

LINOVISION

Mini Industrial 4G LTE Router

IOT-R41

Quick Guide (V1.0/2025-11-4)



Quick Guide

Package Contents



IOT-R41



Cellular Antenna



Power Adapter



GPS Antenna



Wall Mounting
Bracket with Screws



Network Cable

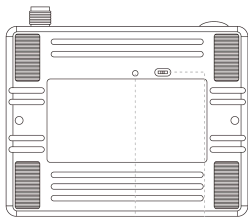
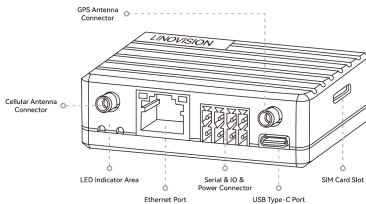


Screws



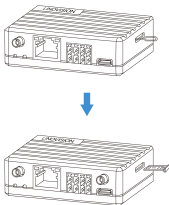
Quick Guide

Interface

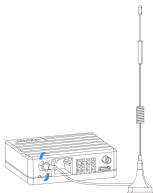


Installation

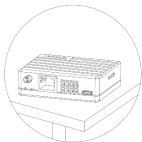
1. SIM Card/Micro SD Card Installation



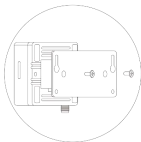
2. Antenna Installation



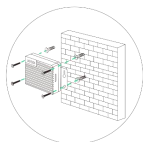
3. Router Installation



Desktop Mounting

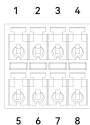


Wall Mounting 1



Wall Mounting 2

Serial & IO & Power



PIN	RS232/RS485	DI	DO	Power	Description
1	---	---	OUT	---	Digital Output
2	---	IN	---	---	Digital Input
3	TX/A	---	---	---	Transmit Data
4	---	---	---	DC+	Positive
5	---	---	COM	---	Common Ground
6	GND	GND	---	---	Ground
7	RX/B	---	---	---	Receive Data
8	---	---	---	DC-	Negative

Reset Button

Function	Description	
	SYSTEM LED	Action
Reset	Static	Press and hold the reset button for more than 5 seconds.
	Static → Blinking	Release the button and wait.
	Off → Static Green	The router is now reset to factory defaults.
Wake up	Orange Static → Green Static	If standby mode is enabled, press and hold on reset button for 3 seconds to wake up the router for 1 hour.

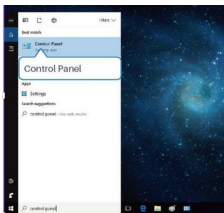
LED Indicators

LED	Indication	Status	Description
SYSTEM	Power & System Status	Off	The power is switched off
		Orange	Static: the power is switched on, the system is on standby mode
			Blinking three times: the power is switched on, the system is starting up
		Green	Static: The system is running properly
		Red	Static: The system goes wrong
LTE	Cellular & Signal Status	Off	SIM card is registering or fails to register (or there are no SIM cards inserted)
		Green	Blinking rapidly: SIM card has been registered and is dialing up now
			Static: SIM card has been registered and dialed up to 4G network
		Orange	Static: SIM card has been registered and dialed up to 3G/2G network
Ethernet Port	Link Indicator (Orange)	Off	Disconnected or fail to connect
		On	Connected
		Blinking	Transmitting data
	Rate Indicator (Green)	Off	10 Mbps mode
		On	100 Mbps mode

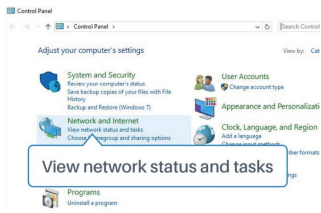
Log in the Web GUI of Router

1. PC Configuration

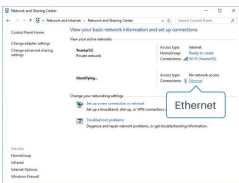
Connect your PC to the router's LAN port. The PC can obtain an IP address automatically or you can set it manually.



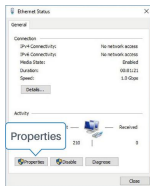
①. Search "Control Panel" on the taskbar and click.



②. Click "View network status and tasks".



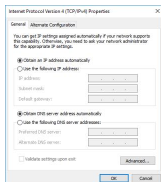
③. Click "Ethernet" (May have different names).



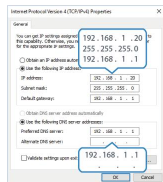
④. Click "Properties".



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" and fill in the information above.

*Remember to click "OK" to finish configuration.

