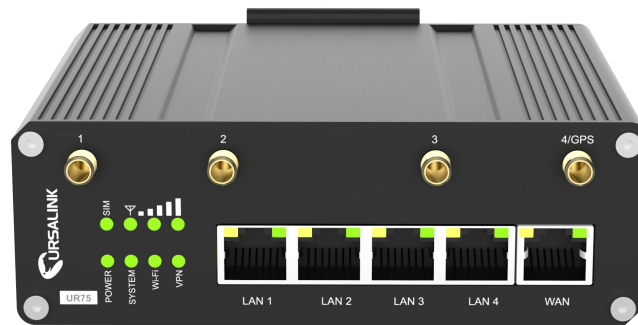# URSALINK

UR75

Industrial Cellular Router

Quick Start Guide

Welcome

Thank you for choosing Ursalink UR75 industrial cellular router.

This guide describes how to install the UR75 and how to log in the Web GUI to configure the device. Once you complete the installation, refer to the Ursalink UR75 User Guide for instructions on how to perform configurations on the device.

Related Documents

This Start Guide only explains the installation of Ursalink UR75 router. For more functionality and advanced settings, please refer to the relevant documents as below.

Document	Description
Ursalink UR75 Datasheet	Datasheet for the Ursalink UR75 industrial cellular router.
Ursalink UR75 User Guide	Users could refer to the guide for instruction on how to log in the web GUI, and how to configure all the settings.

The related documents are available on Ursalink website: http://www.ursalink.com.

Declaration of Conformity

UR75 are in conformity with the essential requirements and other relevant provisions of the CE, FCC, and RoHS.
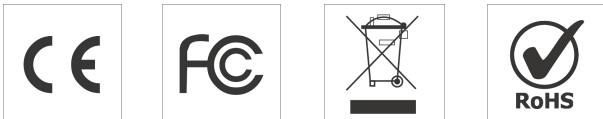
For assistance, please contact
Ursalink technical support:
Email: helpdesk@ursalink.com
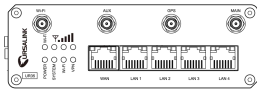Tel: 86-592-5023060
Fax: 86-592-5023065

Revision History

Date	Doc Version	Description
Aug. 4, 2020	V1.1	Initial version

Contents

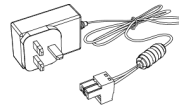<div style="background:#2E7CB8;color:#fff;padding:8px;">

1. Packing List

</div>

Before you begin to install the UR75 router, please check the package contents to verify that you have received the items below.
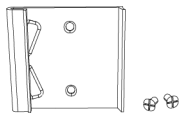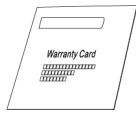
1 × UR75	1 × Ethernet Cable	1 × Power Adapter	1 × 8-Pin Pluggable Terminal

1 × DIN Rail Kit	1 × Warranty Card	1 × Wall Mounting Bracket (Optional)
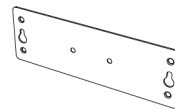
UR75-5G Antennas:
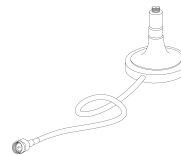
4 × Stubby Cellular Antennas	2 × Stubby Wi-Fi Antennas	Antenna Magnetic Mount (Optional)

UR75-4G Antennas:

2 × Magnetic Mount Cellular Antennas	2 × Stubby Wi-Fi Antennas	1 × GPS Antenna (GPS Version Only)	2 × Stubby Cellular Antennas (Optional)

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

2. Hardware Introduction
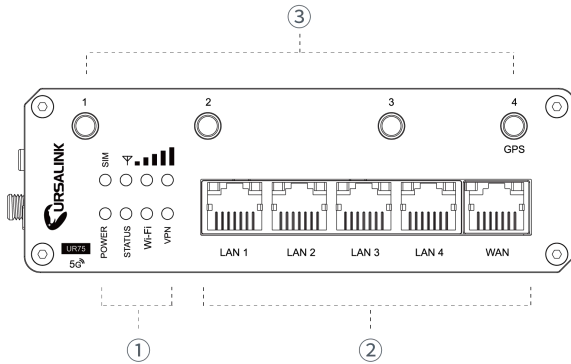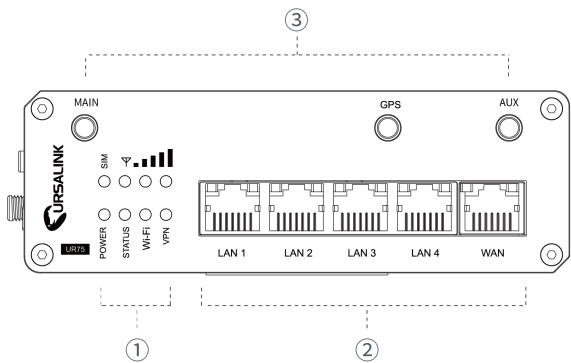
2.1 Overview

A. Front Panel of UR75-5G

① LED Indicator Area
    POWER: Power Indicator
    SYSTEM: Status Indicator
    Wi-Fi: Wi-Fi Indicator
    VPN: VPN Indicator
    SIM : SIM Status Indicator
    Ψ: Signal Strength Indicator
② Ethernet Ports & Indicators
③ Cellular Antenna Connectors
   (Connector 4 is for both GPS and cellular)

