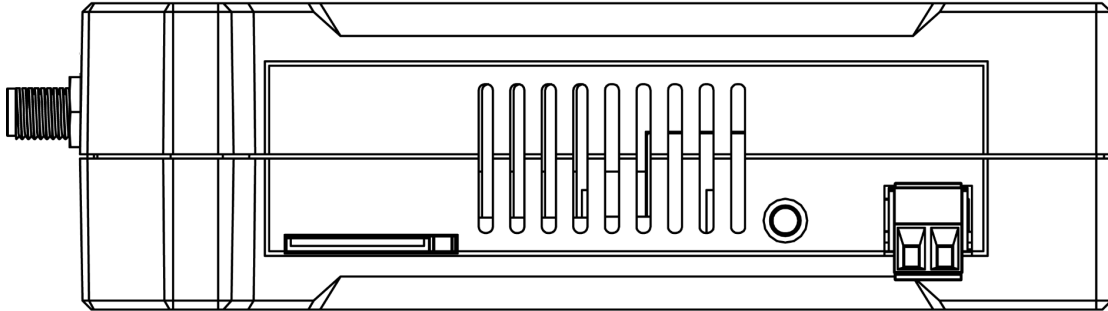
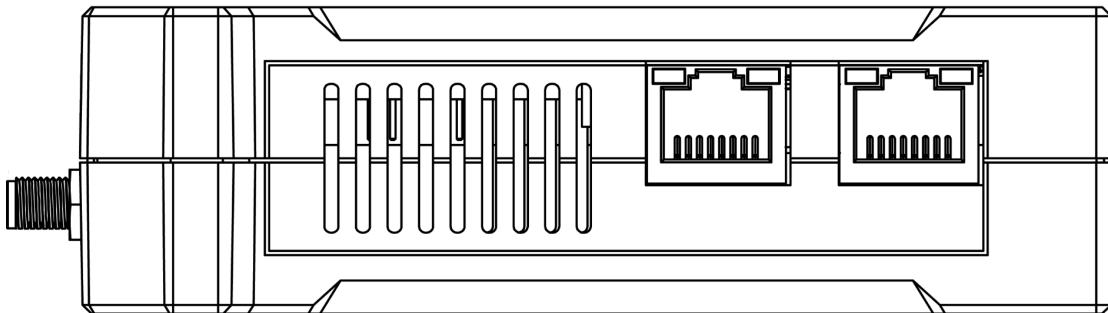


