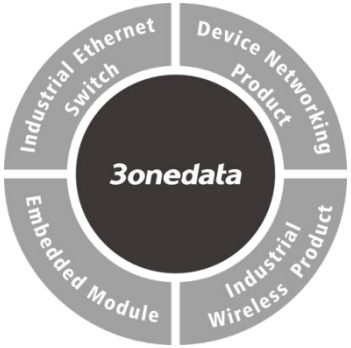
3onedata
Make network communication more reliable

IRT2000-A1-1T1D-12-LV
Industrial Grade 4G Wireless Router
Quick Installation Guide



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【Package Checklist】

Please check whether the package and accessories are intact while using the gateway for the first time.

1 One 4G router
2. 2 antennas
3. DIN rail mounting accessories
4. 1 pair of hanging ears
5. Certificate of conformity
6. Warranty Card

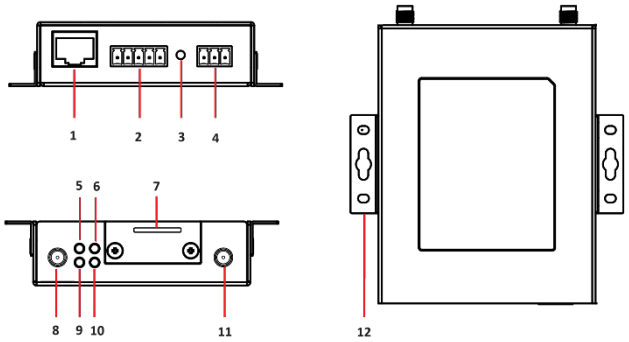
If any of these items are damaged or lost, please contact our company or dealers, we will solve it ASAP.

【Product Overview】

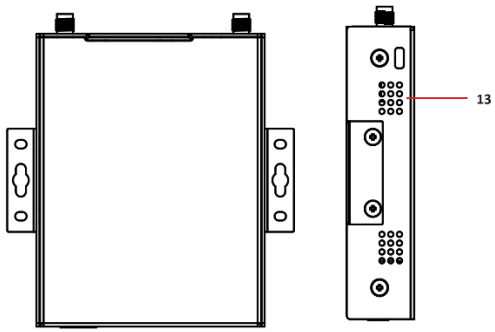
This product is a high-performance and cost-effective guide rail/wall mounted industrial 4G router. The model is **IRT2000-A1-1T1D-12-LV** (1 WIFI antenna interface+1 4G antenna interface+1 100Mbps LAN port+1 RS-232/485 serial port).

【Panel Design】

➢ **Top view, bottom view, and main view**



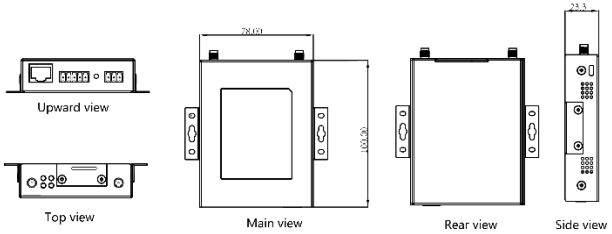
➢ **Rear and side views**



1. 100Mbps electrical port
2. Serial port
3. Reset button
4. Power input wiring terminals
5. Running indicator light
6. WLAN indicator light
7. SIM/UIM card slot
8. WIFI antenna interface (optional)
9. Power indicator light
10. Serial port indicator light
11. 4G antenna interface
12. Hanging ear
13. Heat dissipation hole

【Mounting Dimension】

Unit: mm

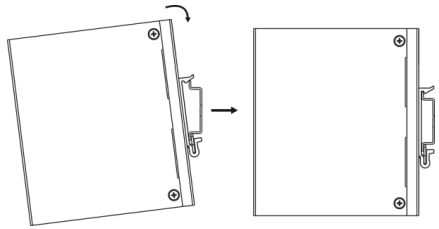


Notice Before Mounting:

- Don't place or install the device in area near water or moisture, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before powering on the device, check the power specifications supported by the device to prevent device damage due to overvoltage.
- The device surface temperature is high after running; please don't directly contact to avoid scalding.

【DIN-Rail Mounting】

The product adopts 35mm standard DIN-Rail mounting which is suitable for most industrial scenes, mounting steps as follows:



Step 1 Check whether the DIN-Rail mounting kit that comes with the device is installed firmly.

Step 2 Insert the bottom of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, and then insert the top into DIN-Rail.

Tips:

Insert a little to the bottom, lift upward and then insert to the top.

Step 3 Check and confirm the product is firmly installed on DIN-Rail, then mounting ends.

【Disassembling DIN-Rail】

Step 1 Power off the device.

Step 2 After lifting the device upward slightly, first shift out the top of DIN-Rail mounting kit, and then shift out the bottom of DIN-Rail, disassembling ends.

