Industrial Router Lite Series

UR32L

Quick Start Guide

Safety Precautions

Milesight will not shoulder responsibility for any loss or damage resulting from not following the instructions of this operating guide.

● The device must not be modified in any way.

● Do not place the device close to objects with naked flames.

● Do not place the device where the temperature is below/above the operating range.

● Do not power on the device or connect it to other electrical device when installing.

● Check lightning and water protection when used outdoors.

● Do not connect or power the equipment using cables that have been damaged.

Related Documents

This Start Guide only explains the installation of Milesight UR32L router. For more functionality and advanced settings, please refer to the relevant documents as below.

Document	Description
UR32L Datasheet	Datasheet for UR32L industrial cellular router.
UR32L 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 Milesight website: https://www.milesight-iot.com

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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Revision History

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

Contents

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.
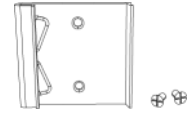

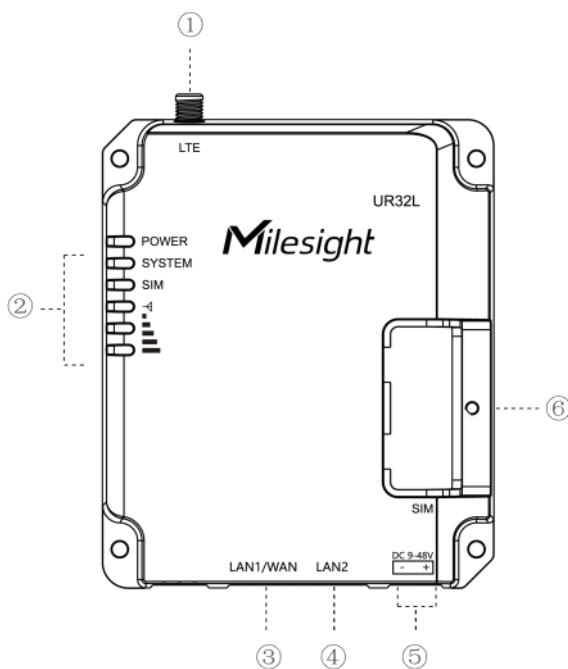|			
1 × UR32L	1 × Magnetic Cellular Antenna	1 × Power Adapter	1 × DIN Rail Kit
4 × Wall Mounting Kits	1 × Warranty Card	1 × Quick Start Guide	1 × Stubby Cellular Antenna (Optional)

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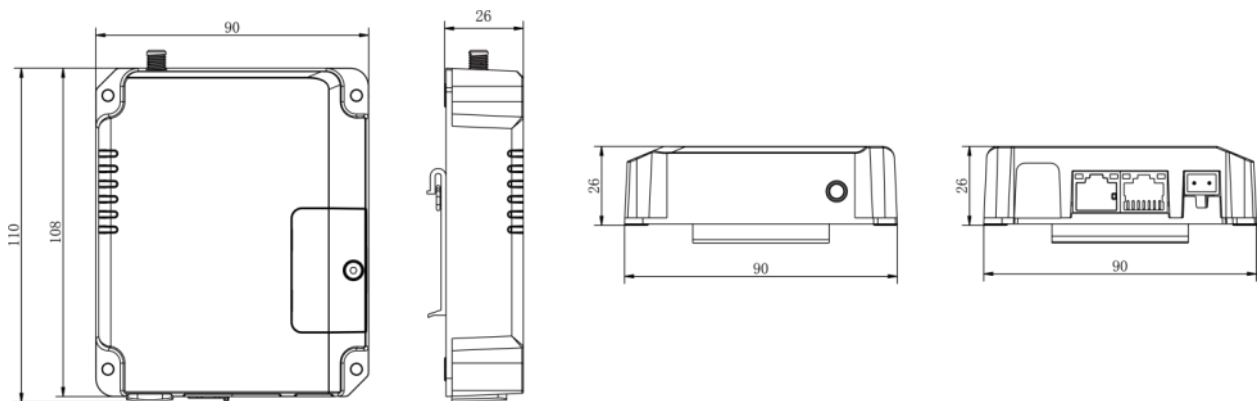
2. Hardware Introduction

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 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.