# RLTK420

## Routers



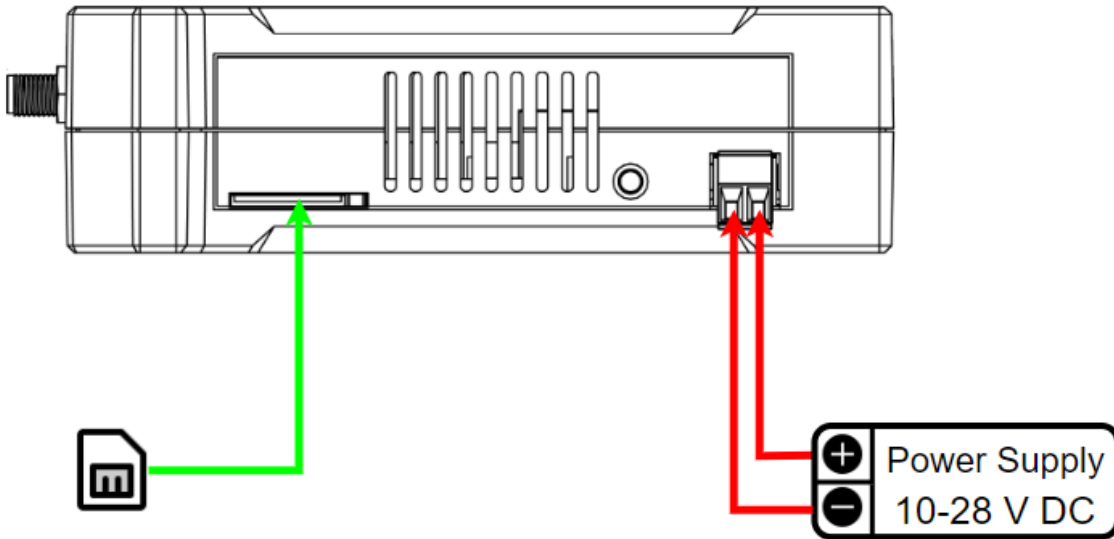
## Quick Start Guide

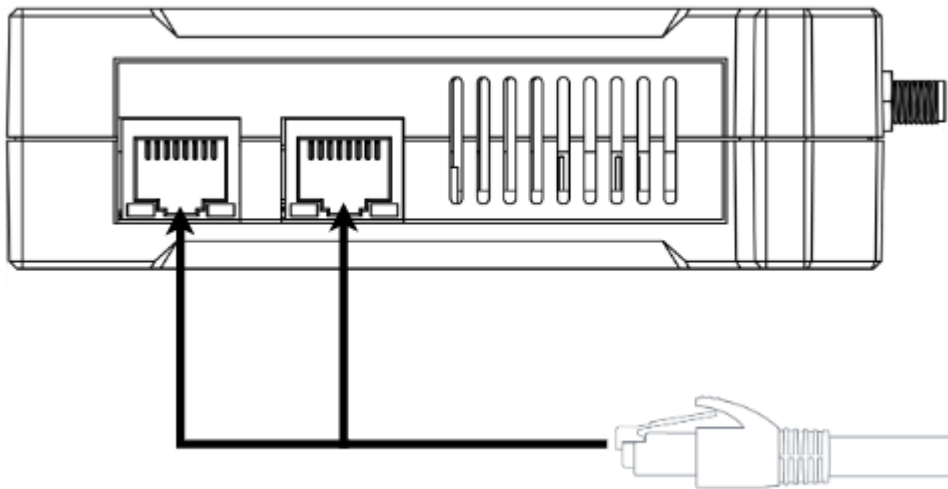
**SIDE VIEW**

**SIDE VIEW**


### Index Numbers and Functions

Wiring/ Index Number	Function
ANT	SMA - Antenna
COM IN	Com In(-)
IN 1	Digital Input
IN 2	Digital Input
IN 3	Digital Input
IN 4	Digital Input
IN 5	Digital Input

IN 6	Digital Input
COM IN	Com In(-)
O1 NO	Output 1 NO
O1 COM	Output 1 COM
O2 NO	Output 2 NO
O2 COM	Output 2 COM
PWR -	GND
PWR +	DC IN – ( 10 – 26VDC )
RST	Reset
RS485 B	RS485 - B
RS485 E	RS485 - E
RS485 A	RS485 - A
ETH	Ethernet

**TABLE-1**

**FIGURE-1**


**FIGURE-2**

## Hardware Installation

△ Follow these steps before powering on the device;△

- The power connection of the device is shown in red in figure-1. Polarization is important in the power connection.
- The sim card can be inserted into its slot as shown in green in figure 1. The orientation of the sim card is important.
- Ethernet connection shown in black in figure-2.

