LINOVISION

# IOT-R51W

Datasheet

User Manual

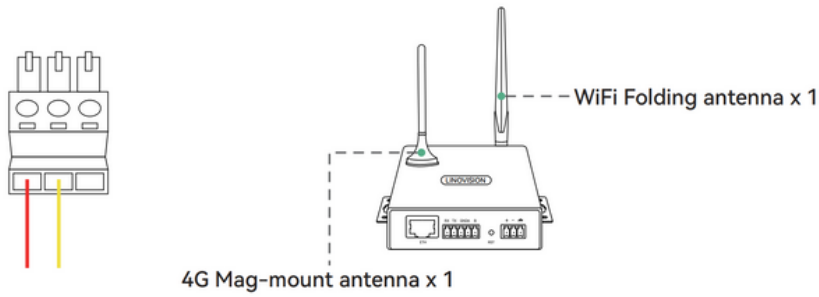
## Quick Guide

Updated on March 27, 2025

## Installation

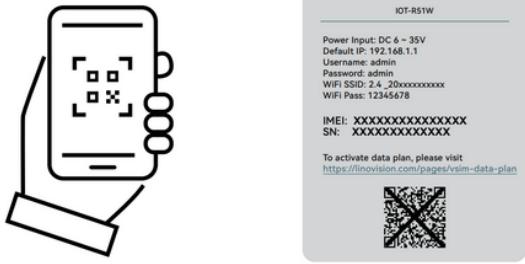
1. Attach the antennas to the SMA connectors on the back of the router, ensuring they are connected to the ports labeled "Main" and "Aux." Tighten the antennas by turning them clockwise.
2. Connect the cables to the terminal base. Once the device is powered on, the router's indicator lights will illuminate.
3. Allow the router a minute or two to initialize after plugging it in, as it may require some time to become fully operational.

**WARNING:** Improper wiring may cause damage to the device. Ensure that the red wire (positive) is connected to the left port and the yellow wire (negative) is connected to the right port.

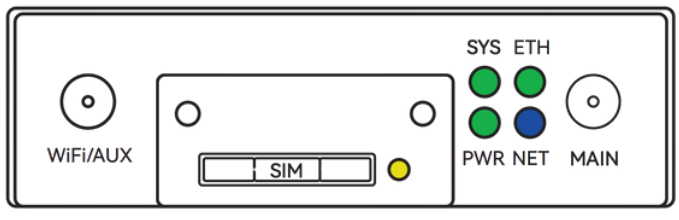



## Scan QR code

To learn more about the vSIM Data Plan, please scan the QR code on the router label or visit our website at: https://linovision.com/pages/vsim-data-plan.



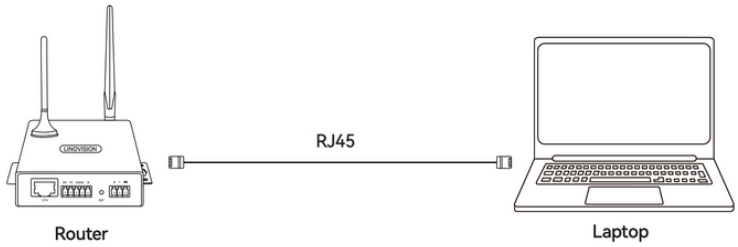

## Rear Panel LED Indicator




| | |
|---|---|
| SYS | A green LED indicates system online. |
| ETH | Flashes green when there is Ethernet traffic. |
| PWR | A green LED indicates the R51W is receiving power. |
| NET | A blue LED indicates Internet connectivity. |

## Connect IOT-R51W router to PC

Connect the Ethernet cable to the router's Ethernet port and to the Ethernet port on the PC. Alternatively, use Wi-Fi to access the web platform by opening a web browser and entering the default IP address.