2.5 Ethernet Port Indicator

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

3. Hardware Installation

Environmental Requirements

- Power Input: 9-48 VDC (48 VDC is needed for PoE output)
- Power Consumption: Typical 1.8 W (Max 2.2 W)
- Operating Temperature: -40°C to 70°C (-40°F -158°F)
- Relative Humidity: 0% to 95% (non-condensing) at 25°C/77°F

3.1 SIM Card Installation

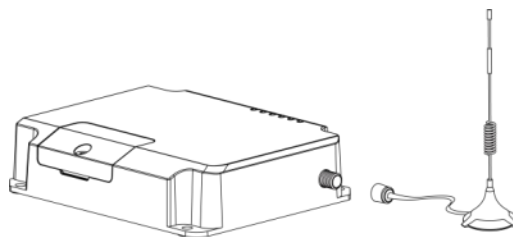A. Unscrew the cover of the SIM card then take it off.
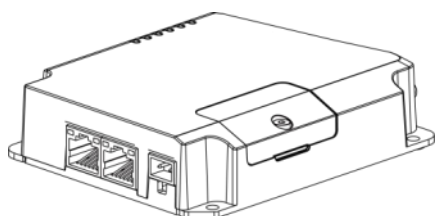
B. Put SIM card into the slot and screw it up.
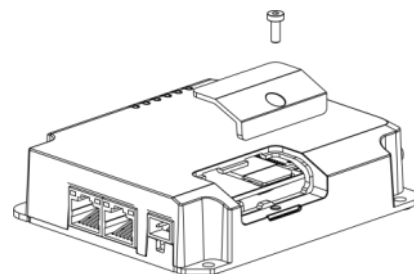
3.2 Antenna Installation

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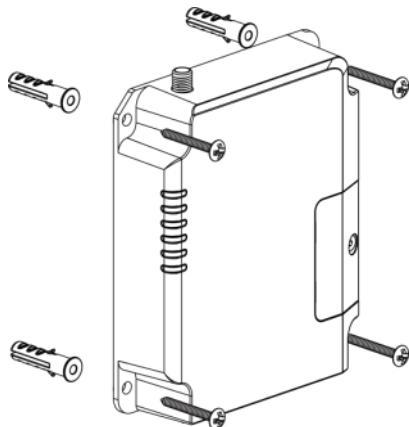
3.3 Router Installation

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.**
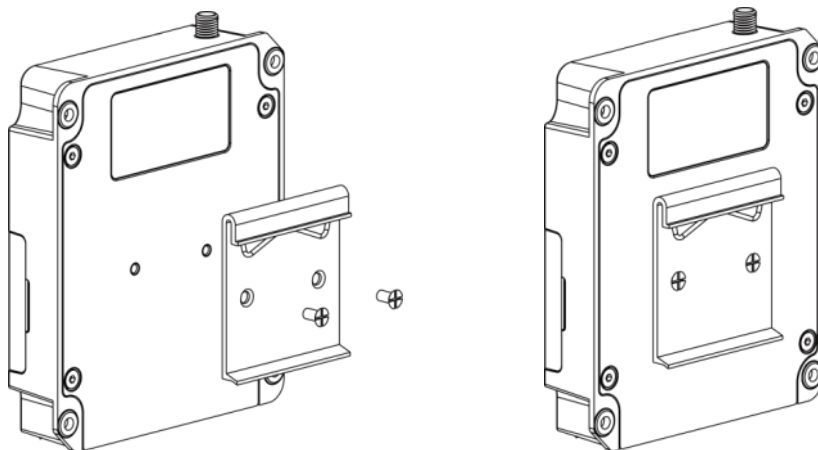
4. Log in the Web GUI of Router

