3onedata
Reliable Connections



IRT2000-A1-1T1D-12-LV

Rail Mounted/wall Mounted Installation
Industrial Grade 4G Wireless Router

- Supports 1 100Mbps LAN port, 1 RS-232/485 serial port, 2 external antenna interfaces (1 4G antenna, 1 WIFI antenna interface), 1 SIM/UIM card slot, etc
- Supports 4G all network connectivity, with cellular wireless network standards including FDD-LTE/TDD-LTE/WCDMA/EDGE/GPRS/GSM
- Supports link backup, 4G/WiFi, and wired Ethernet link switching
- Supports OpenVPN client, IPsec, PPTP/L2TP, GRE, N2N, and provides powerful data security mechanisms
- Support input voltage: 6-35VDC, low-power design, suitable for different on-site power supply methods
- No fan design, metal casing
- Support -30~75℃ wide operating temperature range

Introduction

The IRT2000-A1-1T1D-12-LV industrial grade wireless 4G router is a single port, cost-effective domestic all network industrial grade router that uses 4G//Wi Fi high-speed wireless network as the data carrier network, providing secure and high-speed wireless connection between remote devices and sites. No matter where you are, your device can quickly access the Internet with the help of 4G/Wi Fi networks all over the world.

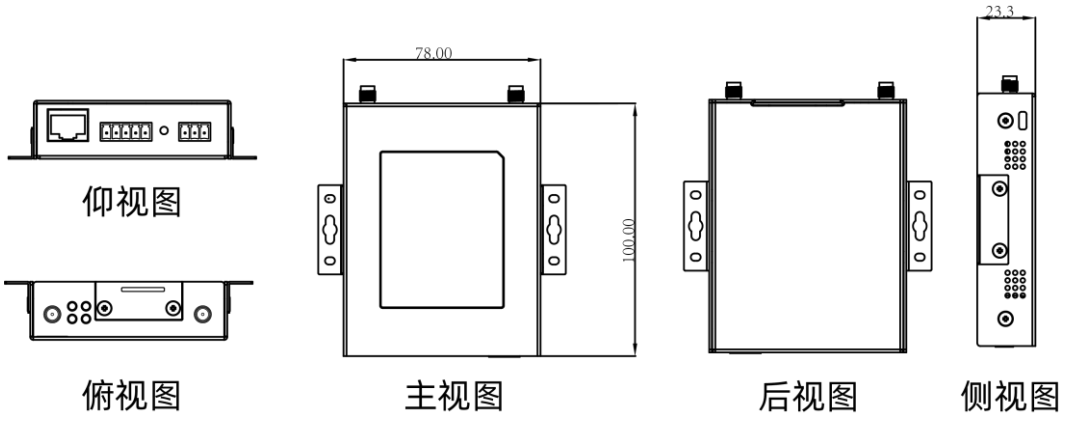
This industrial grade wireless router meets the needs of industrial users with low power consumption, operating temperatures up to -30 ℃~75 ℃, small size, light weight, strict EMC indicators, and can meet the network communication needs in harsh temperature, humidity, and electromagnetic interference environments. It is an ideal choice for industrial applications. Simultaneously equipped with VPN function, it provides multiple VPN encryption modes such as IPSec, L2TP, GRE, etc., allowing device data to be transmitted in a secure data channel, preventing data from being accessed and tampered with, and providing higher security for network applications. It can be widely used in various industries such as rail transit, security, smart cities, comprehensive pipe galleries, production automation, and smart light poles.

Features and Benefits

- Adopting industrial grade devices and specialized design, it can adapt to the harsh working environment of industrial sites
- No fan design, capable of long-term operation in temperature environments ranging from -30 ° C to+75 ° C
- Adopting a metal shell with a protection level of IP30, it is particularly suitable for industrial control field applications
- Low power design, wide power input (6-35VDC), suitable for different on-site power supply methods
- Embedded watchdog technology, self-healing of faults, ensuring normal operation of equipment
- Adopting a comprehensive anti drop mechanism to ensure that data terminals are always online
- WDT watchdog design, hardware interface isolation protection, ensuring system stability
- Support multiple VPN encryption modes such as IPsec, L2TP, GRE, N2N, etc. to ensure data transmission security
- Flexible data return method, supporting wireless methods such as 4G/Wi Fi
- Provide a WEB configuration interface, simple to use, and extremely easy to deploy
- Support unified management of remote devices
- Provide remote firmware upgrades, feature expansion, security, and simplicity