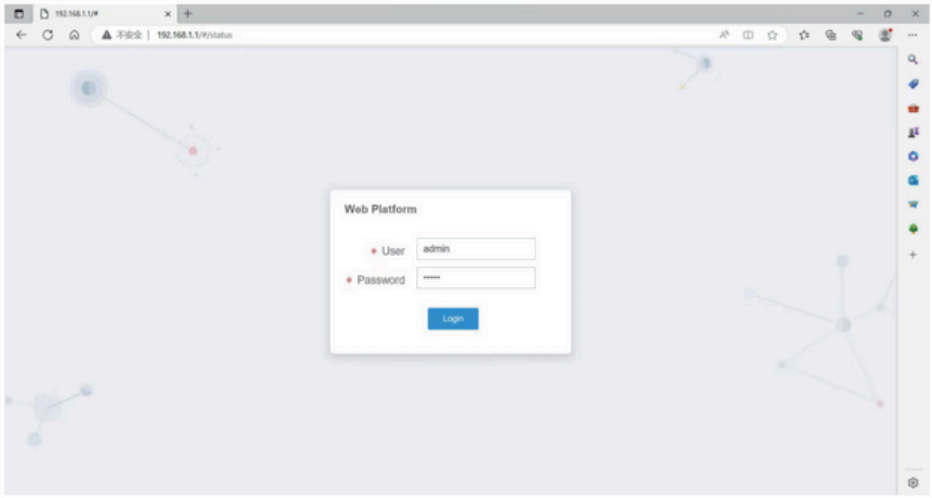



## Access the router's web platform

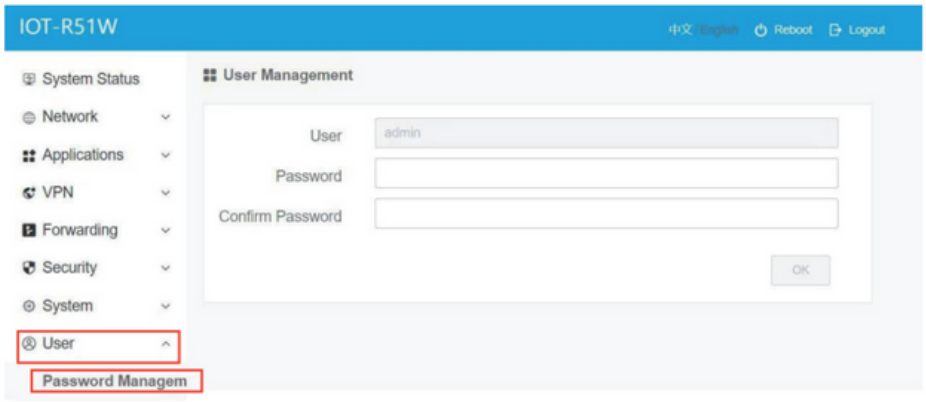
Open a web browser on your computer and navigate to the router's IP address. The default IP address is "192.168.1.1". You can find the SSID (network name) and wireless password printed on the label at the top of the router.