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.
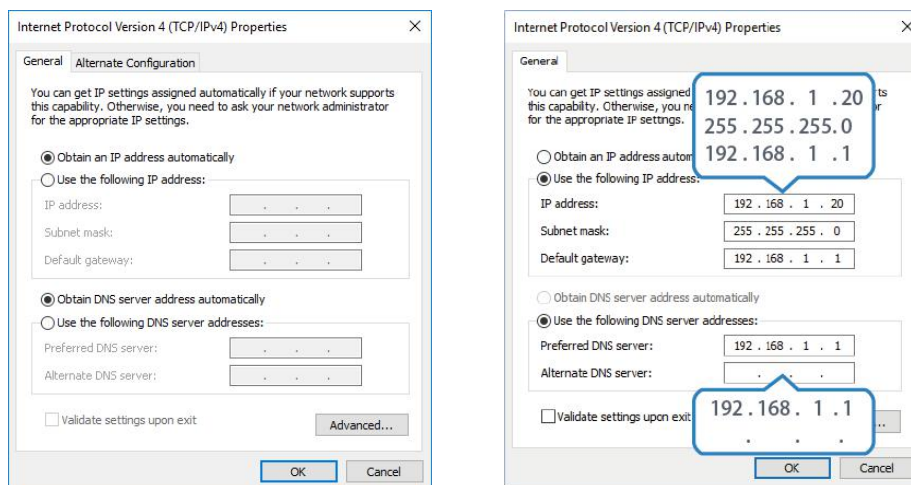
IP Address: **192.168.1.1**

Username: **admin**

Password: **password**

A. Go to "Control Panel" → "Network and Internet" → "Network and Sharing Center", then click "Ethernet" (May have different names).
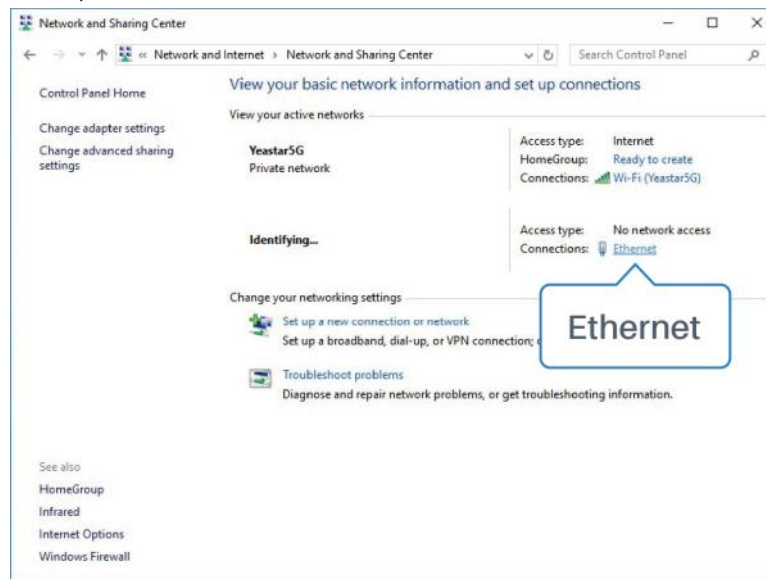
B. Go to "Properties" → "Internet Protocol Version 4(TCP/IPv4) ", select "Obtain an IP address automatically" or "Use the following IP address", then assign a static IP manually within the same subnet of the device.

