

# UR32L Router

## Quick Guide

## Welcome

Thank you for choosing Milesight UR32L industrial cellular router.

This guide describes how to install the UR32L and how to log in the Web GUI to configure the device. Once you complete the installation, refer to the Milesight UR32L User Guide for instructions on how to perform configurations on the device.

## Related Documents

Document	Description
UR32L Datasheet	Datasheet for UR32L industrial cellular router.
UR32L User Guide	Instruction on how to log in the web GUI, and how to configure all the settings.

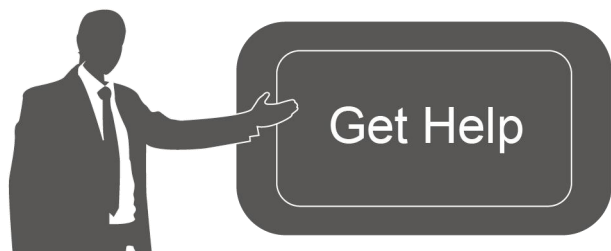
## Declaration of Conformity

UR32L are in conformity with the essential requirements and other relevant provisions of the CE, FCC, and RoHS.



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For assistance, please contact  
Milesight technical support:  
Email: [iot.support@milesight.com](mailto:iot.support@milesight.com)  
Tel: 86-592-5085280  
Fax: 86-592-5023065

## Revision History

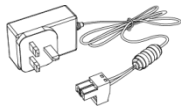
Date	Doc Version	Description
Apr. 13, 2021	V 1.0	Initial version
July 22, 2021	V 1.1	Delete Ethernet Cable

# 1. Packing List

Before you begin to install the UR32L router, please check the package contents to verify that you have received the items below.



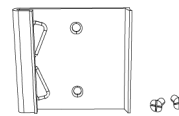
1 × UR32L



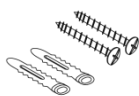
1 × Power Adapter



1 × Magnetic Cellular Antenna



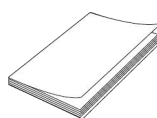
1 × DIN Rail Kit



Screws



1 × Warranty Card



1 × Quick Start Guide



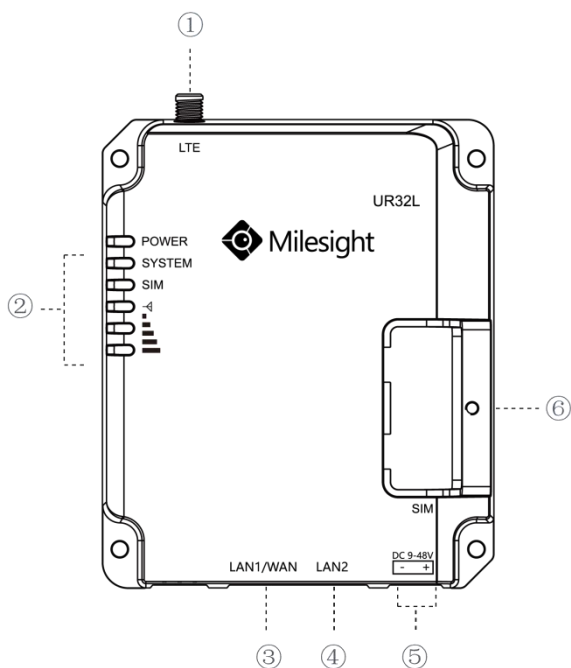
1 × Stubby Cellular Antenna (Optional)