2. Log in the Router

Default Settings:

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

Steps:

1. Open a web browser (Chrome recommended).
2. Enter the IP address in the address bar and press Enter.
3. Input username and password, then click Login.

Note: After 5 failed login attempts, the page will be locked for 10 minutes.



Network Configuration

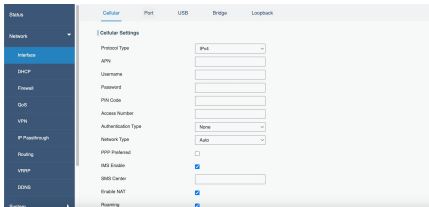
Use the steps below to connect IOT-R41 to the network via cellular connection.

Example: Insert SIM card into the SIM slot.

1. Go to Network > Interface > Cellular > Cellular Setting to configure APN and network type.

2. Click Save and Apply for the settings to take effect.

- Auto: The router automatically reads APN, Username, and Password from the SIM card (for SIM cards from well-known ISPs).
- Manual: If Auto is unavailable, configure APN manually:
 - a. Go to Network > Interface > Cellular > APN in the web interface.
 - b. Enter the APN parameters (contact your mobile provider for details). Common configurations for personal lines:
 - ▶ T-Mobile: fast.t-mobile.com
 - ▶ AT&T: nxtgenphone
 - ▶ Verizon: vzwinternet



3. Click Status > Cellular to view the cellular connection status. If it shows “Connected”, the SIM has dialed up successfully. Alternatively, check the LTE indicator—rapid green blinking also indicates a successful dial-up.

4. Open a browser on your PC and visit any website to verify Internet access via IOT-R41.

IMEI Information

1. Device Label: Check the IMEI on the label attached to the device or package.
2. Web GUI: Log in at 192.168.1.1 (admin / password) → Status → Device Information → View IMEI.

Specifications

Hardware Platform	
CPU	ARM Cortex-A7, 528 MHz
RAM	128 MB DDR3
Flash	128 MB
Interface	
Network Type	4G LTE (CAT 4)/WCDMA/GSM
Ethernet Port	1 × 10/100 Mbps LAN Port Full or Half Duplex (Auto-Sensing)
Serial Port	1 × RS232 or 1 × RS485 (Configurable via WEB GUI) Terminal Resistor: 1 × 120 Ω Resistor Switch (for RS485) Baud Rate: 300bps to 230400bps
I/O	1 × DI + 1 × DO, Galvanic Isolation 0.3A@30VDC (DO)
Serial & I/O Connector	3.5mm Terminal Block
Power Supply	5–24 VDC, with Surge-Protection and Reverse Polarity Protection, 2-pin 3.5 mm Terminal Block 5V/1A by USB Type-C Port
Reset Button	Pinhole reset button
Built-in	Watchdog, Timer
SIM Card	1 (Nano SIM-4FF)
GNSS	GPS/GLONASS/Beidou/Galileo/QZSS
USB	1 × USB 2.0 (Type-C) for Power Supply, Network Supply and Debug
Antenna Connector	3G/4G: 1 × 50 Ω SMA Connector (Center PIN: SMA Female) GNSS: 1 × 50 Ω SMA Connector (Center PIN: SMA Female)
Mechanical Specs	
Dimensions	70 x 55 x 22 mm (2.76 x 2.17 x 0.87 in)

Weight	103 g (0.23 lbs)
Installation Method	Wall mount, flat surface (all require additional kit)
Protection Rating	IP30
Housing	Metal
Power Rate	
Power Consumption	Idle: 78mA@12V Data link: 226mA (peak)@12V Standby mode: 6.3 mA@12V
Indicator	
LED	1 × SYSTEM, 1 × SIM
Ambient Environment	
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Ambient Humidity	0% to 95% (Non-condensing)
Ethernet Isolation	1.5 kV RMS
Software System	
Network Protocols	IPv4/IPv6, PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, QoS, SNTP, Telnet, SSH, etc.
VPN	DMVPN, IPsec, OpenVPN, PPTP, L2TP, GRE
Security	SPI Firewalls, Access Control (ACL), DMZ, Port Mapping, MAC Binding, DoS&DDoS Protection, Filtering (IP&Domain)
Management	Web, CLI, SMS, On-demand dial up, SNMP v1/v2/v3, DeviceHub, RemoteMonit
AAA	Radius, Tacacs+, LDAP, Local Authentication
Multilevel Authority	Multiple Levels of User Authority
Serial Port	Transparent (TCP Client/Server, UDP), Modbus Master/Slave, Modbus Gateway (Modbus RTU to Modbus TCP)