C. Open a Web browser on your PC (Chrome is recommended), type in the IP address 192.168.1.1, and press Enter on your keyboard.
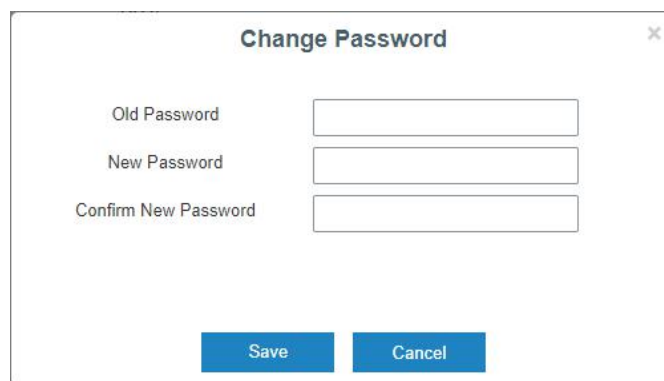
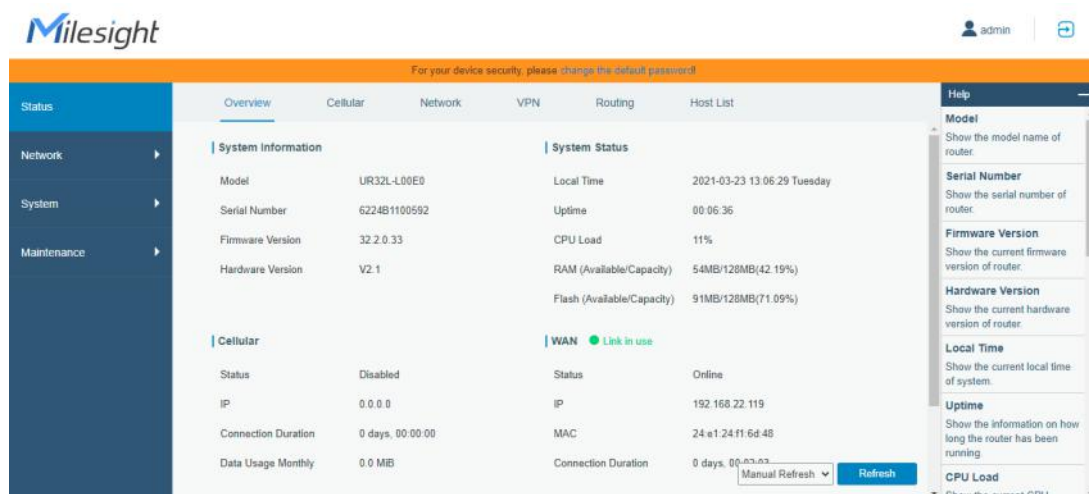D. Enter the username, password, and click "Login".

