LINOVISION IoT-R32L Router User Guide

Contents

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LINOVISION IoT-R32L Router

Welcome

- Thank you for choosing Linovision R32L industrial cellular router.
- This guide describes how to install the R32L and how to log in the Web GUI to configure the device. Once you complete the installation, refer to the Linovision R32L User Guide for instructions on how to perform configurations on the device.

Related Documents

Document	Description
R32L Datasheet	Datasheet for R32L industrial cellular router.
R32L User Guide	Instruction on how to log in the web GUI, and how to configure all the settings.

Declaration of Conformity

R32L are in conformity with the essential requirements and other relevant provisions of the CE, FCC, and RoHS.

- For assistance, please contact Linovision sales support:
  - **Email:** sales@linovision.com

- **Tel:** 86-571-86708175

Packing List

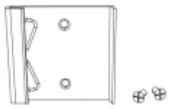
Before you begin to install the R32L router, please check the package contents to verify that you have received the items below.

1 × R32L

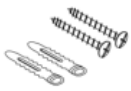
1 × Ethernet Cable

1 × Power Adapter

1 × Magnetic Cellular Antenna

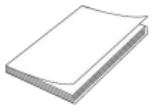


1 × DIN Rail Kit



Setscrews

1 × Warranty Card



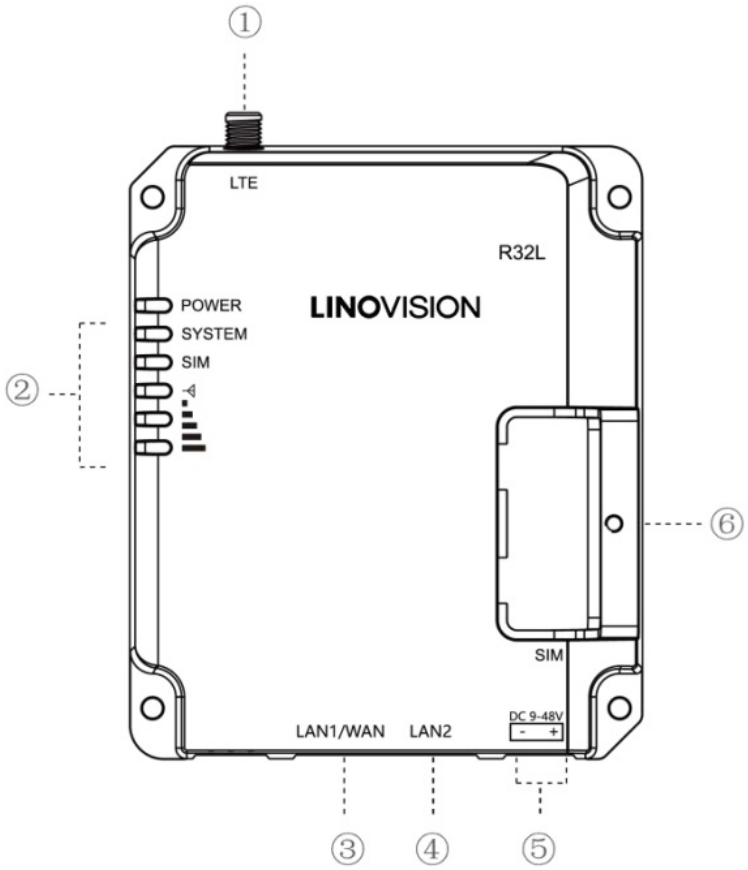
1 × Quick Start Guide

1 × Stubby Cellular Antenna (Optional)

If any of the above items is missing or damaged, please contact your salesrepresentative.

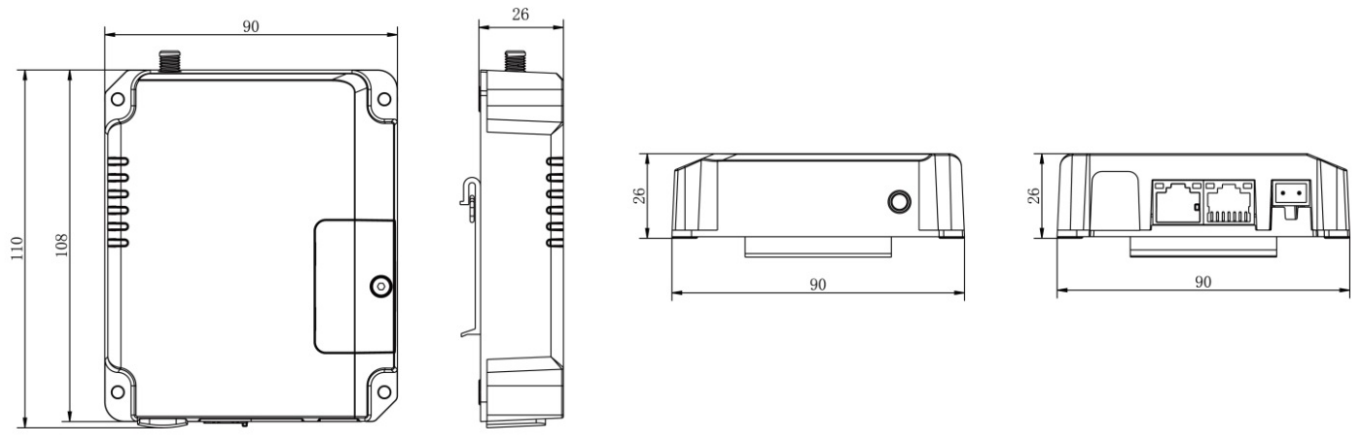
Hardware Introduction

Overview



1. Cellular Antenna Connector
2. LED Indicator Area
    - **POWER:** Power Indicator
    - **SYSTEM:** Status Indicator
    - **SIM** : Status Indicator
    - Signal Strength Indicator
3. Ethernet LAN1/WAN Port
4. Ethernet LAN2 Port
5. Power Connector
6. SIM and Reset Button Holder

Dimensions (mm)



LED Indicators

LED	Indication	Status	Description
POWER	Power Status	Off	The power is switched off
		On	The power is switched on
SYSTEM	System Status	Green Light	Static: Start-up
			Blinking slowly: the system is running properly
		Red Light	The system goes wrong
SIM	SIM Card Status	Off	SIM is registering or fails to register (or there are no SIM cards inserted)
		Green Light	Blinking slowly: SIM has been registered and is ready for dial-up
			Blinking rapidly: SIM has been registered and is dialing up now
			Static: SIM has been registered and dialed up successfully
Signal Strength	Signal 1/2/3	Off	No signal
		Green Light	Static/Off/Off: weak signals with 1-10 ASU (please check if the antenna is installed correctly, or move the antenna to a suitable location to get better signal)
			Static/Static/Off: normal signals with 11-20 ASU (average signal strength)
			Static/Static/Static: strong signals with 21-31 ASU (signal is good)

Reset Button
Reset button is under the SIM slot.

