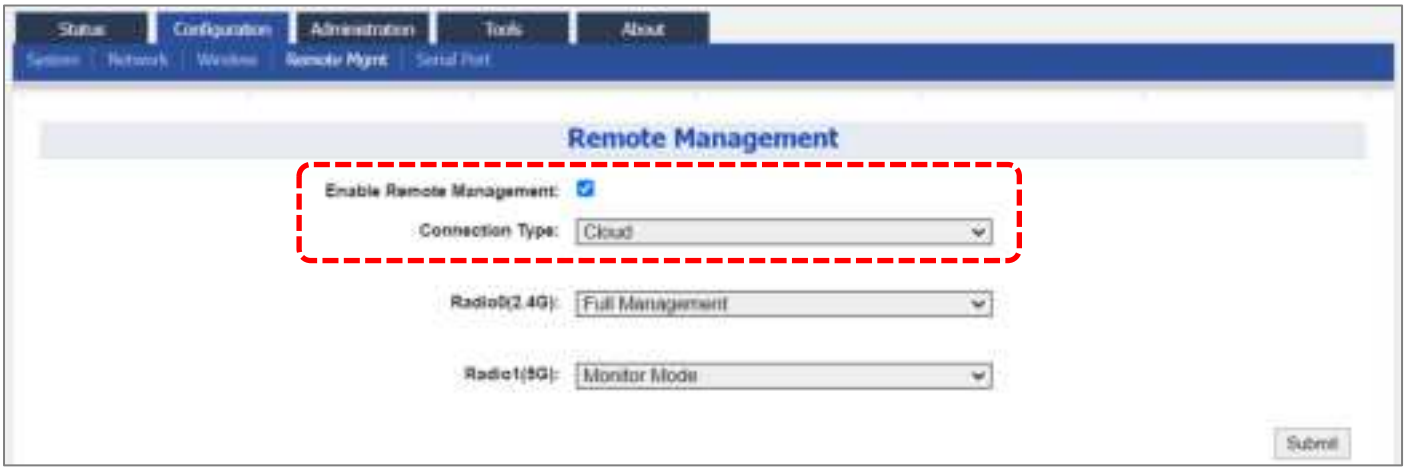


You can subscribe to AltaiCare cloud service to manage your APs collectively. Follow the steps below to register your APs.

1. Go to **Configuration** > **Network** > **General**. Configure a **valid** IP address either via DHCP or using a static IP configuration so that the M360-X can connect to the Internet and communicate with AltaiCare. You can use Google Public DNS Server, e.g. 8.8.8.8 or 8.8.4.4, if you are unsure about your ISP DNS's server IP address.



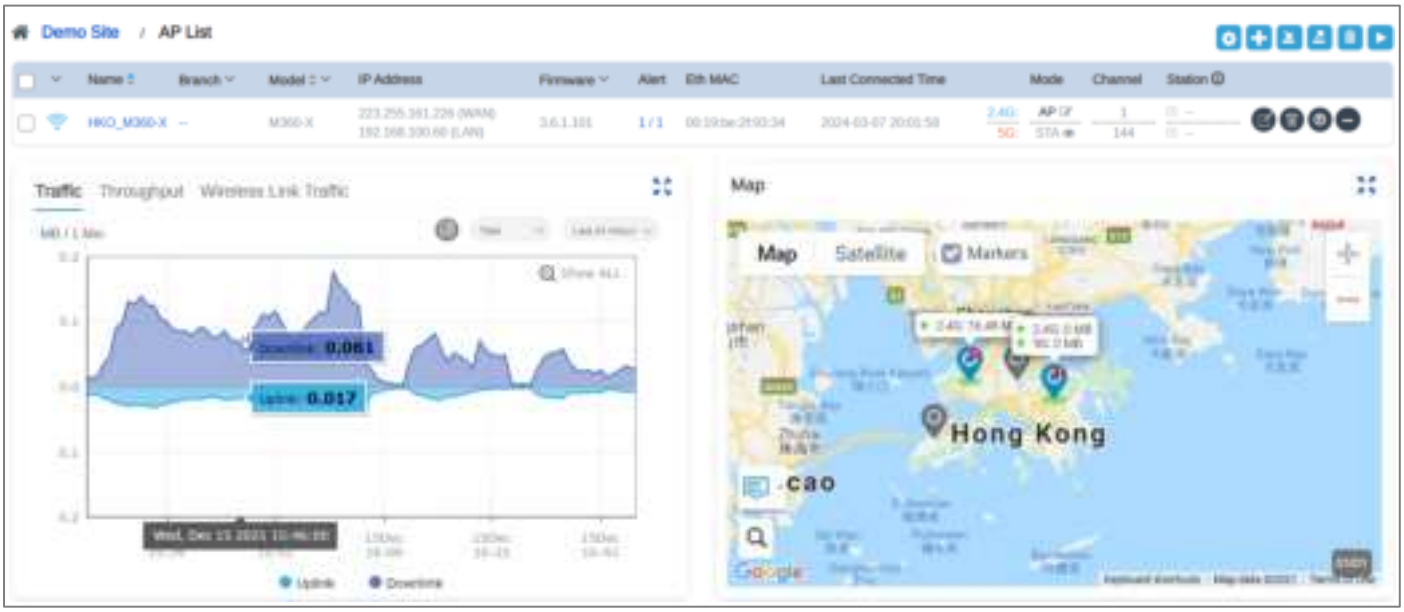
2. Click the **Remote Mgmt** tab on the navigation bar. Check the box to **Enable Remote Management**. Select **Cloud** as the Connection Type.



3. Select **Full Management** if the radio (2.4G/5G) runs on **AP Mode**. If **Station/Bridge/Repeater Modes**, select **Monitor Mode** instead.

4. Click **Submit** button and then **Save & Apply** in the top right corner to make the changes take effect.

5. Follow the AltaiCare Quick Start Guide to register the M360-X in the cloud system.



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 20cm 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.

CE

Warning

M360-X may require professional installation depending on the deployment scenario.

Only use the optional power adaptor available for M360-X. Using a different power adaptor might damage the device.

The metal chassis of the equipment may be hot. Pay special attention or use special protection before handling this equipment.

Operations in the 5.15-5.35 GHz band are restricted to indoor usage only all EU countries..

Disclaimer

All specifications are subject to change without prior notice. Altai Technologies assumes no responsibilities for any inaccuracies in this document or for any obligation to update information in this document. This document is provided for information purposes only. Altai Technologies reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

Declaration of Conformity:
Altai Technologies Limited here by declares that this M360-X is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. In accordance with Article 10(2) and Article 10(10), This product is allowed to be used in all EU member states. The full text of the EU declaration of conformity is available at the following internet address: www.altaitechnologies.com

Note: This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

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Customer Support Centre:
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Frequency Band(s):

2.4G WiFi : 2412-2462MHz(TX/RX)
5.2G WiFi : 5150-5250MHz(TX/RX)
5.3G WiFi : 5250-5350MHz(TX/RX)
5.6G WiFi : 5470-5725MHz(TX/RX)
5.8G WiFi : 5725-5850MHz(TX/RX)

Out Power (s):

2.4G WiFi : 0.255270W
5.2G WiFi : 0.016943W
5.3G WiFi : 0.020559W
5.6G WiFi : 0.017139W
5.8G WiFi : 0.025468W