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

E. When you login 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.

F. After you login the Web GUI, you can view system information and perform configuration on the router.

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.
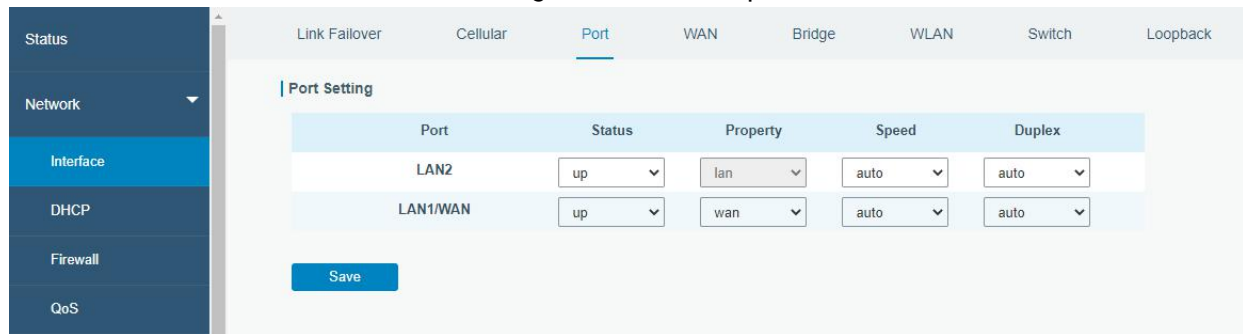
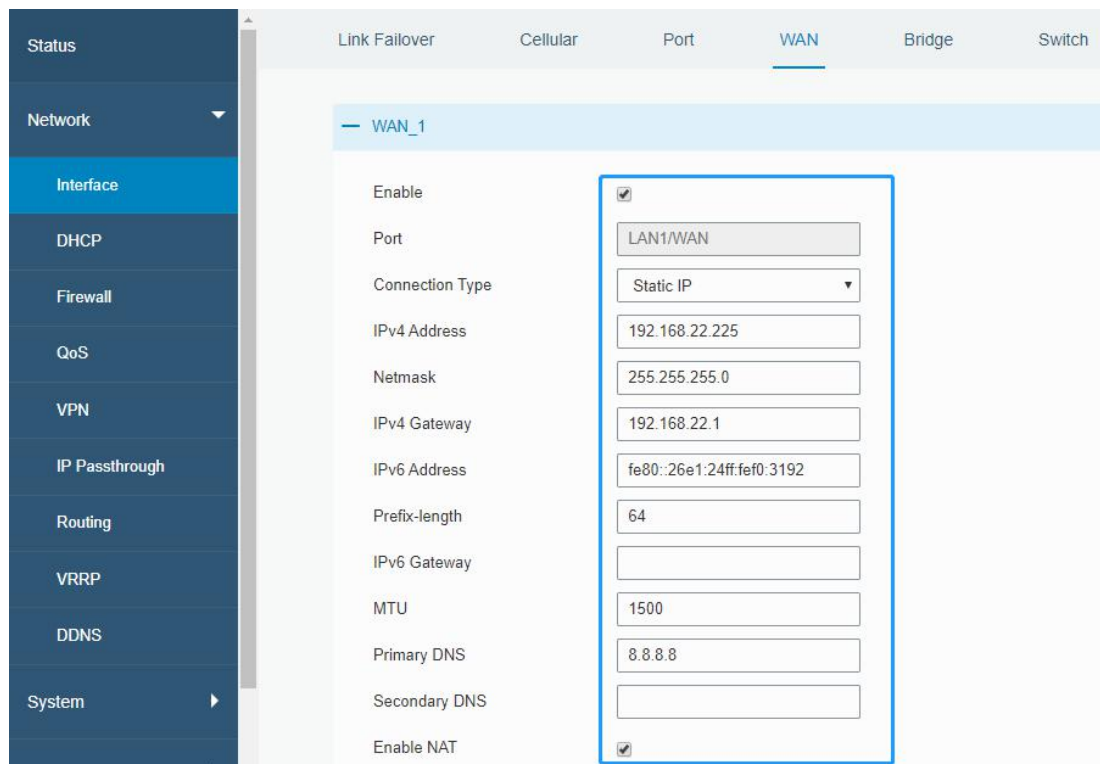B. Go to "Network > Interface > WAN" to select connection type and configure WAN parameters, click "Save & Apply" button to make the changes take effect.

C. Connect WAN port to another network devices like modem.

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 UR32L router.

5.2 Cellular Connection Configuration

A. Go to "Network > Interface > Cellular > Cellular Setting" to configure APN, PIN code or other cellular info, click "Save" and "Apply" to save the configuration.

B. Go to "Network > Interface > Link Failover" to enable SIM and rise link priority.

C. Click ✏ to configure ICMP ping detection information.

Ping Detection

Enable	☑
IPv4 Primary Server	8.8.8.8
IPv4 Secondary Server	114.114.114.114
IPv6 Primary Server	2001:4860:4860::8888
IPv6 Secondary Server	2400:3200::1
Interval	300 s
Retry Interval	5 s
Timeout	3 s
Max Ping Retries	3

OK   Cancel

D. 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

Modem		**Network**	
Model	EC25	Status	Connected
Version	EC25EUXGAR08A05M1G	IPv4 Address	10.142.57.34/30
Signal Level	23asu (-67dBm)	IPv4 Gateway	10.142.57.33
Register Status	Registered (Home network)	IPv4 DNS	211.136.17.107
IMEI	862506043707416	IPv6 Address	fe80::cca3:25ff:fed2:908/64
IMSI	460081370507437	IPv6 Gateway	::
ICCID	89860493262190157437	IPv6 DNS	::
ISP	CHINA MOBILE	Connection Duration	0 days, 00:23:21
Network Type	TDD LTE	**Data Usage Monthly**	
PLMN ID	46000	RX	4.0 MiB
LAC	592f	TX	2.8 MiB
Cell ID	ceb972a	ALL	6.8 MiB

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 UR32L router.

[END]