Function	Description	
	SYSTEM LED	**Action**
Reset	Blinking	Press and hold the reset button for more than 5 seconds.
	Static Green → Rapidly Blinking	Release the button and wait.
	Off → Blinking	The router is now reset to factory defaults.

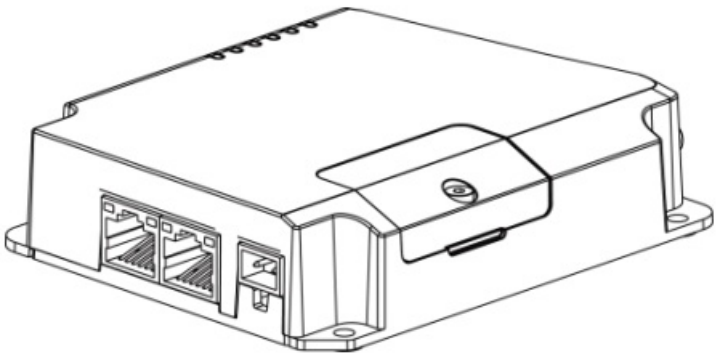
Ethernet Port Indicator

Indicator	Status	Description
Link Indicator (Orange)	On	Connected
	Blinking	Transmitting data
	Off	Disconnected

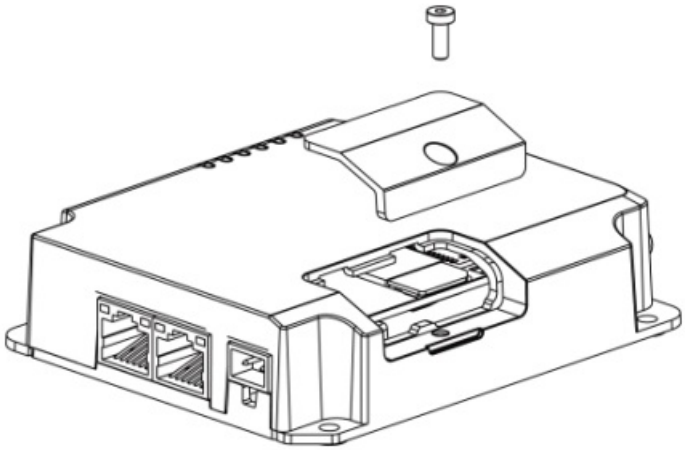
Hardware Installation

SIM Card Installation

- A. Unscrew the cover of the SIM card then take it off.

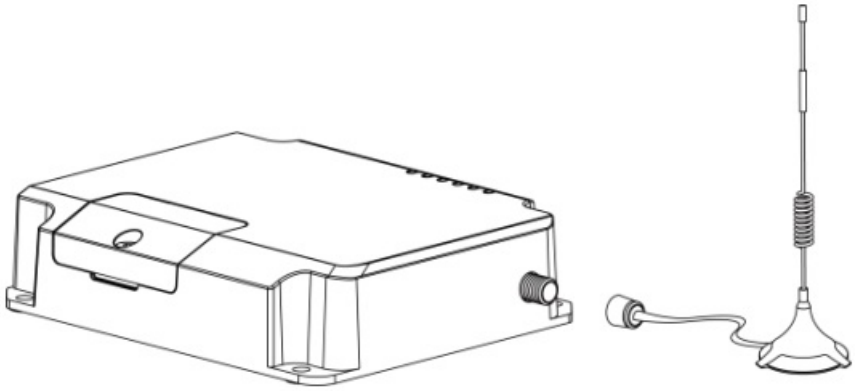


- B. Put SIM card into the slot and screwit up.



Antenna Installation

Rotate the antenna into the antenna connector accordingly.The external antenna should beinstalled vertically always on a site with a good signal.



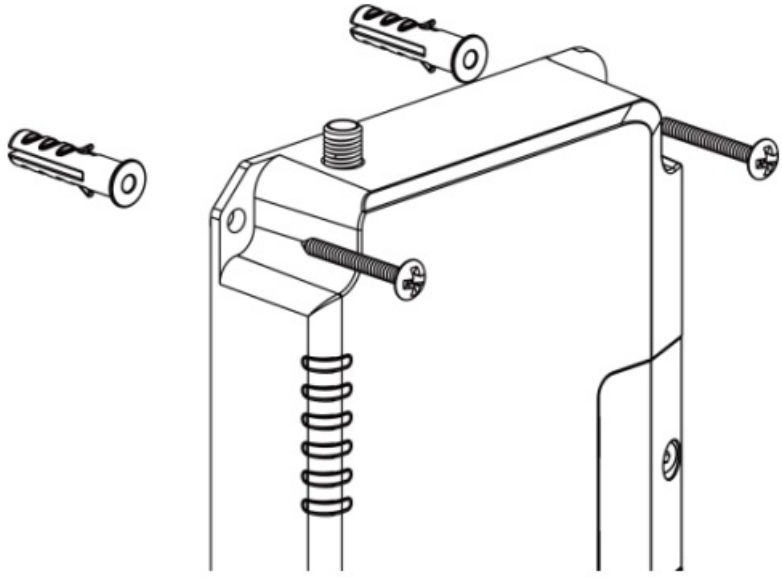
Router Installation

The router can be placed on a desktop or mounted to a wall or a DIN rail.

1. **Wall Mounting (Measured in mm)**

   Use 4 pcs of M3 × 6 flat head Phillips screws to fix the router on the wall.