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

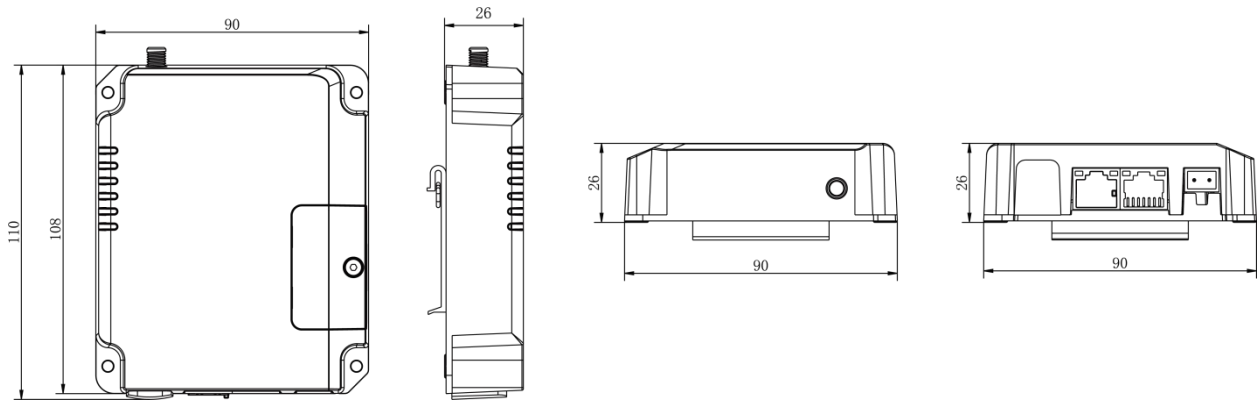
# 2. Hardware Introduction

## 2.1 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

## 2.2 Dimensions (mm)



## 2.3 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)			

## 2.4 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.

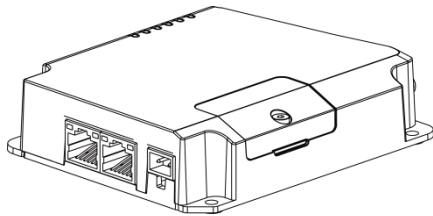
## 2.5 Ethernet Port Indicator

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

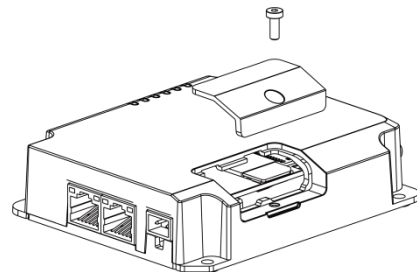
## 3. Hardware Installation

### 3.1 SIM Card Installation

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

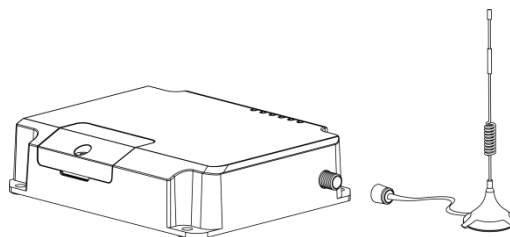


B. Put SIM card into the slot and screw it up.



### 3.2 Antenna Installation

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



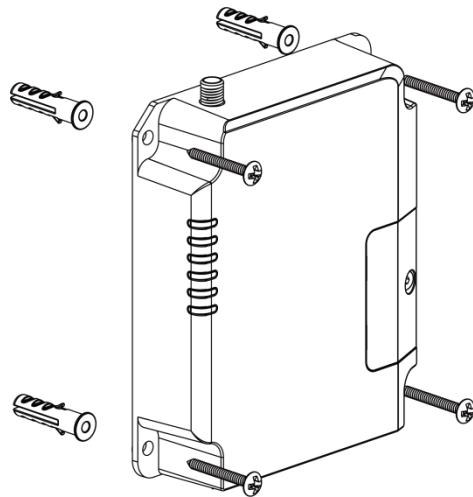
### 3.3 Router Installation

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

#### 3.3.1 Wall Mounting (Measured in mm)

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

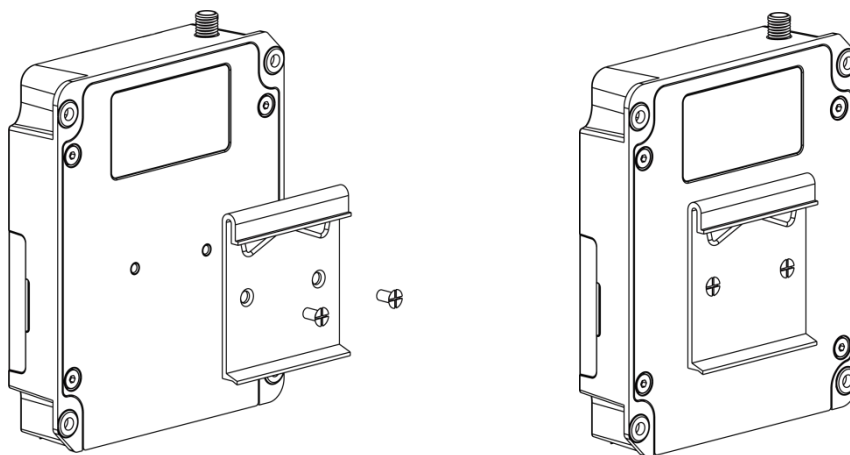
**!** Recommended torque for mounting is 1.0 N·m, and the maximum allowed is 1.2 N·m.