## Enter the default username and password

1. The default user name is "admin" and the password is "admin".



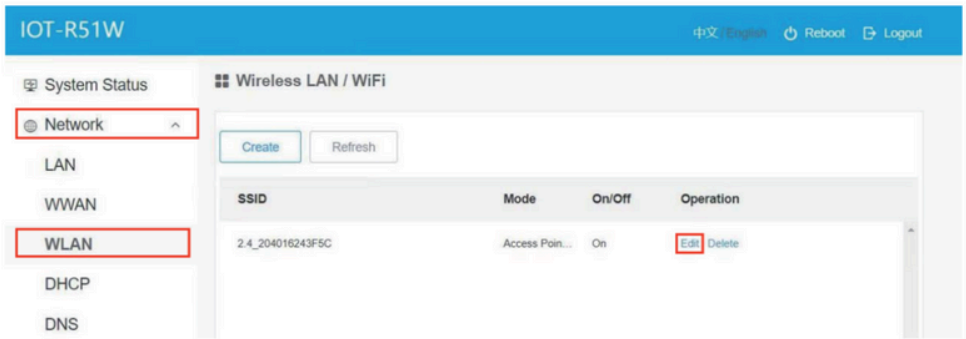

2. Log in to the Web Platform and navigate to the "User > Password Management" section to set up a new password.




3. The Web Platform provides basic configuration, Applications, VPN, Forwarding, Security and other functions.

## WiFi Settings

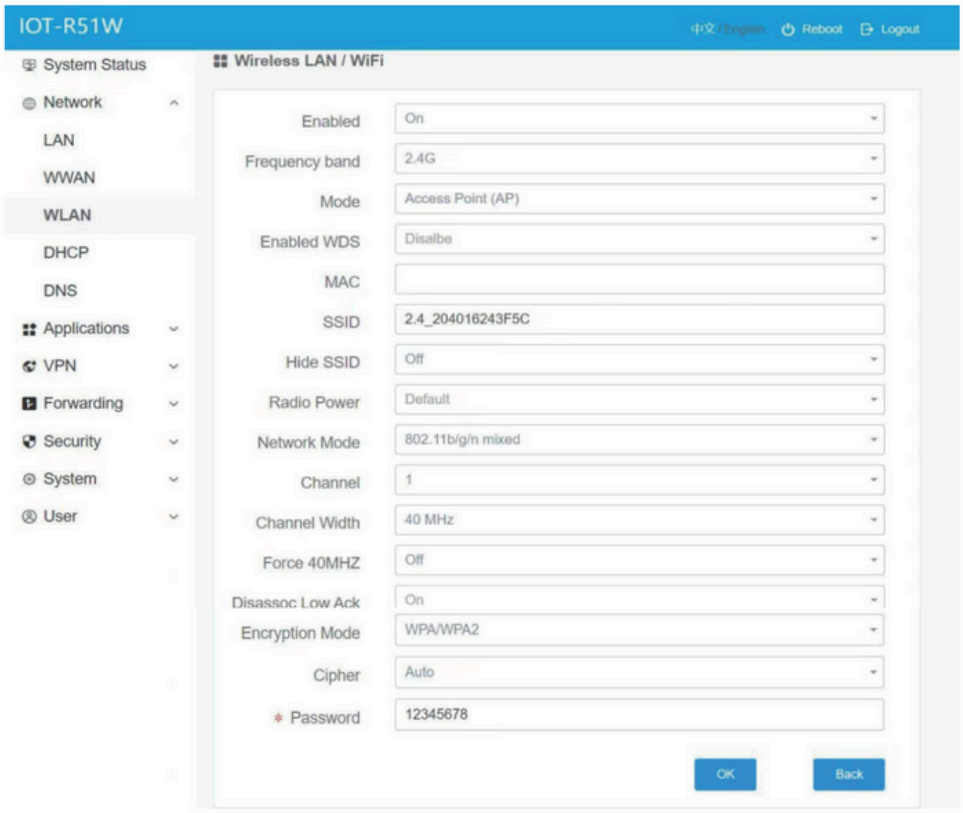
The default SSID is “2.4_2xxxxxxxxx” and the default password is “12345678”. To modify these settings, navigate to “Network > WLAN > Edit”.




The IOT-R51W router offers two operational modes: Access Point (AP) mode and Client (STA) mode. In AP mode, the router provides wireless LAN hotspots for convenient network access, eliminating the need for additional wiring. In Client mode, the router can connect to other AP devices.

When using AP mode, you can choose to make your network invisible by enabling the “Hide SSID > On” option. Only users who know the network name and password will be able to connect.

The IOT-R51W router also supports multiple networks/SSIDs, which can be configured under “Network > WLAN > Create”. These additional networks can be used to define separate environments for security purposes or to apply specific rules and policies.




## Save your settings

Once you have completed naming and securing your wireless network, click the “OK” button. The changes will be applied to the router, which may take a few moments. After the router has completed its configuration process, your wireless network will be enabled.