B. Front Panel of UR75-4G

① LED Indicator Area
    POWER: Power Indicator
    SYSTEM: Status Indicator
    Wi-Fi: Wi-Fi Indicator
    VPN: VPN Indicator
    SIM : SIM Status Indicator
    Ψ: Signal Strength Indicator
② Ethernet Ports & Indicators
③ Antenna Connectors
    MAIN: Main Cellular Antenna Connector
    AUX: Auxiliary Cellular Antenna Connector
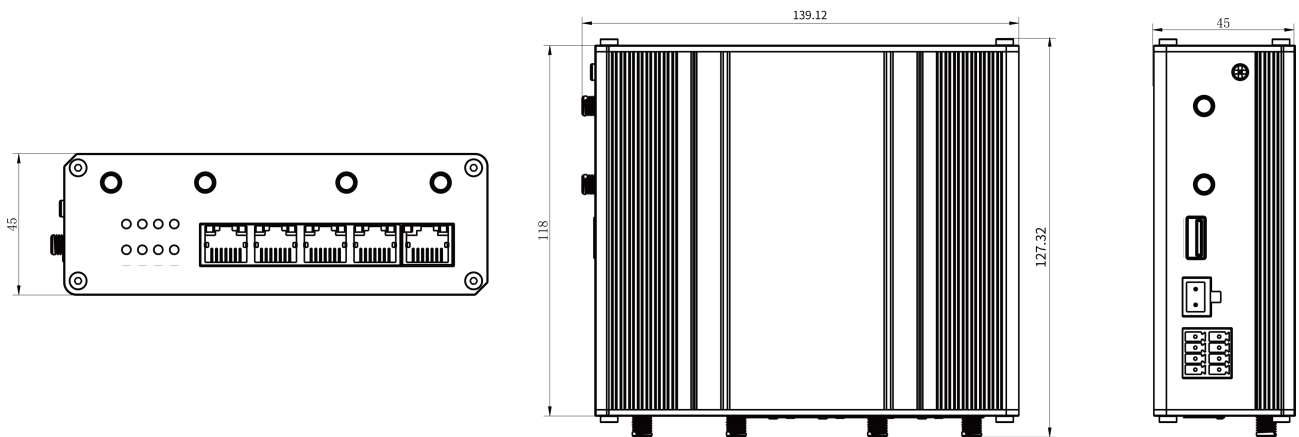   GPS: GPS Antenna Connector

C. Left Side Panel
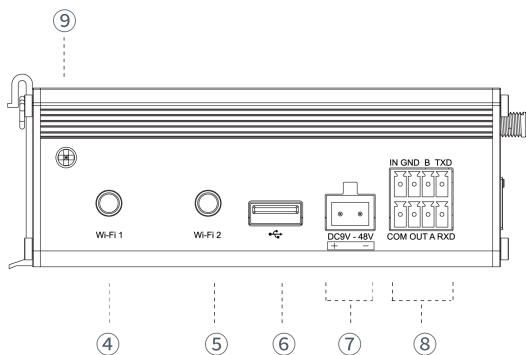
④ Wi-Fi Antenna Connector 1
⑤ Wi-Fi Antenna Connector 2
⑥ USB Port (Reserved)
⑦ Power Connector
⑧ Serial Port & I/O Ports
⑨ Grounding Stud

D. Right Side Panel
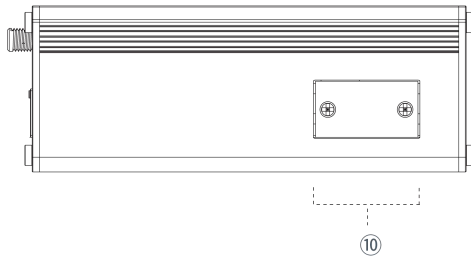
⑩ SIM and Reset Button Holder

⑩

2.2 Dimensions (mm)

139.12

45

118

127.32

45

2.3 Connectors

Serial Port&I/O Ports

1 2 3 4

5 6 7 8
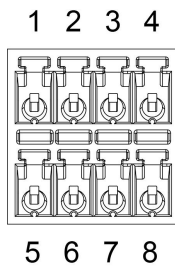
PIN	RS232	RS485	DI	DO	Description
1	---	---	IN	---	Digital Input
2	GND	---	GND	---	Ground
3	---	B	---	---	Data -
4	TXD	---	---	---	Transmit Data
5	---	---	---	COM	Common Ground
6	---	---	---	OUT	Digital Output
7	---	A	---	---	Data +
8	RXD	---	---	---	Receive Data