#### 3.3.2 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 hang the 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 is 1.2 N·m.

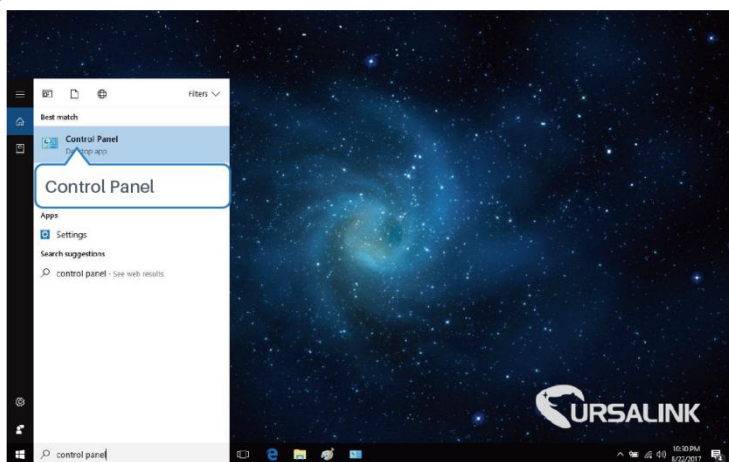


## 4. Log in the Web GUI of Router

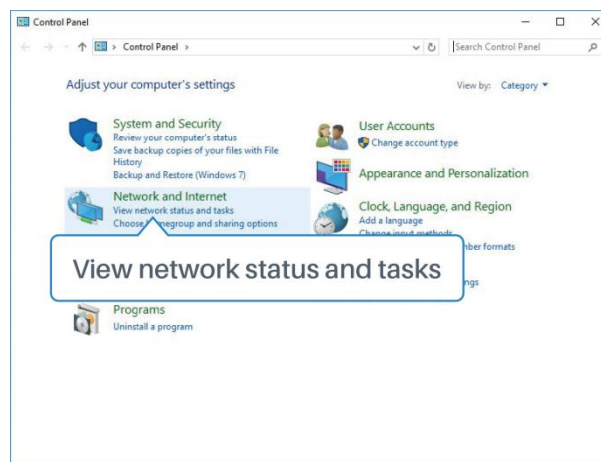
### 4.1 PC Configuration

Please connect PC to LAN port of UR32L 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.

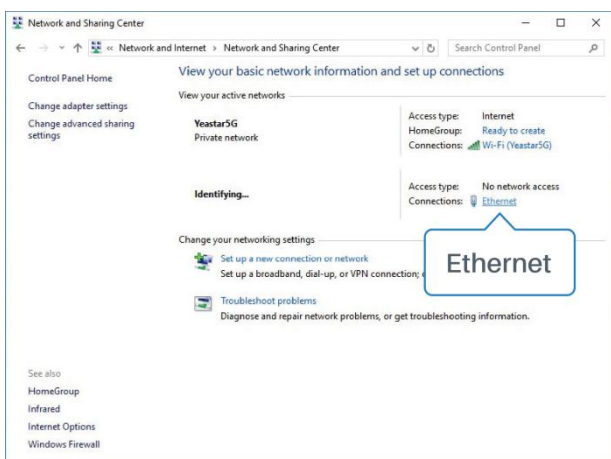
**(Note:** As remote access is disabled by default, you can't access to the router's Web GUI if you connect PC to WAN port of the router. But it will function properly if you enable it on Web GUI.)



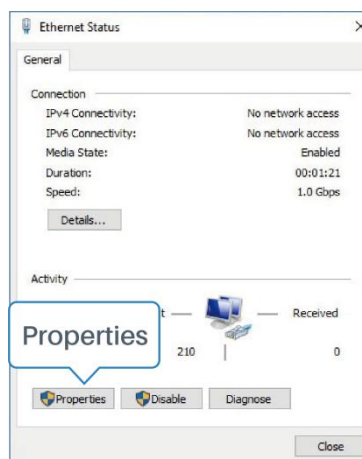
① Click "Search Box" to search "Control Panel" on the Windows 10 taskbar.