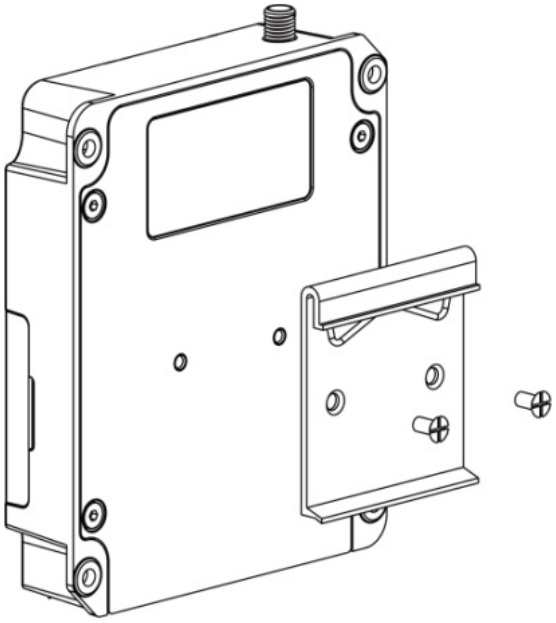
   Recommended torque for mounting is 1.0 N·m, and the maximum allowed is1.2 N·m.

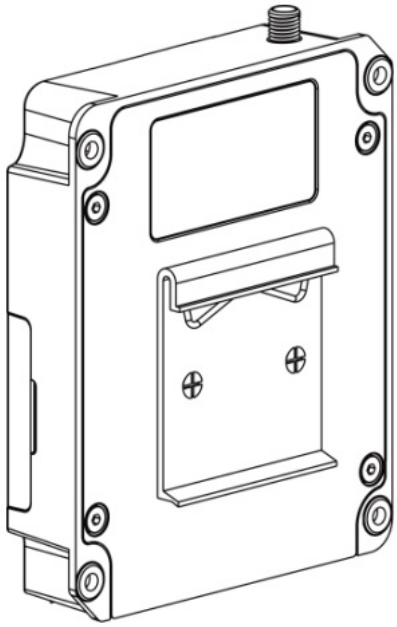


2. **DIN Rail Mounting (Measured in mm)**

   Use 2 pcs of M3 × 6 flat head Phillips screws to fix the mount clip to the router, and then hangthe device to the DIN rail. The width of DIN rail is 3.5cm.

   Recommended torque for mounting is 1.0 N·m, and the maximum allowed is1.2 N·m.





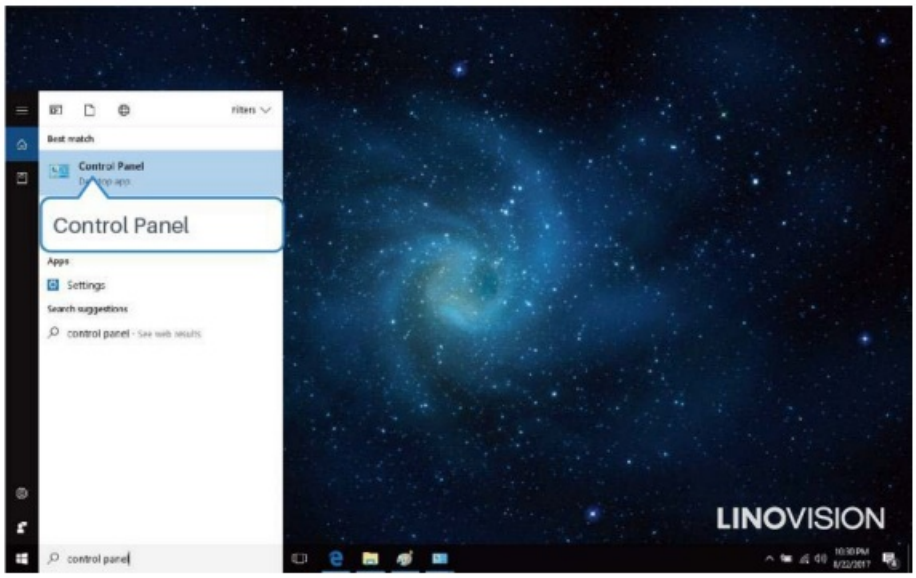
Log in the Web GUI of Router

PC Configuration

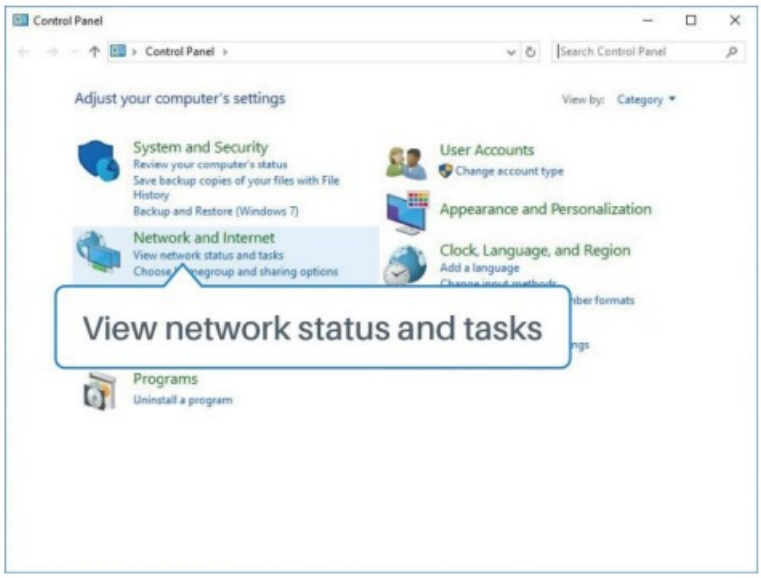
Please connect PC to LAN port of R32L router. PC can obtain an IP address, or you can configure a static IP address manually. The following steps are based on Windows 10 operating system for your reference.

(Note: As remote access is disabled by default, you can't access to the router's Web GUI if you connect PC to WAN port of the router. But it will function properly if you enable it on Web GUI.