Power Connector

9 10
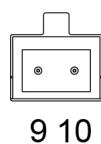
PIN	Description	Wire Color
9	Positive	Red
10	Negative	Black

2.4 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
VPN	VPN Status	Off	VPN is disconnected
		Green Light	VPN is connected
Wi-Fi	Wi-Fi Status	Off	Wi-Fi is disabled
		Green Light	Wi-Fi is enabled
SIM	SIM Card Status	Off	SIM1 or SIM2 is registering or fails to register (or there are no SIM cards inserted)
		Green Light	Blinking slowly: SIM1 (as primary SIM) has been registered and is ready for dial-up
			Blinking rapidly: SIM1(as primary SIM) has been registered and is dialing up now
			Static: SIM1 (as primary SIM) has been registered and dialed up successfully
		Orange Light	Blinking slowly: SIM2 (as primary SIM) has been registered and is ready for dial-up
			Blinking rapidly: SIM2(as primary SIM) has been registered and is dialing up now
			Static: SIM2 (as primary 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)

2.5 Reset Button

⚠ Reset button is under the SIM slots.

| 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.

2.6 Ethernet Port Indicator

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

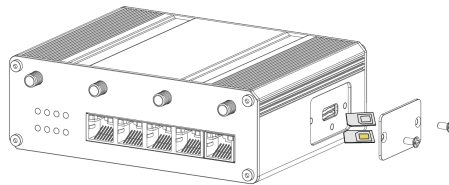## 3. Hardware Installation

3.1 SIM Card Installation

⚠️ UR75 do not support hot-plug. Please cut off the power before insert or take off cards.
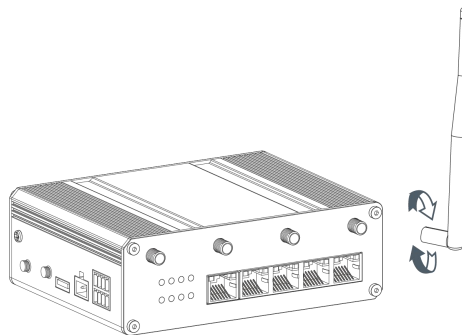
A. Unscrew the holder of the SIM card.
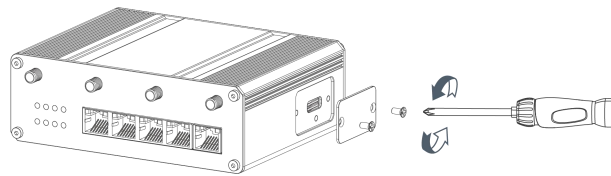
B. Insert the SIM card(s) into the device following the triangle location of SIM card(s).
C. Put SIM card into the slot and screw it up.

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.
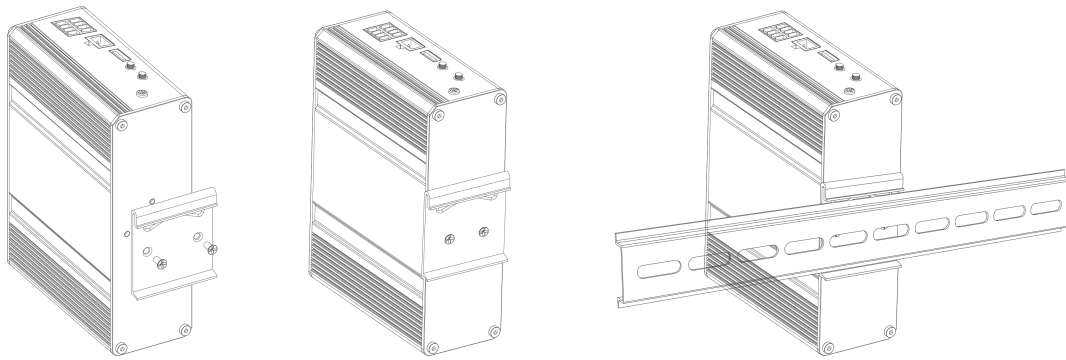

3.3 Mount the Router

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

3.3.1 DIN Rail Mounting

Use 2 pcs of M3 × 6 flat head Phillips screws to fix the DIN rail to the router, and then hang the DIN rail on the mounting bracket. It is necessary to choose a standard bracket.