## Use Case ( Set up remote access for IP camera)

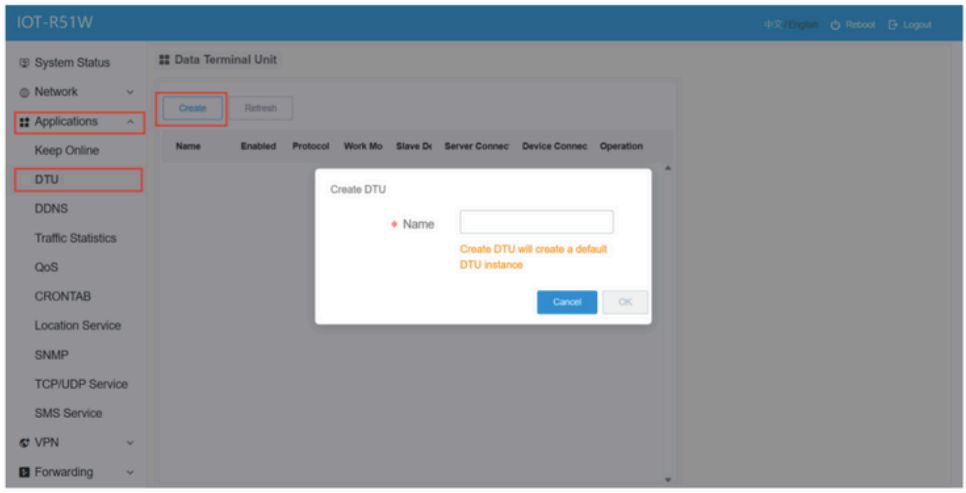
Plug-and-play installation ensures easy setup and instant connectivity.


## Advanced Settings

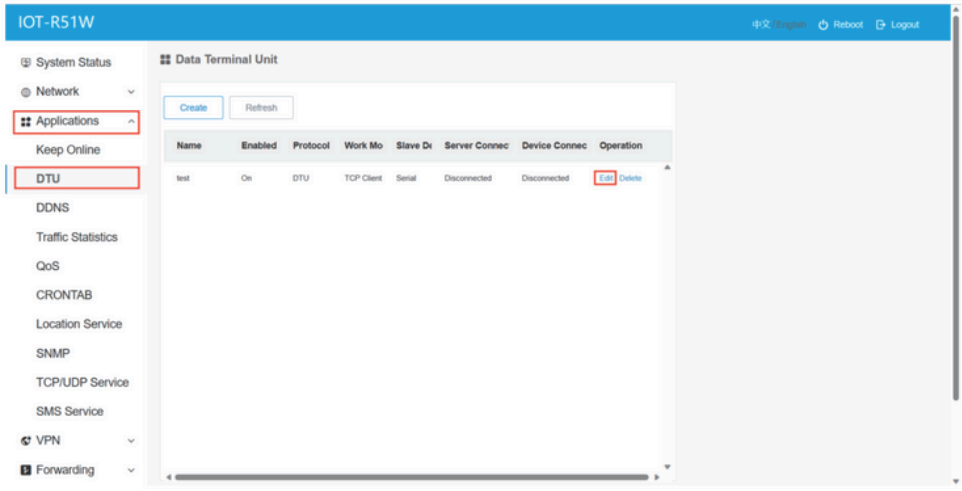
1. **DTU Setting**

The DTU (Data Transfer Unit) provides wireless connectivity, data collection, and transmission for industrial applications.

- Click “Applications > DTU > Create”