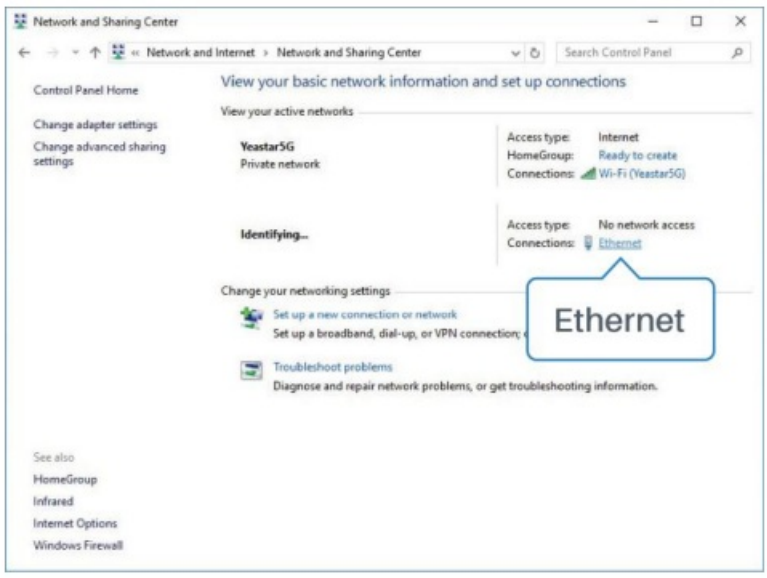
1. Click "Search Box" to search "Control Panel" on the Windows 10 taskbar.



2. Click “Control Panel” to open it, and then click “View network status and tasks”.

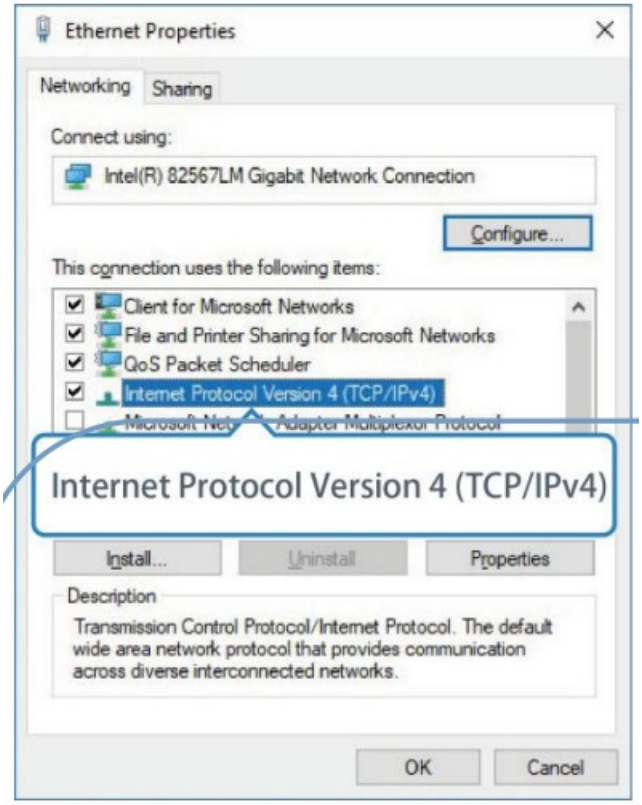


3. Click “Ethernet” (May have different names).

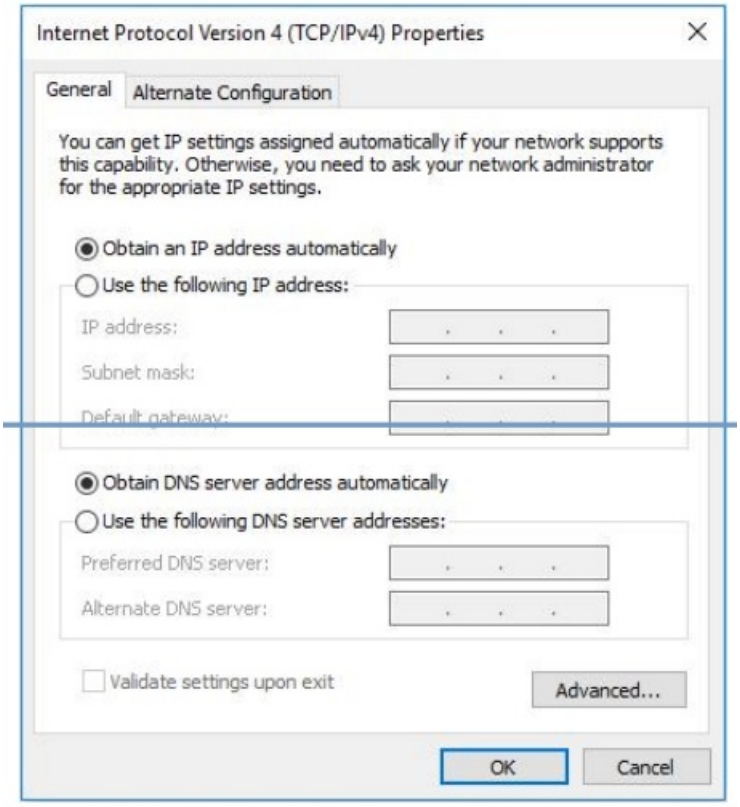


4. Click “Properties”.

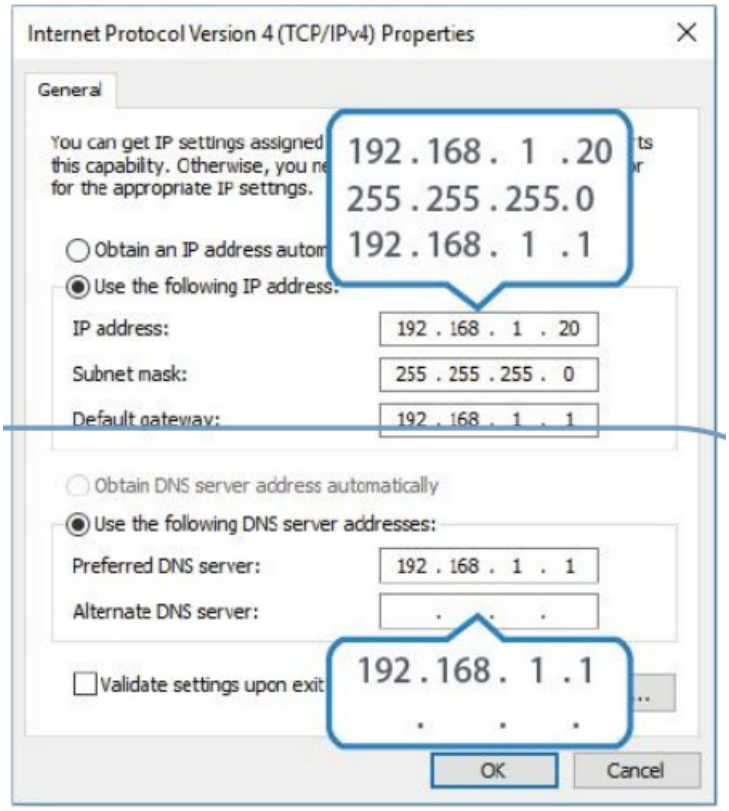
5. Double Click “Internet Protocol Version 4 (TCP/IPv4)” to configure IP address and DNS server.