⚠️ **Recommended torque for mounting is 1.0 N·m, and the maximum allowed is 1.2 N·m.**
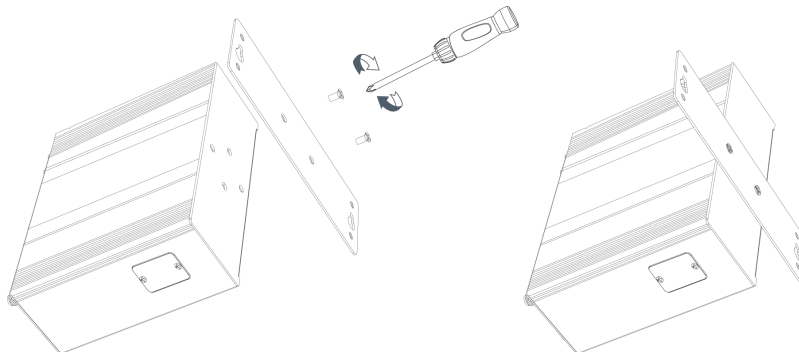
3.3.2 Wall Mounting

Use 2 pcs of M3 × 6 flat head Phillips screws to fix the wall mounting kit to the router, and then use 2 pcs of M3 drywall screws to mount the router associated with the wall mounting kit on the wall.
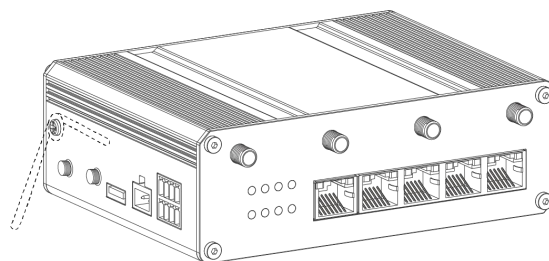
⚠ **Recommended torque for mounting is 1.0 N·m, and the maximum allowed is 1.2 N·m.**

3.4 Protective Grounding Installation

A. Remove the grounding nut.
B. Connect the grounding ring of the cabinet's grounding wire onto the grounding stud and screw up the grounding nut.

⚠ **The router must be grounded when deployed. According to operating environment, the ground wire should be connected with grounding stud of router.**

4. Log in the Web GUI of Router

4.1 PC Configuration

Please connect PC to any port among LAN1-LAN4 of UR75 router directly. 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 the Web GUI.)
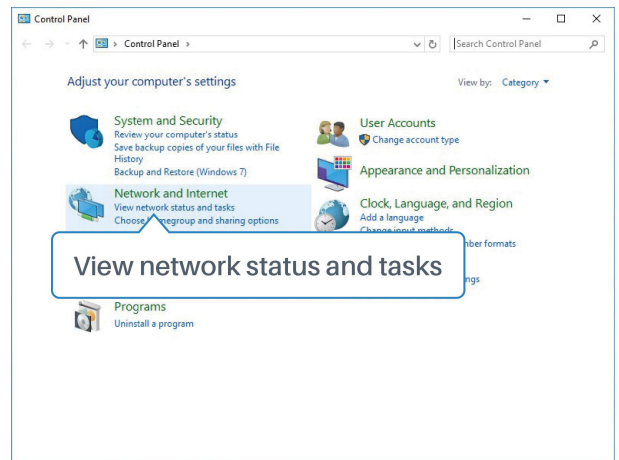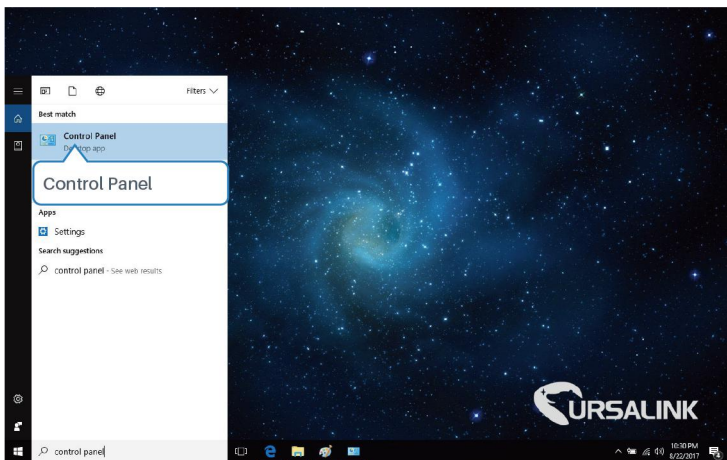
① Click "Search Box" to search "Control Panel" on the Windows 10 taskbar.