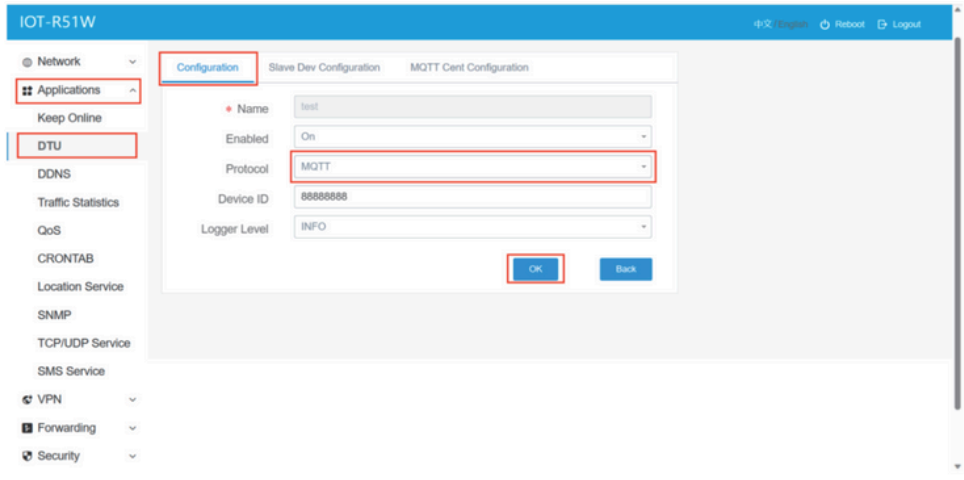


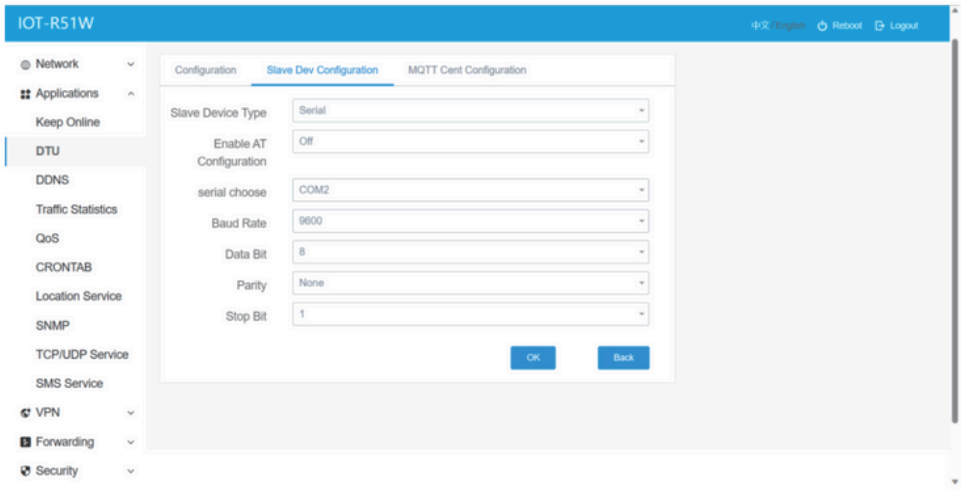

- Click “Applications > DTU > Edit"