6. **Method 1:** click “Obtain an IP address automatically”;



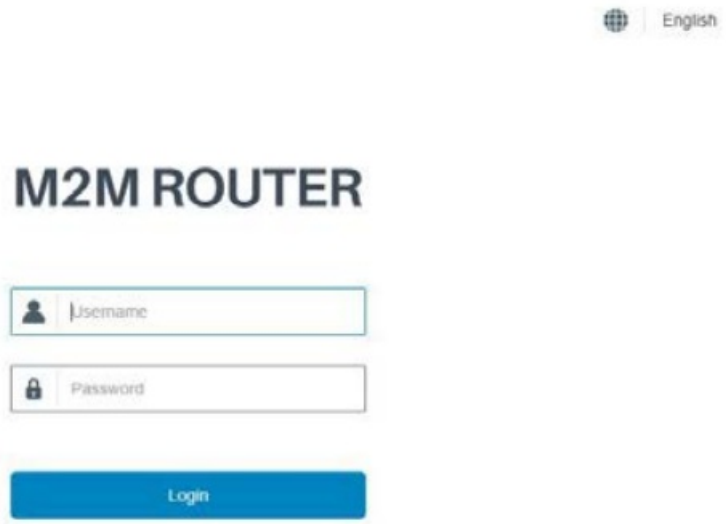
7. **Method 2:** click “Use the following IP address” to assign a static IP manually within the same sub net of



Log in the Router
If this is the first time you configure the router, please use the default settings below:

- **IP Address:** 192.168.1.1
- **Username:** admin
- **Password:** password

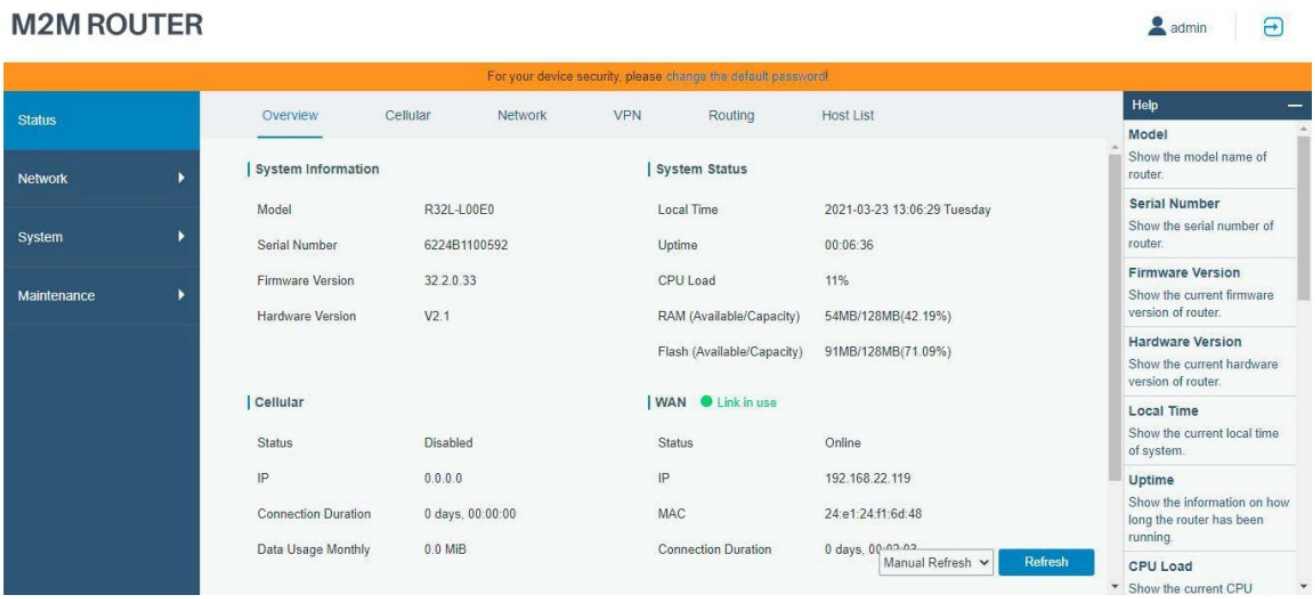
- Start a Web browser on your PC (Chrome is recommended), type in the IP address, andpress Enter on your keyboard.
- Enter the username and password, click “Login”.



If you enter the username or password incorrectly more than 5 times, the login page will be locked for 10 minutes.

- When you log in with the default username and password, you will be asked to modify the password. It’s suggested that you change the password for the sake of security. Click “Cancel”button if you want to modify it later.

- After you log in the Web GUI, you can view system information and perform configuration on the router.