② Click "Control Panel" to open it, and then click "View network status and tasks".
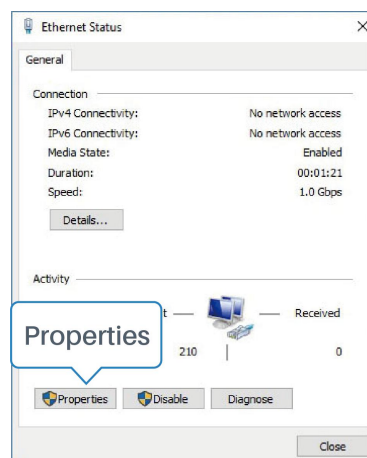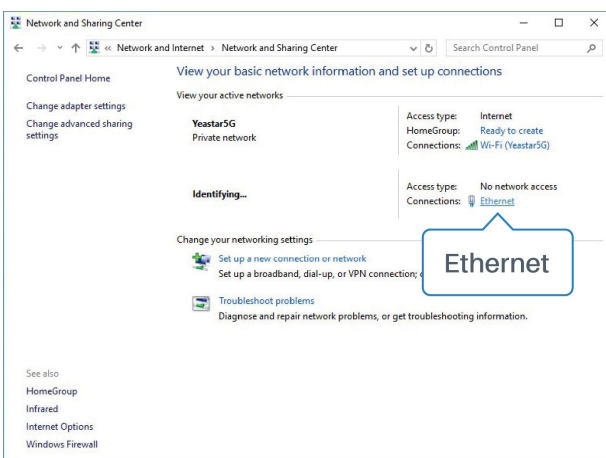
③ Click "Ethernet" (May have different names).

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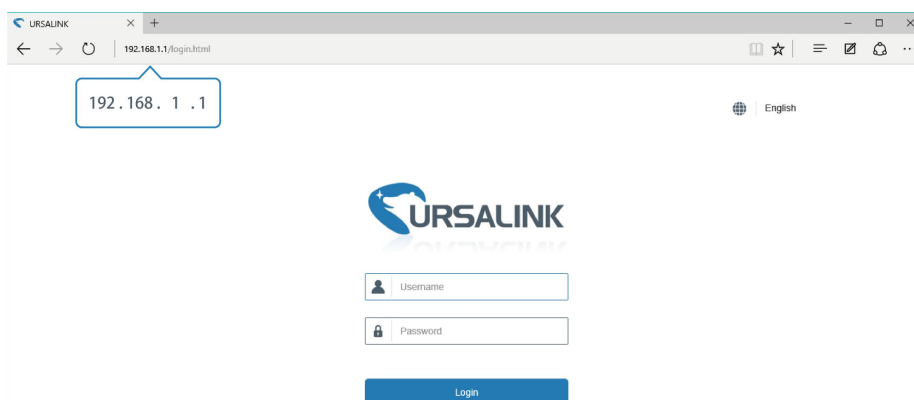IP Address: **192.168.1.1**
Username: **admin**
Password: **password**

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

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.
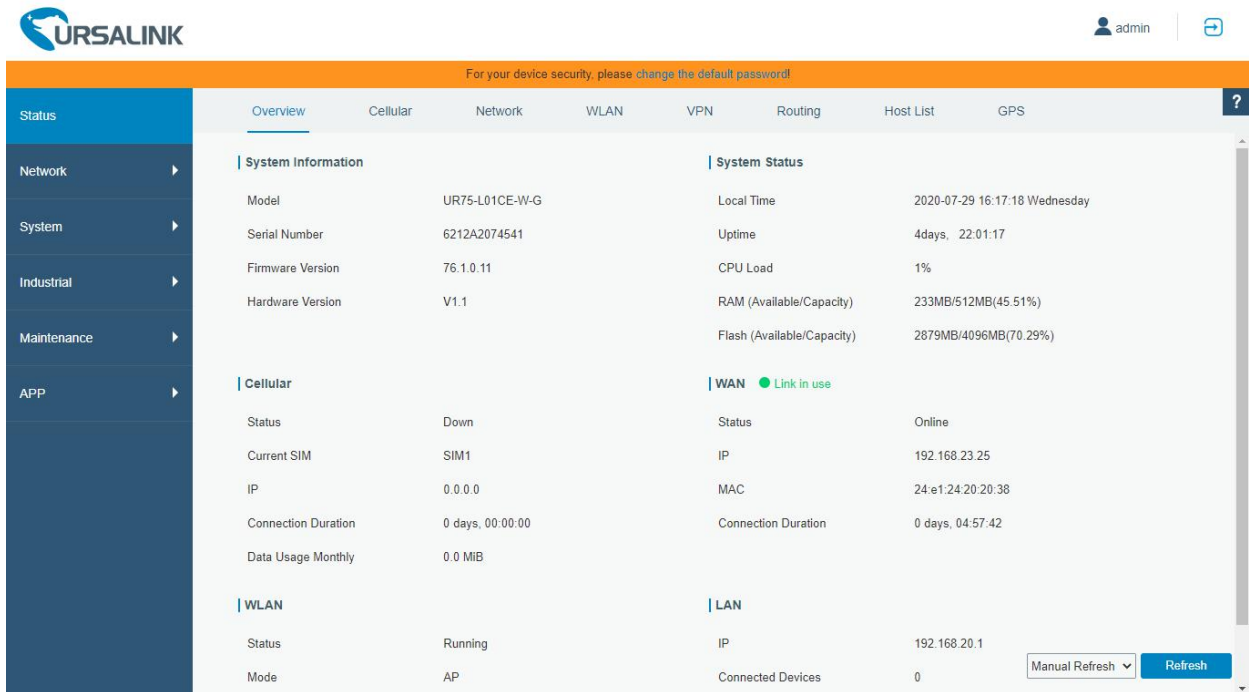
Change Password ✕