Notes:

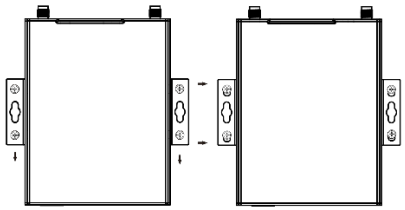
- Power ON operation: First insert the power supply terminal block into the device power supply interface, and then plug the power supply plug contact and power on.
- Power OFF operation: First, remove the power plug, then remove the wiring section of terminal block. Please pay attention to the above operation sequence.

【Installing Wall Mounted Equipment】

Step 1 On the wall where the equipment is installed, stick the equipment to the wall as a reference or refer to the installation dimensions, and mark the positions of the four screws.

Step 2 Attach the device to the marked wall, align the screws with the marked position, and secure the screws with a certain gap.

Step 3 Slide the device down onto the hanging screw, then tighten the screw to complete the installation.



【Dismantling wall mounted equipment】

Step 1 Power outage of equipment.

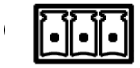
Step 2 Stabilize the equipment, loosen and remove the screws on the wall.

Step 3 Remove the device and the disassembly is complete.

Notes:

- Power on operation: First, insert the power terminal of the power cord into the power interface of the device, and then plug in the power plug to power on.
- Power off operation: First unplug the power plug, and then remove the terminal wiring part. Please pay attention to the above operation sequence.

【Power Supply Connection】



This device provides a 3-digit power input terminal with built-in power reverse protection and overvoltage protection.

Standard power supply: DC 12V/1A

Power range: DC6~35V.

【SIM/UIM Crd Slot】

This device provides one SIM/UIM card slot, standard drawer interface, supports 1.8V/3V SIM/UIM cards, and built-in 15KV ESD protection

【Connect Serial Port】



This device provides 5-bit serial input terminals and supports 1 RS-232 serial port and 1 RS-485 serial port (optional). The definitions of each pin are as follows:

PIN	1	2	3	4	5
RS-232	RXD	TXD	GND	-	-
RS-485	-	-	GND	A	B

【Connecting Antennas】

This device provides 2 external antenna interfaces (standard SMA female, characteristic impedance 50 ohms), 1 4G antenna, and 1 Wi Fi antenna (optional).

【Set RESET Button】

Provide one RESET button for device restart and factory reset.

【Checking LED Indicator】

The device provides LED indicators to monitor its operating status, which has simplified the overall troubleshooting process. The function of each LED is described in the table below:

LED	Indicate	Description
SYS	Chang Liang	Equipment powered on or abnormal
	Extinction	Equipment not powered on or abnormal
	Flicker	Normal operation of equipment
PWR	Bright	The power connection is running normally
	Extinction	Power supply not connected or not functioning properly
ETH	Chang Liang	The electrical port has established a valid network connection
	Flicker	The electrical port is in a network active state
	Extinction	The electrical port has not established a valid network connection
NET	Flicker	Connect to cellular network
	Extinction	Not connected to cellular network

【Specification】

Panel	
Electric port	1 100 Mbps LAN 10/100Mbit/s adaptive, built-in 1.5KV electromagnetic isolation protection
Serial port	5PIN terminal interface, 1 RS-232 and 1

	RS-485 serial port (optional)
SIM/UIM card slot	1 SIM/UIM card slot, standard drawer interface, supporting 1.8V/3V SIM/UIM cards, built-in 15KV ESD protection
Antenna interface	2 external antenna interfaces (standard SMA female, characteristic impedance 50 ohms), 1 4G antenna, and 1 Wi Fi antenna (optional)
Indicator light	Operation indicator light, power indicator light, electrical port connection indicator light, serial port connection indicator light
Hardware specifications	
DRAM capacity	64MB
Flash capacity	16MB
operating system	Linux system
Maximum power consumption	2.4W
Idle working current	120mA@12VDC
Average working current	150mA@12VDC
Peak operating current	200mA@12VDC
Source	
Input power supply	Standard power supply: DC 12V/1A Power supply range: DC6~35V
Access terminal	Terminal power socket with built-in power reverse protection and overvoltage protection
Working Environment	
Working temperature	-30℃~75℃
Storage temperature	-40℃~85℃
Working humidity	5%～95% (no condensation)
Protection grade	IP30 (metal shell)

【Disposal of Waste Electrical and Electronic Equipment (WEEE 2012/19/EU)】

(Applicable in the EU-member states)



The crossed-out wheeled bin symbol on the equipment or its packaging indicates that the product, at the end of its service life, shall not be mixed with unsorted municipal waste but should be collected separately, in accordance with local laws and regulations.

A proper separate collection of end-of-life equipment for the subsequent recycling, treatment and environmentally compatible disposal, will help prevent potential damage to the environment and human health, facilitating the reuse, recycling and/or recovery of its component materials.

Private users should contact their vendor or municipal waste management service and ask for disposal information.

Professional users should contact their suppliers and check the terms of their selling agreement.

This product must not be disposed of with other commercial waste.

Users' cooperation in the correct disposal of this product will contribute to saving valuable resources and protecting the environment.