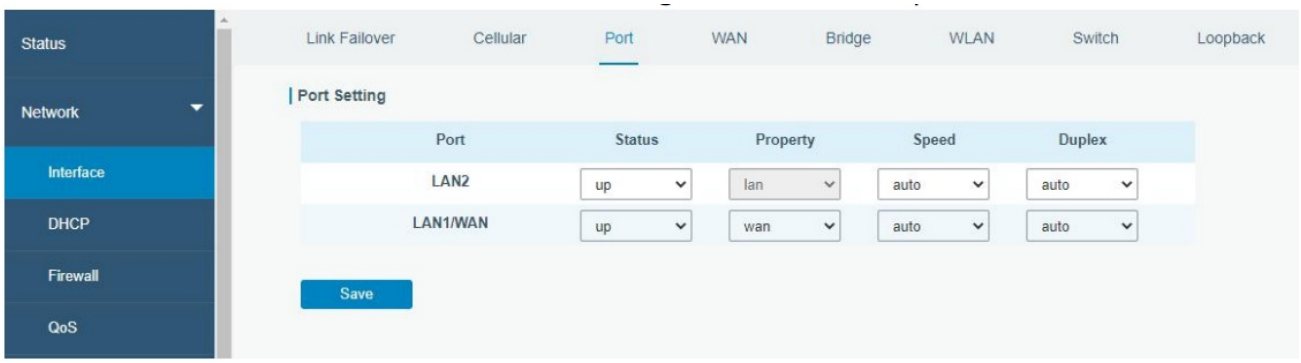


Network Configuration

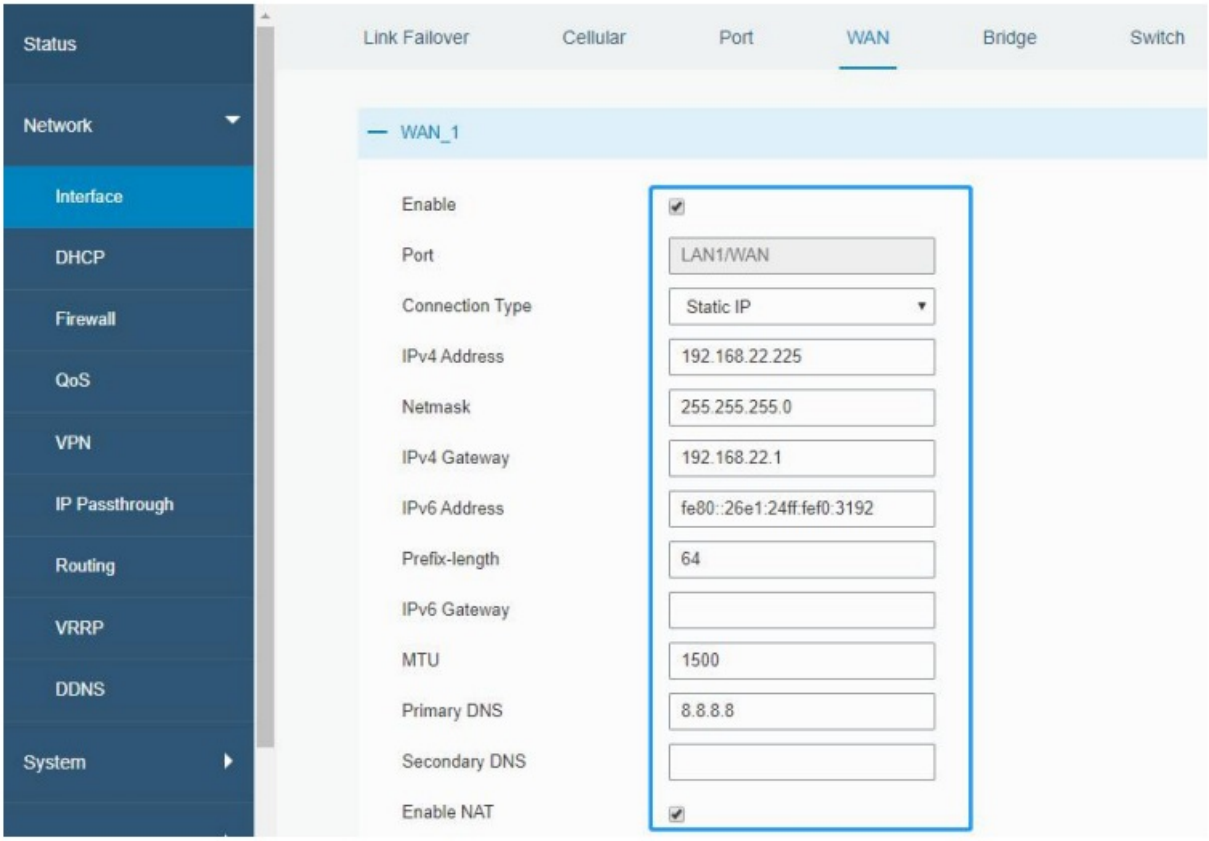
This chapter explains how to connect R32L to network via WAN connection or cellular.

Ethernet WAN Configuration

- Go to “Network > Interface > Port” to change LAN1 to WAN port



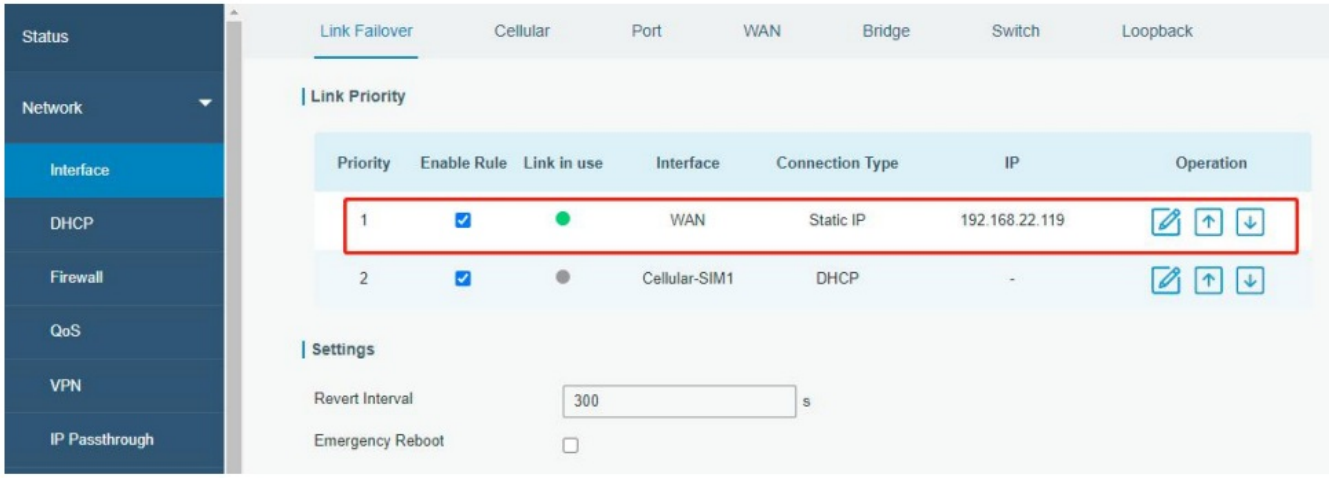
- Go to “Network > Interface > WAN” to configure WAN parameters. Take static IP configuration as an example. DHCP client and PPPoE type are optional according to your requirements.



Click “Save & Apply” button to make the changes take effect.

- Connect WAN port to another router or modem.
- Log in R32L web GUI via WAN port IP address and go to “Status > Network” to check if status is “up”.