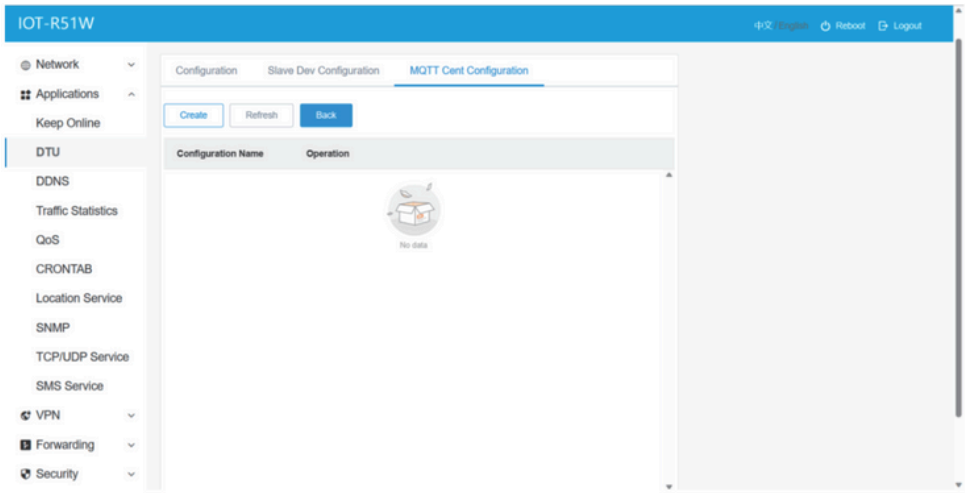



## 2. Supports MQTT Protocol Convert

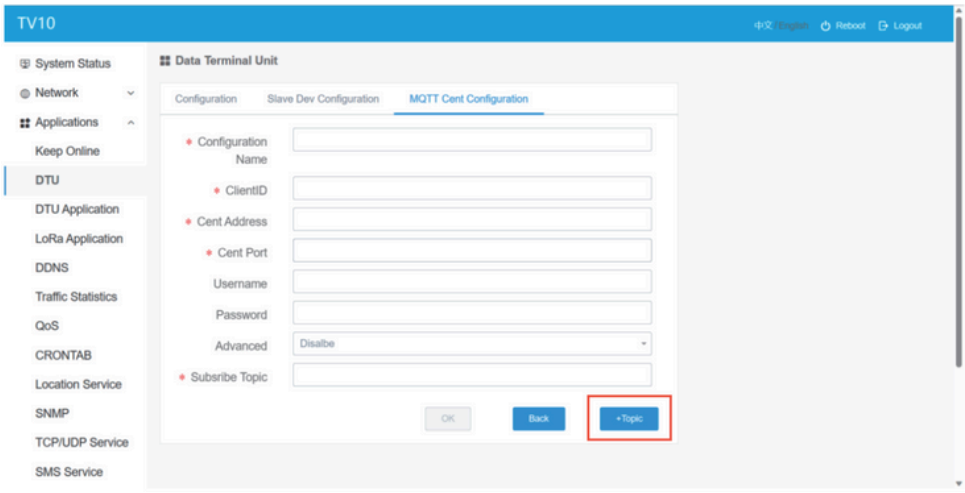
- Click Applications > DTU > Configuration > Select Protocol > OK. A lightweight publish-subscribe messaging protocol optimized for resource-constrained devices with minimal code requirements and low network bandwidth consumption. MQTT is widely adopted across industries including water management, mining, energy, oil and gas, and industrial automation.



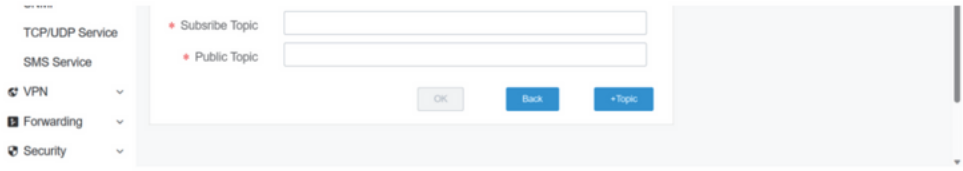



- Click "+Topic" to create multiple public topics




- An MQTT topic is a string used within the MQTT protocol to identify and route messages. It serves as a key element in facilitating communication between MQTT publishers and subscribers. In the MQTT publish/subscribe model, publishers send messages to specific topics, while subscribers can subscribe to these topics to receive the corresponding messages.