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.

5. Network Connection of Router

This chapter explains how to connect UR75 to network via WAN connection, cellular and Wi-Fi.

5.1 Ethernet WAN Configuration

A. 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.

Status	Link Failover	Cellular	Port	WAN	Bridge

| WAN Settings

— WAN_1

Enable	☑	
Port	WAN	
Connection Type	Static IP	▼
IPv4 Address	192.168.22.231	
Netmask	255.255.255.0	
IPv4 Gateway	192.168.22.1	
IPv6 Address	fe80::26e1:24ff:fef0:3ee0	
Prefix-length	64	
IPv6 Gateway		
MTU	1500	
Primary DNS	8.8.8.8	
Secondary DNS		
Enable NAT	☑	

Sidebar: Status, Network (Interface, DHCP, Firewall, QoS, VPN, IP Passthrough, Routing, VRRP, DDNS), System, Industrial

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

B. Connect UR75 WAN port to another router or modem.

C. Log in UR75 web GUI via WAN port IP address and go to "Status > Network" to check if status is "up".

Status	Overview	Cellular	Network	WLAN	VPN	Routing	Host List	GPS

| WAN-IPv4

Port	Status	Type	IP	Netmask	Gateway	DNS	Connection Duration
WAN	up	Static	192.168.22.231	255.255.255.0	192.168.22.1	8.8.8.8	18h 54s

D. Go to "Network > Interface > Link Failover" to rise the WAN priority to 1.
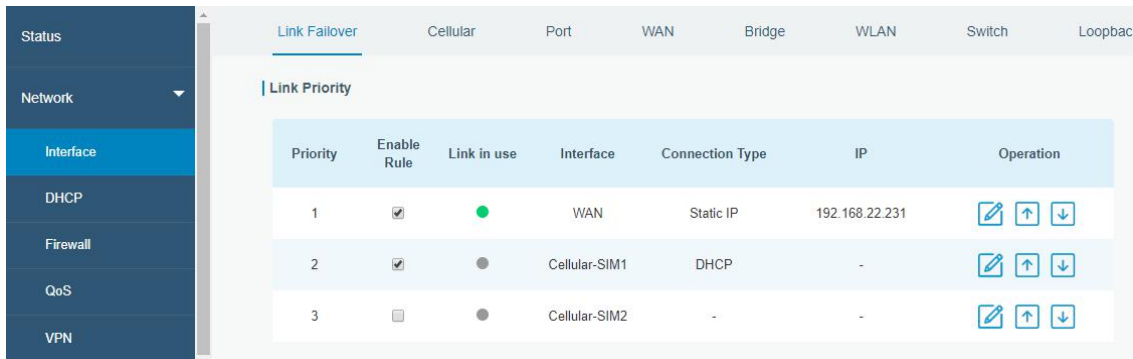
E. Open your preferred browser on PC, then type any available web address into address bar and see if it is able to visit Internet via UR75 router.

5.2 Cellular Connection Configuration

Take inserting SIM card into SIM1 slot as an example; please refer to the following detailed operations.