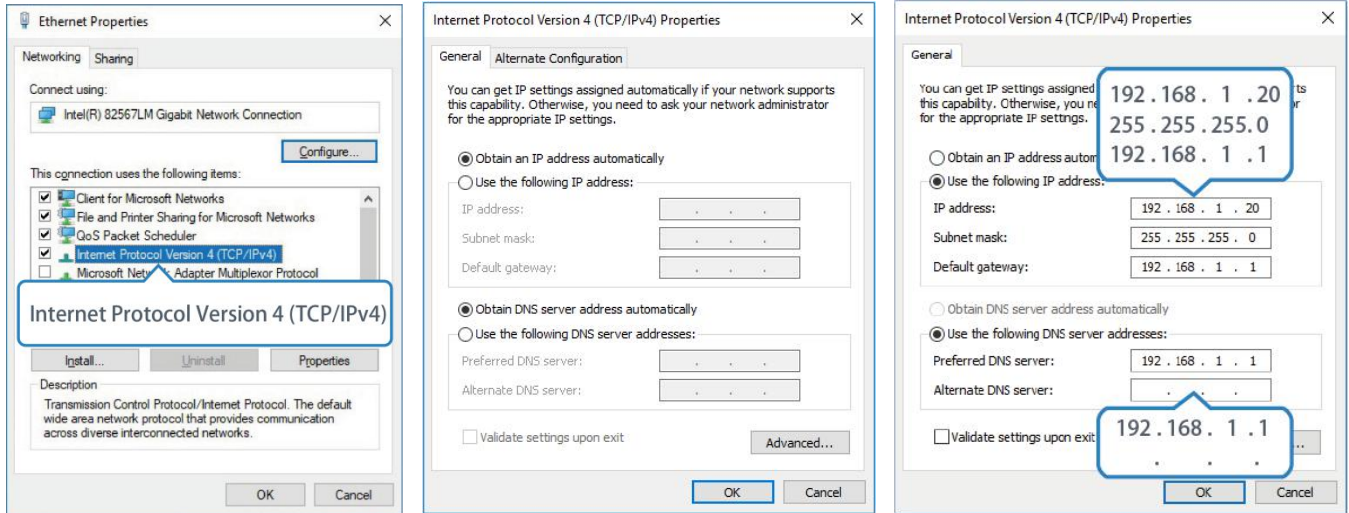
② Click "Control Panel" to open it, and then click "View network status and tasks".



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”;

Method 2: click “Use the following IP address” to assign a static IP manually within the same subnet of the router.

(Note: Remember to click “OK” to finish configuration.)