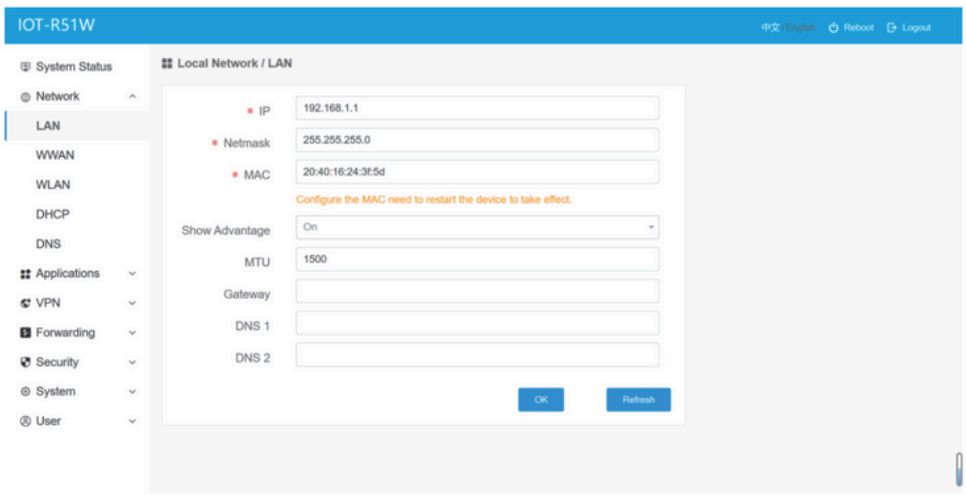



**RemoteMonit**

- Scan the QR code below to access visual instructions for pairing your device with RemoteMonit.

### 3. LAN Configuration

- The configuration of the LAN port is primarily used to facilitate the connection between the router and the slave device, enabling the slave device to access the external network via the router. Additionally, it ensures seamless communication between the various network segments connected to the router.



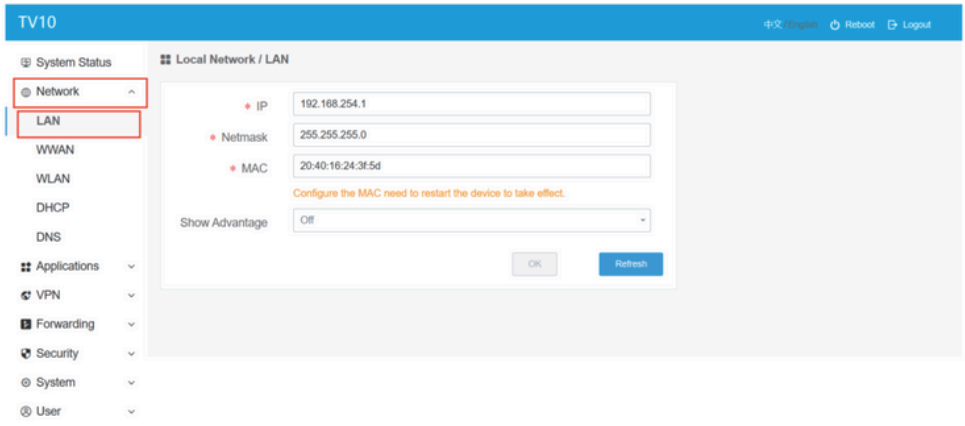

- Port Configuration Parameters

| Parameter | Caption | Configuration Method |
|---|---|---|
| IP address | Set the IP address of the LAN port | Manually enter in the input box Format: X.X.X.X Default value: 192.168.1.1 |
| Subnet mask | Set the subnet mask of the LAN port | Manually enter in the input box Format:X.X.X.X Default value: 255.255.255.0 |
| MAC address | Set the MAC address of the LAN port | The format is normally not modified XX:XX:XX:XX:XX:XX: |
| Gateway | Set the gateway of the LAN port IP | Manually enter in the input box Format: X.X.X.X |
| DNS1 | Set preferred DNS server | Manually enter in the input box Format: X.X.X.X |
| DNS2 | Set preferred DNS server | Manually enter in the input box Format: X.X.X.X |

**4. Devices on Different Network Segments**

(In situations where it is not possible to modify the camera's IP address, you can instead adjust the router's IP address to ensure compatibility.)

- Click “Network > LAN”




a. First, change the netmask of the router to ensure it matches that of your camera.

b. Verify that the IP addresses of both the camera and the router are on the same network segment, based on the subnet mask configuration.

- For example: The IP address of the camera is 192.168.254.4 with a subnet mask of 255.255.255.0, while the router's IP address is 192.168.1.1 with the same subnet mask. Based on the subnet mask configuration, the first three octets of the IP addresses should match to ensure they are on the same network segment. Therefore, change the router's IP address to 192.168.254.x.