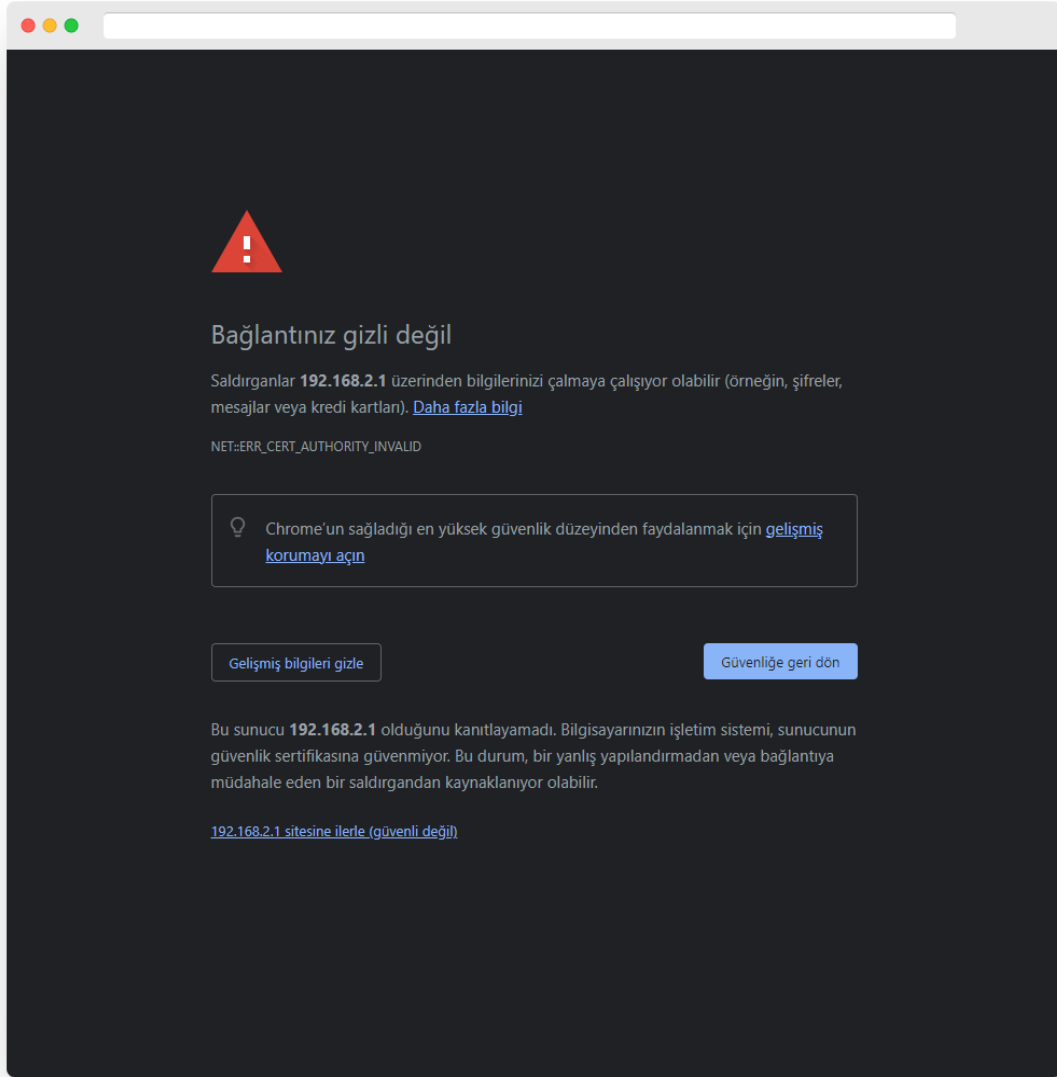
After this step make sure everything is same as the wiring diagram, then power the device

If the connection is correct u should see the power led blink, if it's not check the “common errors and solutions” section.