## 4.2 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**

A. Start a Web browser on your PC (Chrome is recommended), type in the IP address, and press Enter on your keyboard.

B. Enter the username and password, click “Login”.

English



Username

Password

Login



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

C. 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.

**Change Password** ✕

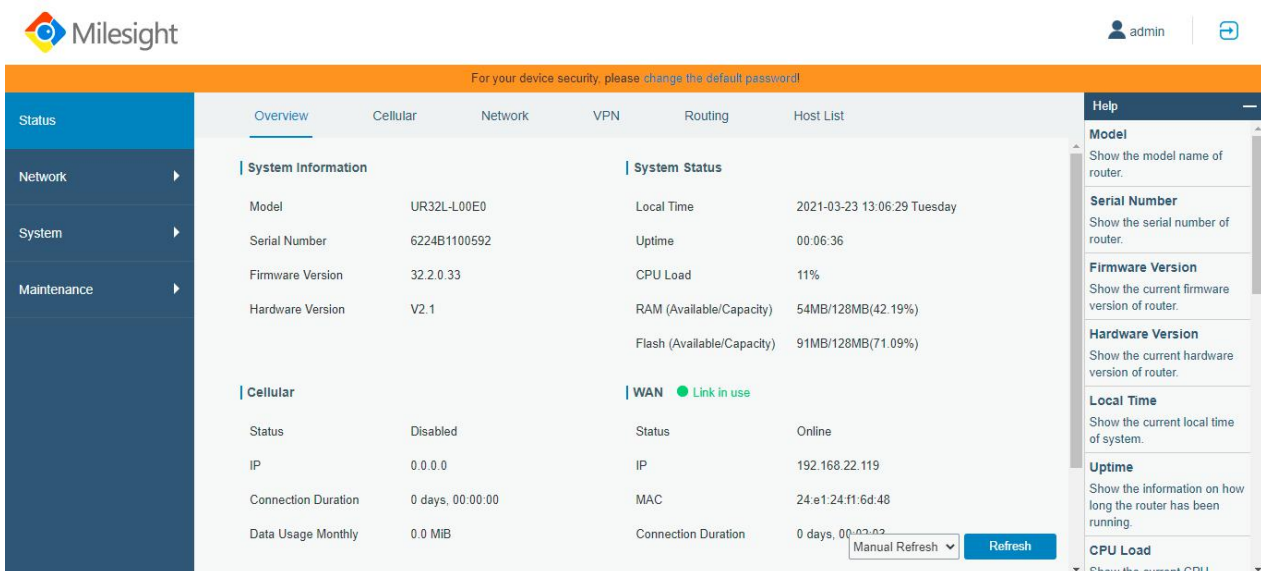
Old Password

New Password

Confirm New Password

Save Cancel

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



The screenshot displays the Milesight Web GUI interface. At the top, there is a navigation bar with the Milesight logo and a user profile icon labeled 'admin'. Below the navigation bar, a warning banner reads: "For your device security, please change the default password!". The main content area is divided into several sections: "System Information", "System Status", "Cellular", and "WAN".

System Information		System Status	
Model	UR32L-L00E0	Local Time	2021-03-23 13:06:29 Tuesday
Serial Number	6224B1100592	Uptime	00:06:36
Firmware Version	32.2.0.33	CPU Load	11%
Hardware Version	V2.1	RAM (Available/Capacity)	54MB/128MB(42.19%)
		Flash (Available/Capacity)	91MB/128MB(71.09%)

Cellular		WAN <span style="color: green;">● Link in use</span>	
Status	Disabled	Status	Online
IP	0.0.0.0	IP	192.168.22.119
Connection Duration	0 days, 00:00:00	MAC	24:e1:24:f1:6d:48
Data Usage Monthly	0.0 MiB	Connection Duration	0 days, 00:00:00

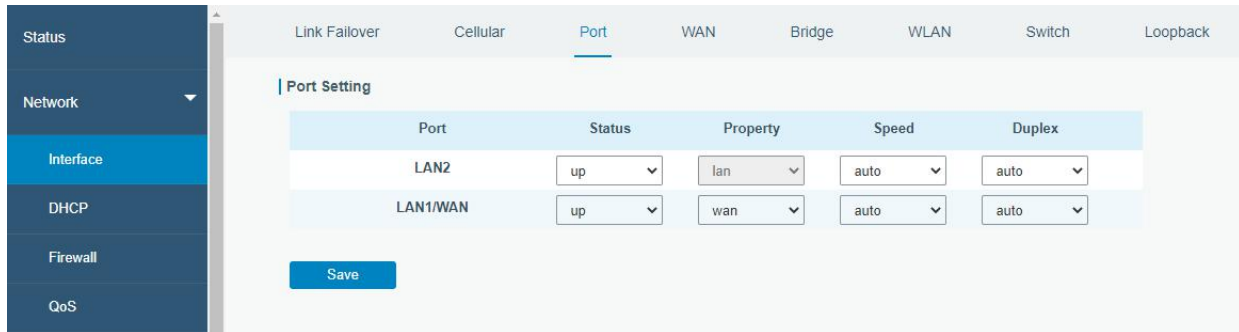
At the bottom right of the WAN section, there is a "Manual Refresh" dropdown menu and a "Refresh" button. On the right side of the page, there is a "Help" sidebar with expandable sections for Model, Serial Number, Firmware Version, Hardware Version, Local Time, Uptime, and CPU Load.