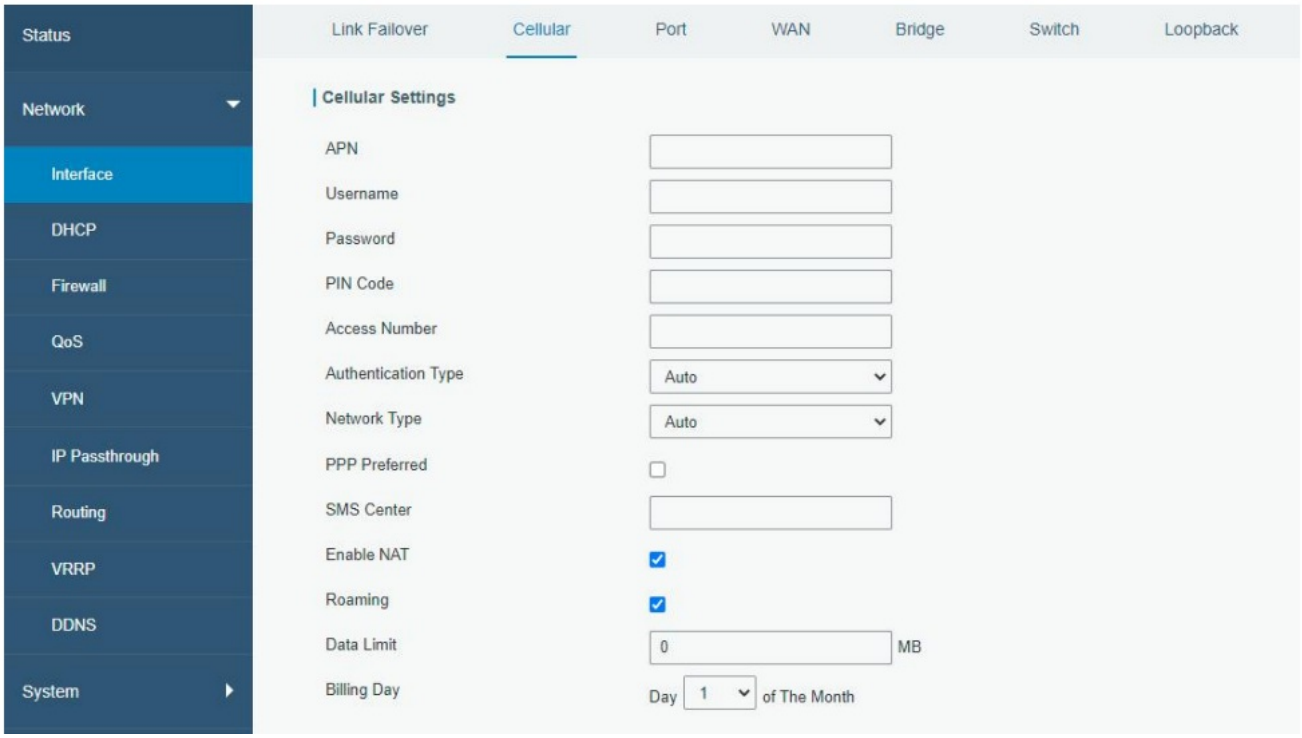
- Go to “Network > Interface > Link Failover” to rise the WAN priority to 1.



- Open your preferred browser on PC, then type any available web address into address bar and see if it is able to visit Internet via R32L router.

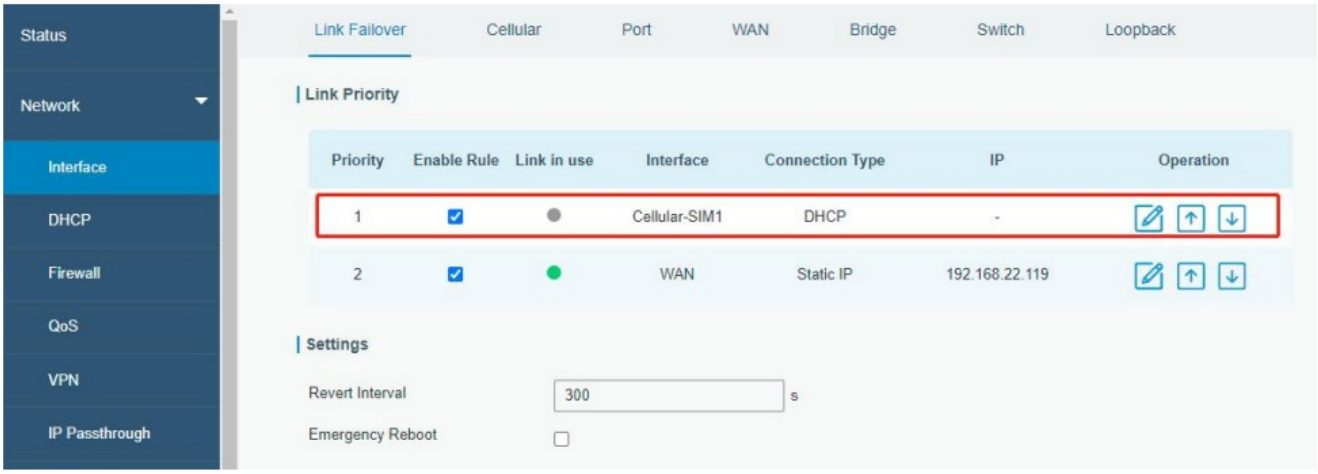
Cellular Connection Configuration

- Click “Network > Interface > Cellular > Cellular Setting” to configure the cellular info, likeAPN and network type.
- Click “Save” and “Apply” for configuration to take effect.