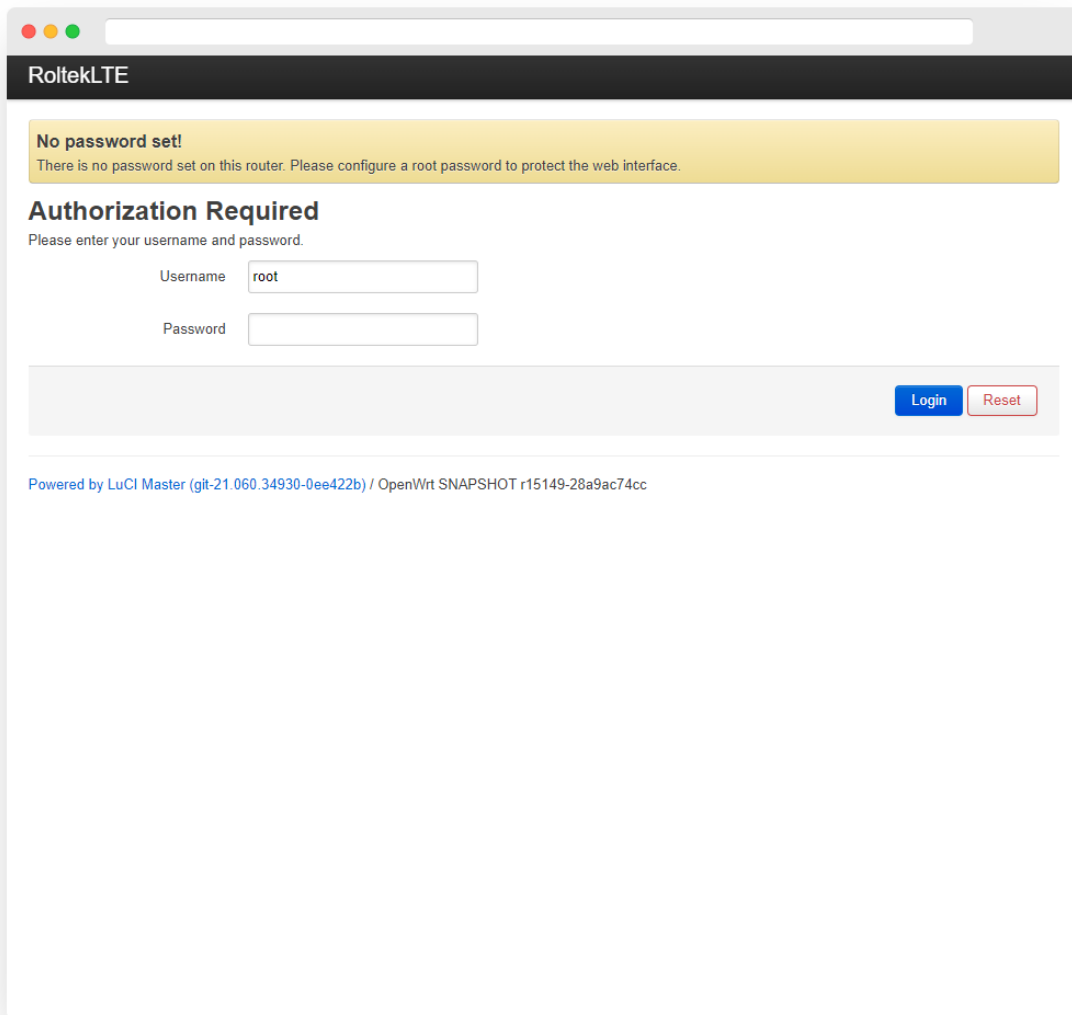
## How to Connect Device’s Interface

To connect to the device interface, the device must be connected to the computer via the **WAN / LAN0** or **LAN1** ethernet port. The computer's ethernet configuration must be DHCP.

After turning on the device and assigning an IP to the computer, the interface can be accessed by typing **192.168.2.1** in the web browser. To access the interface, click **Advanced and proceed to 192.168.2.1 (not secure)**.



On the next page, you need to enter your username and password. Username is "**root**" by default. If you are using the device for the first time or if you have not saved a password to the device, leave the password field blank. When you click the **login** button, you will be logged into the device. The **reset** button clears the username and password entries.



If the login is successful the following page should pop up.

RoltekLTE
REFRESHING

[Status](#) | [System](#) | [Services](#) | [Network](#) | [VPN](#) | [Logout](#)

**No password set!**  
There is no password set on this router. Please configure a root password to protect the web interface.

## Status

### System

Hostname	RoltekLTE
Model	SKYLAB SKW92A
Architecture	MediaTek MT7628AN ver:1 eco:2
Firmware Version	OpenWrt SNAPSHOT r15149-28a9ac74cc / LuCI Master git-21.060.34930-0ee422b
Kernel Version	5.4.81
Local Time	2023-01-24 12:03:13
Uptime	0h 1m 56s
Load Average	1.74, 0.74, 0.28

### Memory

Total Available	72.48 MB / 120.66 MB (60%)
Used	33.53 MB / 120.66 MB (27%)
Buffered	4.72 MB / 120.66 MB (3%)
Cached	12.09 MB / 120.66 MB (10%)

### Network

IPv4 Upstream

Protocol: DHCP client  
 Address: 10.115.58.65/30  
 Gateway: 10.115.58.66  
 DNS 1: 213.74.0.4  
 DNS 2: 213.74.1.4  
 Expires: 1h 59m 29s  
 Connected: 0h 0m 31s

Device: Ethernet Adapter: "wwan0"

Active Connections 201 / 16384 (1%)

#### Active DHCP Leases

Hostname	IPv4-Address	MAC-Address	Lease time remaining	Static Lease
LAPTOP-T8VD3QHF	192.168.2.149	F8:75:A4:71:10:E9	expired	<a href="#">Set Static</a>

#### Active DHCPv6 Leases

Host	IPv6-Address	DUID	Lease time remaining	Static Lease
LAPTOP-T8VD3QHF	fd0a:b487:b57d::ba1	000100012597745af875a47110e9	expired	<a href="#">Set Static</a>

### Wireless

radio0

Type: MediaTek MT76x8 802.11bgn  
 Channel: -  
 Bitrate: -

#### Associated Stations

Network	MAC-Address	Host	Signal / Noise	RX Rate / TX Rate
No information available				

Powered by LuCI Master (git-21.060.34930-0ee422b) / OpenWrt SNAPSHOT r15149-28a9ac74cc

On this screen, it is possible to monitor the status of the device.