## 5. Network Configuration

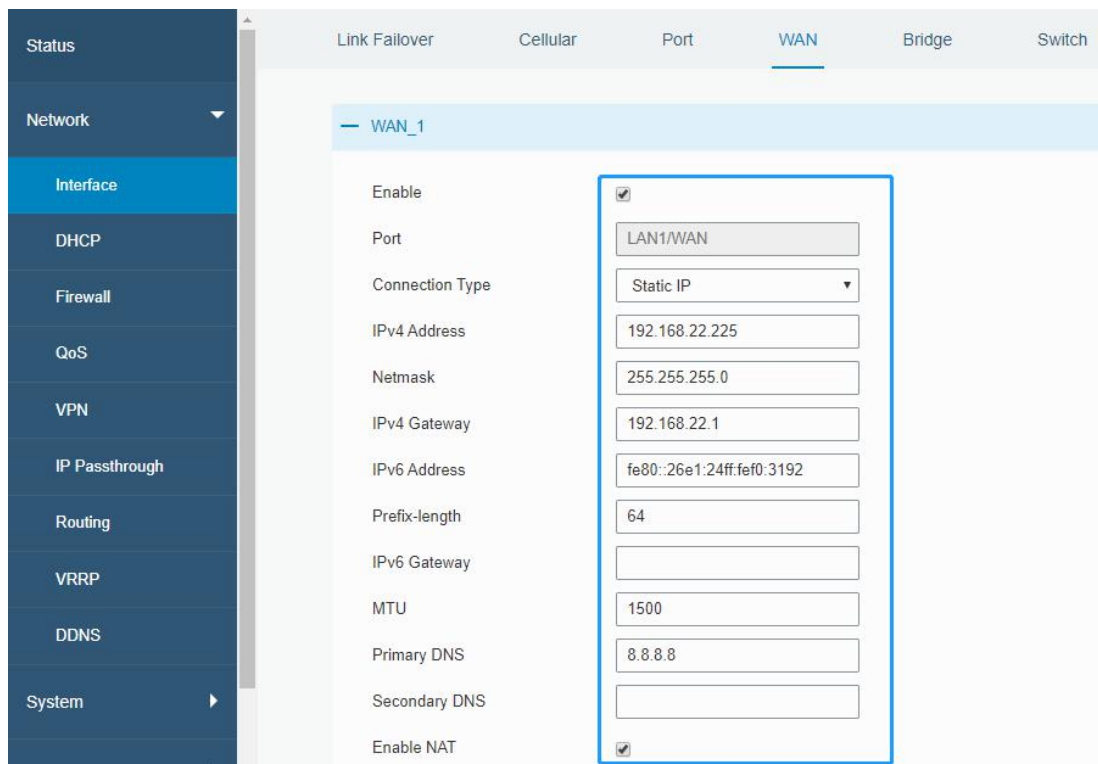
This chapter explains how to connect UR32L to network via WAN connection or cellular.

### 5.1 Ethernet WAN Configuration

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



B. 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.

C. Connect WAN port to another router or modem.

D. Log in UR32L web GUI via WAN port IP address and go to “Status > Network” to check if status is “up”.



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

Priority	Enable Rule	Link in use	Interface	Connection Type	IP	Operation
1	<input checked="" type="checkbox"/>	<span style="color: green;">●</span>	WAN	Static IP	192.168.22.119	<a href="#">✎</a> <a href="#">↑</a> <a href="#">↓</a>
2	<input checked="" type="checkbox"/>	<span style="color: gray;">●</span>	Cellular-SIM1	DHCP	-	<a href="#">✎</a> <a href="#">↑</a> <a href="#">↓</a>

**Settings**

Revert Interval:  s

Emergency Reboot:

F. 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 UR32L router.

## 5.2 Cellular Connection Configuration

A. Click “Network > Interface > Cellular > Cellular Setting” to configure the cellular info, like APN and network type.

B. Click “Save” and “Apply” for configuration to take effect.

**Cellular Settings**

APN:

Username:

Password:

PIN Code:

Access Number:

Authentication Type:

Network Type:

PPP Preferred:

SMS Center:

Enable NAT:

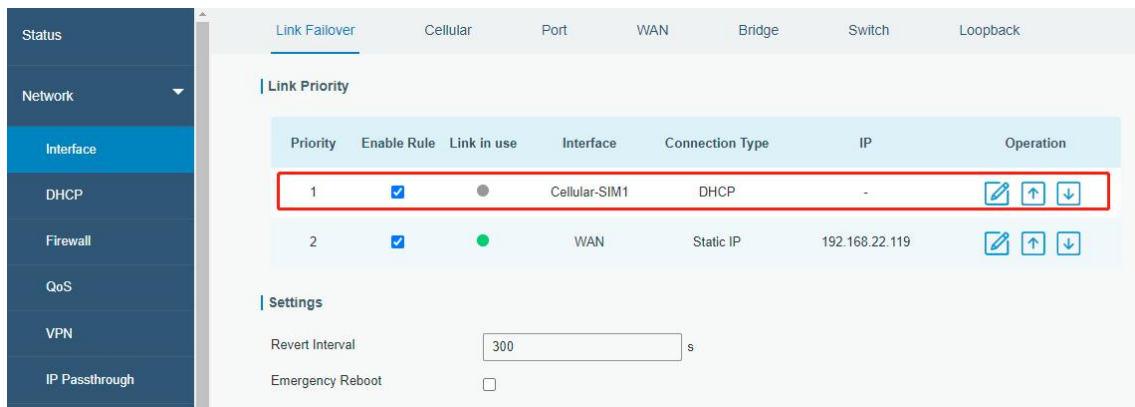
Roaming:

Data Limit:  MB

Billing Day: Day  of The Month

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.

C. Go to “Network > Interface > Link Failover” to enable SIM and rise link priority.



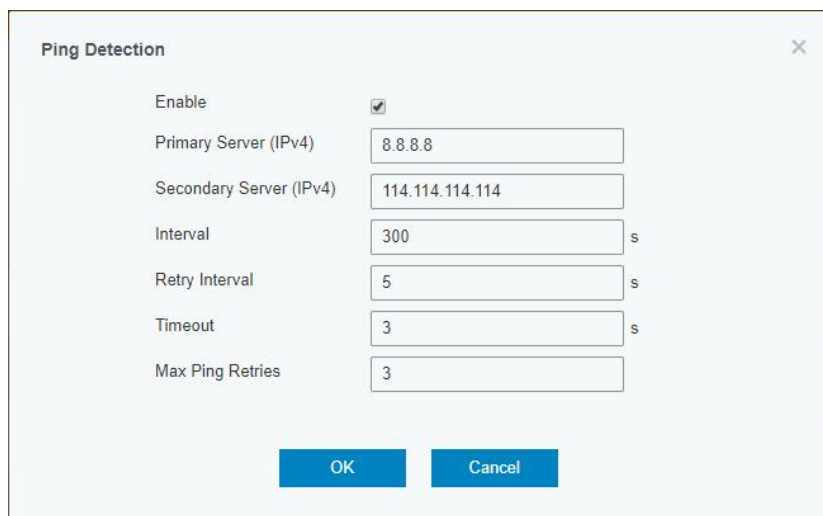
Priority	Enable Rule	Link in use	Interface	Connection Type	IP	Operation
1	<input checked="" type="checkbox"/>	<input type="radio"/>	Cellular-SIM1	DHCP	-	
2	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	WAN	Static IP	192.168.22.119	

**Settings**

Revert Interval:  s

Emergency Reboot:

D. Click  to configure ICMP ping detection information.



**Ping Detection**

Enable

Primary Server (IPv4)

Secondary Server (IPv4)

Interval  s

Retry Interval  s

Timeout  s

Max Ping Retries

E. 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.

Overview	Cellular	Network	VPN	Routing	Host List	GPS
<b>Modem</b>		<b>Network</b>				
Status	Ready	Status	Connected			
Model	EC25	IP Address	10.2.25.74			
Current SIM	SIM1	Netmask	255.255.255.240			
Signal Level	29asu (-55dBm)	Gateway	10.2.25.73			
Register Status	Registered (Home network)	DNS	211.136.17.107			
IMEI	861585042050250	Connection Duration	0 days, 00:00:34			
IMSI	460045927703654	<b>Data Usage Monthly</b>				
ICCID	89860439101880723654	SIM-1	RX: 0.0 MIB TX: 0.0 MIB ALL: 0.0 MIB			
ISP	CHINA MOBILE	SIM-2	RX: 0.0 MIB TX: 0.0 MIB ALL: 0.0 MIB			
Network Type	FDD LTE					
PLMN ID	46000					
LAC	592f					
Cell ID	271f848					

F. 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 UR32L router.

**[END]**