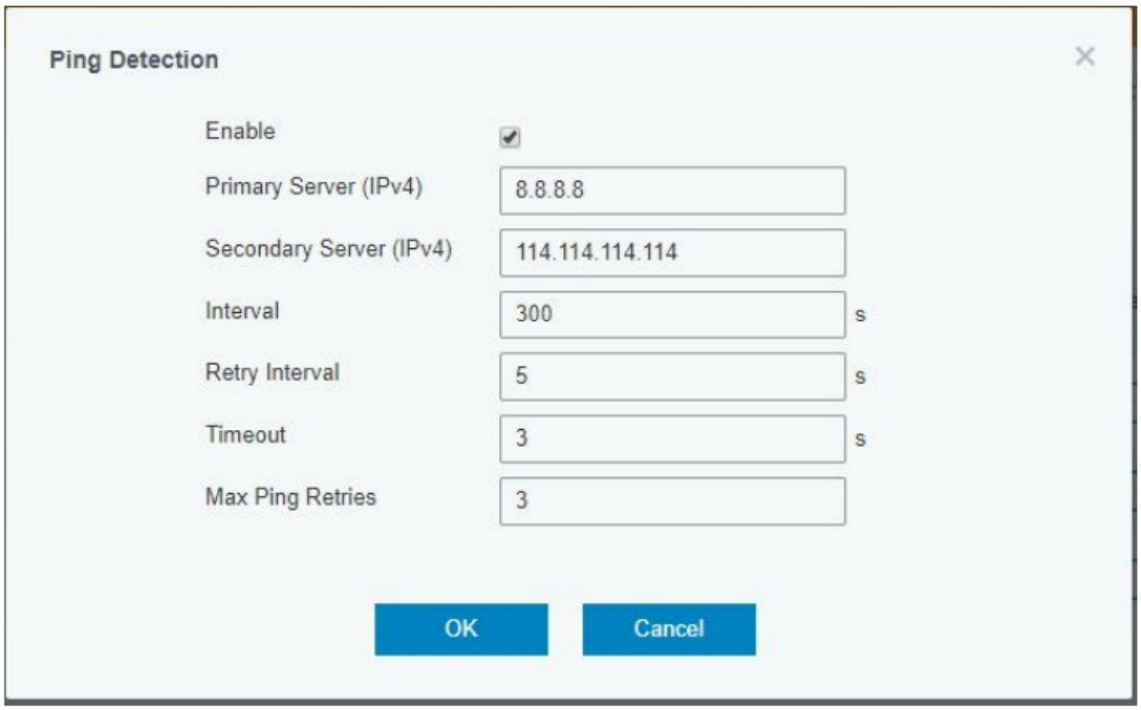


If you select “Auto”, the router will obtain ISP information from SIM card to set APN, Username,and Password automatically. This option will only be taken effect when the SIM card is issued from a well-known ISP.

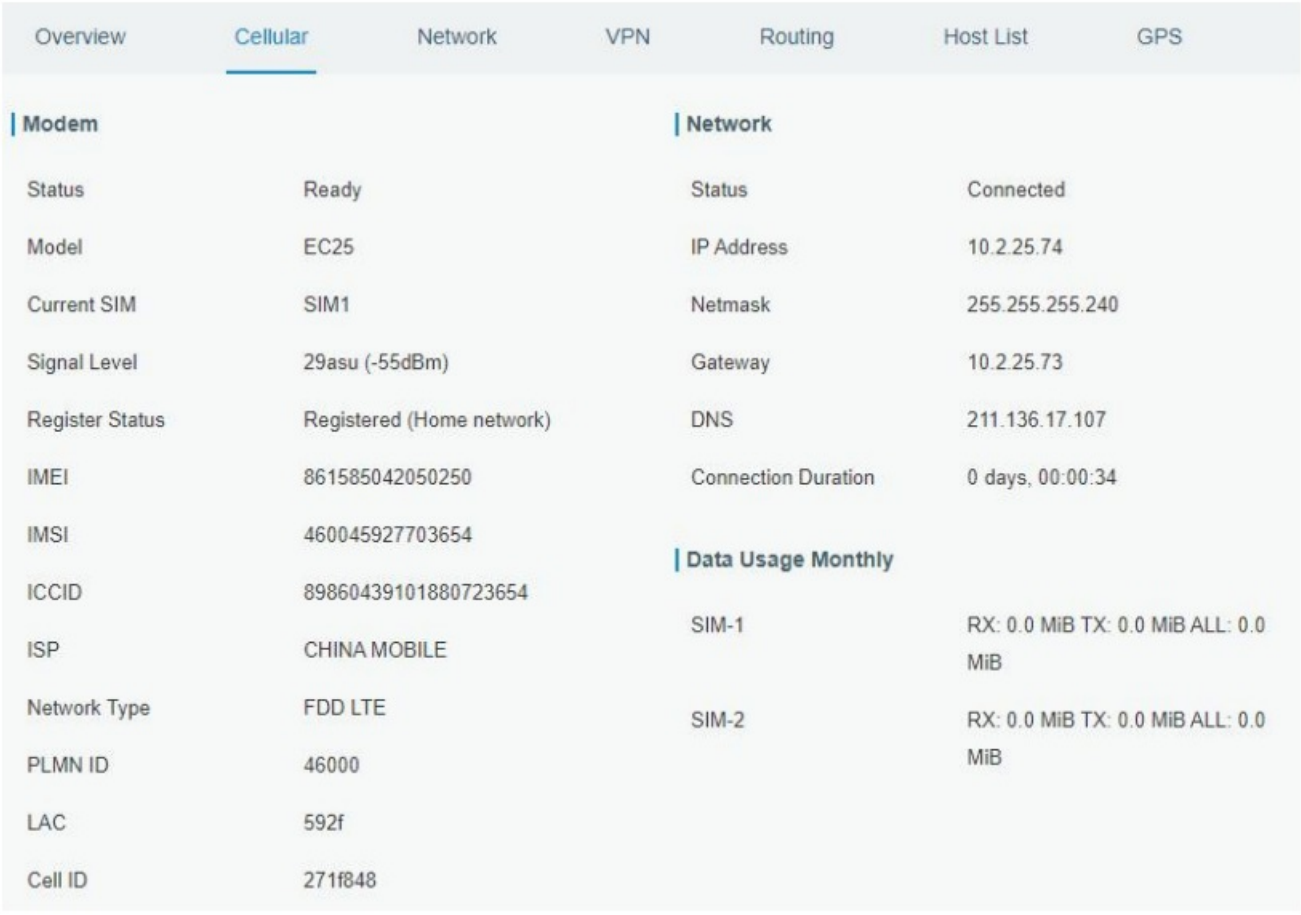
- Go to “Network > Interface > Link Fail over” to enable SIM and rise link priority.



- Click to configure ICMP ping detection information.



- Click “Status > Cellular” to view the status of the cellular connection. If it shows“Connected”, it means SIM has dialed up successfully.
  On the other hand, you can check the status of SIM indicator. If it keeps on green light statically, it means SIM has dialed up successfully.



- Open your preferred browser on PC, then type any available web address into address bar and see if it is able to visit Internet via R32L router.

Documents / Resources

	**LINOVISION IoT-R32L Router** [pdf] User Guide IoT-R32L Router, IoT-R32L, Router