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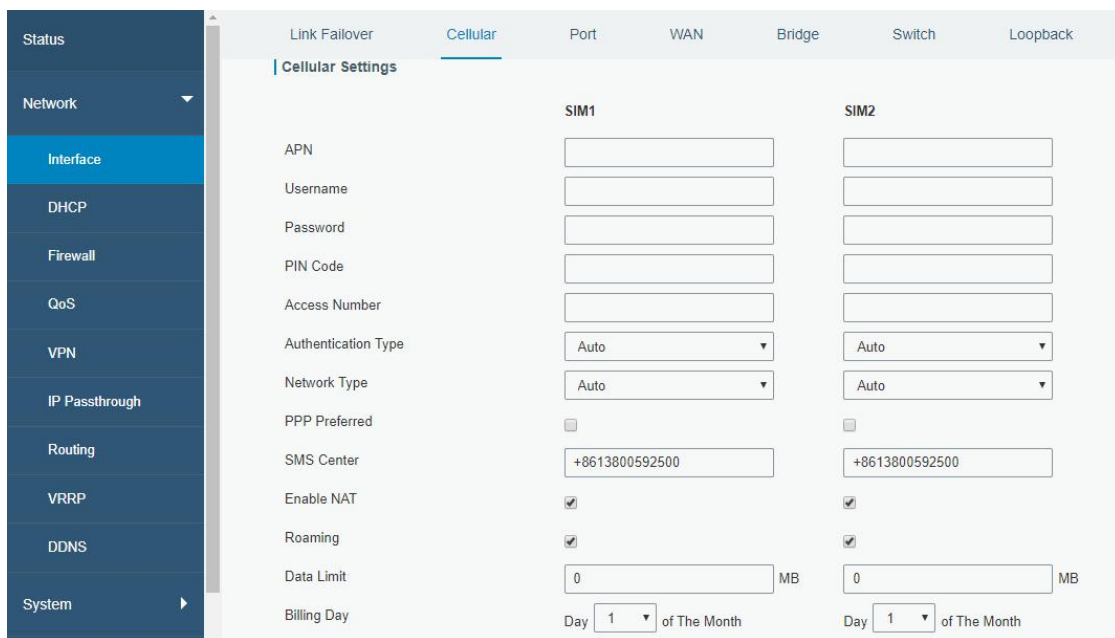
If you select "Auto", the router will obtain ISP information from SIM card to set APN, Username, and Password automatically. This option will only be taken effect when the SIM card is issued from a well-known ISP.

C. Go to "Network > Interface > Link Failover" to enable SIM1 and rise link priority of SIM1.

D. Click [icon] to configure ICMP ping detection information.
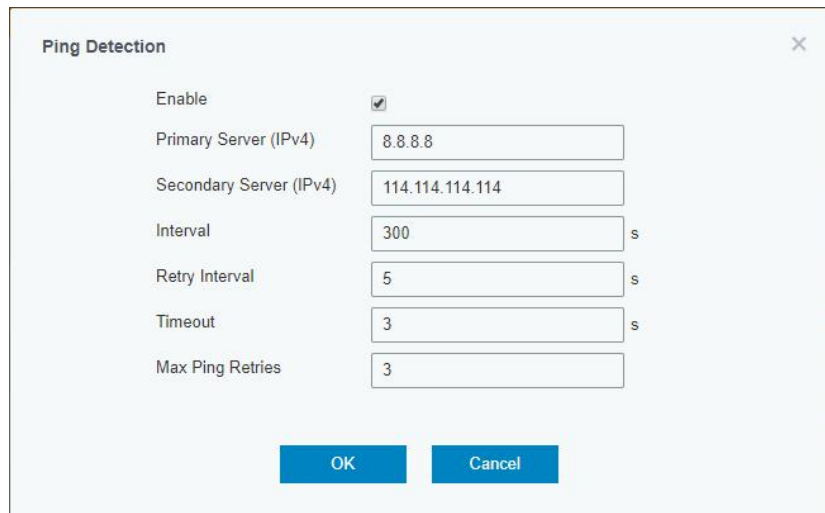
E. Click "Status > Cellular" to view the status of the cellular connection. If it shows "Connected", it means SIM1 has dialed up successfully.

On the other hand, you can check the status of SIM indicator. If it keeps on green light statically, it means SIM1 has dialed up successfully.

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 UR75 router.
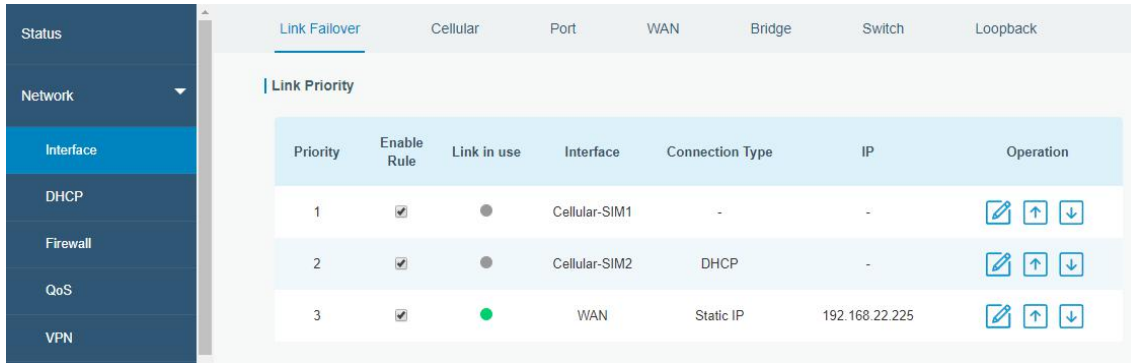
5.3 Wi-Fi Connection Configuration