In the **System** section, **Local Time** shows the current time and date value if the device was able to establish a connection over **LTE**. **Uptime** shows how long the device has been on.

In the **Network** section, the **LTE** connection status of the device and if the connection is provided, IP Address, DNS, etc. information can be viewed.

In the **Active DHCP Leases** section, the IP addresses of the devices connected to the device via ethernet can be seen.

More detailed instructions can be found at [www.roltek.com.tr](http://www.roltek.com.tr)

## Common Errors and Solutions

### 1- Device Does Not Run When Energized / PWR Led Is Not On or Is Constantly On!

Power supply connection may be reverse or the cable may be faulty. Please check the supply voltage levels and try again.

### 2-Device Boot Message Does Not Appear!

Check your device's energy connection, RS485 and connection speed. Then reset the device. If the message is not received, consult the technical team.

### 3- Devices Not Communicating!

If communication cannot be established after receiving the device's opening message, it is necessary to check the settings of each device.

The communication speed, frequency channel and ID configuration of the devices should be the same. If the settings are correct however there is no communication, please be sure that the antennas are in line of sight and the distance is in operable range.

### 4- Devices Draw High Current!

If the device starts to draw high current when it is energized, there may be an error in the connections. If all connections are made correctly and this situation continues, there may have been a previous faulty connection on the device or a situation that could damage the device's operation. In such cases, turn off the energy and consult the technical team.

### 5- Repeated Disconnections Between Devices!



If the communication between devices is not healthy and there are constant breaks, RSSI measurement should be done. If the value obtained in the signal strength measurement is 55 or less, check the antenna connections. If the problem continues, consult the technical team.

### **6- When the Signal is Applied to the Digital Input, the Input LED is not Lit!**

The signal applied to the inputs must be between 10-24VDC and should deliver at least 10mA. Applying high voltage can damage the device. If the problem continues, consult the technical team.

### **7- Device Digital Output Led Is On But No Output!**

If the led lights up when trying to get a digital output from the device, but the output cannot be obtained, high current may have been drawn from the outputs before or there may be a faulty connection. Consult the technical team.

### **8- Device Heats Up and Does Not Communicate!**

If the Device is getting hot, liquid contact in the device and previously made faulty connections may cause this situation. Cut the power of the device and consult the technical team.

## **Safety Warnings**

- Inverted or incorrect power and communication connections in the device may cause permanent damage to the device and the device to which the device is connected.
- Devices use electromagnetic waves to communicate, thus the communication can be interrupted or permanently lost if a high electromagnetic source is placed near the modem such as base stations and high power electric machines.
- Wireless performance may vary depending on the environment. In this respect, it is recommended to make all kinds of measurements in the application area.
- The device should be used in a way not to be exposed to high humidity, high heat and direct sunlight. Otherwise, permanent damage may occur in the device.
- The device is not protected against liquid contact. In these cases, permanent damage may occur to the device and the devices it is connected to. Consult the technical team
- The device should not be subjected to high concentration. In other words, it should not be taken from a low temperature environment to a high temperature environment.
- The device is not resistant to drops and impacts. Permanent damage may occur on the device as a result of falling and impact.

- Do not use the device in case of liquid contact. Consult the technical team
- The device is not resistant to drops and shocks. Permanent damage to the device may occur as a result of falling and hitting.
- The GND connection for the device has a great impact on the communication performance. It is important to make this connection good and solid to get performance.
- Using the device in environments with high electric, magnetic and electromagnetic fields may damage the device or affect its operation.

### **Caution**

- △ The manufacturer and the distributor cannot be held responsible for any damages that may occur due to uses other than the reasons stated in the safety warnings section and the recommended usage instructions.
- △ In an unexpected situation, avoid intervention and contact the technical team. The manufacturer and the distributor company cannot be held responsible for the situations that may occur otherwise.
- △ This device is not designed to be used as a device in applications that directly concern human health. It is not designed to be used in close proximity (at a distance that may affect) the devices that do not work or malfunction directly affect human health. Briefly, this device should not be used for the purpose of communicating with the devices used for this purpose, and the manufacturer and the distributor cannot be held responsible for the problems, damages and damages that may be caused by the electromagnetic waves originating from the device in such an environment.

### **Safety Standards**

#### **Warranty**

- 2 year warranty for the device
  - 5 year warranty for the parts
- △ Keep this document or Serial number and invoice for the warranty to be valid.△

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