A. Go to "Network > Interface > WLAN" and select "Client" mode.
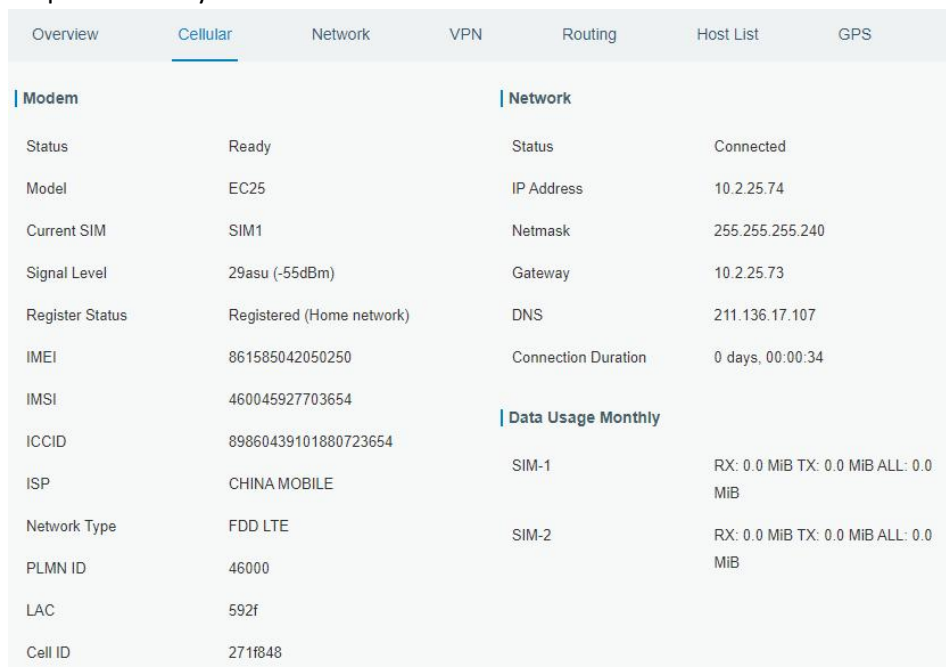B. Click "Scan" to search for Wi-Fi access point. Select the available one and click "Join Network".
Note: WLAN1 supports 2.4GHz and WLAN2 supports 5GHz.

SSID	Channel	Signal	Cipher	BSSID	Security	Frequency	
Ursalink_F0C419	1	-90dBm	Auto	24:E1:24:F0:C4:19	No Encryption	2412MHz	Join Network
Ursalink_F0C407	11	-65dBm	Auto	24:E1:24:F0:C4:07	No Encryption	2462MHz	Join Network
Ursalink_F0C40D	11	-73dBm	Auto	24:E1:24:F0:C4:0D	No Encryption	2462MHz	Join Network
Ursalink_F0C609	6	-77dBm	Auto	24:E1:24:F0:C6:09	No Encryption	2437MHz	Join Network
Ursalink_F0C425	1	-89dBm	Auto	24:E1:24:F0:C4:25	No Encryption	2412MHz	Join Network
Ursalink_F0C372	1	-80dBm	Auto	24:E1:24:F0:C3:71	No Encryption	2412MHz	Join Network
Ursalink_12B114	6	-83dBm	Auto	24:E1:24:12:B1:14	No Encryption	2437MHz	Join Network

C. Type the correct key of Wi-Fi.

WLAN	
Enable	☑
Work Mode	Client [Scan]
SSID	Ursalink_RD
BSSID	24:e1:24:f0:25:5a
Encryption Mode	WPA-PSK/WPA2-PSK
Cipher	AES
Key	••••••••
IP Setting	
Protocol	DHCP Client

D. Go to "Status > WLAN" to check Wi-Fi status. If it shows "Connected", it means router connects to Wi-Fi successfully.

| | Overview | Cellular | Network | WLAN | VPN | Routing | Host List |

WLAN Status

Name	Status	Type	SSID	IP Address	Netmask
WLAN1	Connected	Client	Ursalink_RD	192.168.1.108	255.255.255.0

Associated Stations

SSID	MAC Address	IP Address	Connection Duration

E. Go to "Network > Interface > Link Failover" to enable WLAN and rise link priority of WLAN.

| | Link Failover | Cellular | Port | WAN | Bridge | WLAN | Switch | Loopback |

Link Priority

Priority	Enable Rule	Link in use	Interface	Connection Type	IP	Operation
1	☑	●	WLAN	DHCP	-	✎ ↑ ↓
2	☑	●	WAN	Static IP	192.168.24.125	✎ ↑ ↓
3	☐	●	Cellular-SIM1	DHCP	-	✎ ↑ ↓
4	☐	●	Cellular-SIM2	-	-	✎ ↑ ↓

[END]