Dimension

Unit:mm



Specification

Standard & Protocol	Wireless LAN, following IEEE802.11b/g/n Wireless security, following IEEE802.11i 10Base-T, following IEEE 802.3 100Base TX, following IEEE 802.3u
Cellular Network	2G/3G/4G/Cellular network LTE FDD: B1/B3//B7/B8/B20/B28A LTE TDD: B38/B40/B41 WCDMA: B1/B8 GSM: B3/B8
Transmitted Power	GSM/GPRS power level: --GSM850:4(2W) --EGSM900:4(2W) --DCS1800:1(1W) --PCS1900:1(1W) EDGE power level: --GSM850: E2(0.5W) --EGSM900: E2 (0.5W) --DCS1800:E1(0.4W) --PCS1900: E1(0.4W) UMTS power level: --WCDMA :3 (0.25W) LTE power class:3 (0.25W)

Receive Sensitivity	Frequency：GSM850@-109dBm（typical） Frequency：EGSM900@-109dBm（typical） Frequency：DCS1800@-109dBm（typical） Frequency：PCS1900@-109dBm（typical） Frequency：WCDMA B1@-110dBm（typical） Frequency：WCDMA B2@-110dBm（typical） Frequency：WCDMA B5@-110dBm（typical） Frequency：WCDMA B8@-110dBm（typical） LTE FDD@-97 dBm
Network Access	APN, VPDN
Access authentication	CHAP/PAP/MS-CHAP/MS-CHAPV2
LAN Protocol	ARP, Ethernet
WAN Protocol	Static IP, DHCP, PPPoE
VLAN	VLAN management
IP Applications	Ping, Traceroute, DHCP Server/Client, DNS Relay, Dynamic DNS, Telnet, SSH, HTTP, HTTPS, TFTP, FTP, SFTP, NAT
IP Routing	Static routing
VPN	IPsec, L2TP/PPTP, GRE, OpenVPN, N2N
Firewall	NAT, PAT, DMZ, port mapping IP filtering, port filtering, MAC filtering
Link Backup	Link switching for 4G wireless networks, Wi Fi, and wired Ethernet
Link Detection	TCP/Ping heartbeat detection, VPN link detection, automatic connection when disconnected
QoS	Uplink and downlink bandwidth limitations
Embedded Watchdog	Self inspection of equipment operation and self repair of equipment operation faults
DTU	Built in software DTU function
Traffic Statistics	Real time traffic statistics Monthly traffic statistics Traffic limit setting

Timed Tasks	Timed restart
SNMP	SNMP v1/v2
Configuration Maintenance	Web Management Telnet and SSH terminals System status monitoring NTP client, supporting device system clock network synchronization Configure import and export Network tools: Ping, Tracert
Firmware Management	Firmware upgrade, supports local (HTTP/serial) and remote upgrades
Event Alarm	System logs, application logs
Processor	Industrial grade 32-bit processor
Operating System	Linux system
Serial Port Parameters	5PIN terminal interface, 1 * RS232, 1 * RS485
Interface	Ethernet interface: 1 100Mbit LAN 10/100Mbit/s adaptive, built-in 1.5KV electromagnetic isolation protection Antenna interface: 2 external antenna interfaces (standard SMA female, characteristic impedance 50 ohms), 1 4G antenna, 1 Wi Fi antenna SIM/UIM card interface: Standard drawer type interface, supporting 1.8V/3V SIM/UIM cards, built-in 15KV ESD protection
Reset Button	Through this button, the device's parameter configuration can be restored to the factory values
Real Time Clock	Built in RTC, battery powered
WIFI	Supports IEEE 802.11n b/g/n 2.4GHz Support AP/Client mode Supports open systems, shared keys, and WPA/WPA2 authentication Support WEP/TKIP/AES encryption
Indicator Light	Power indicator light, ETH indicator light, system indicator light, network indicator light
Source	Interface: Terminal power socket, built-in power reverse protection and overvoltage protection Standard power supply: DC 12V/1A Power supply range: DC6~35V

Power Dissipation	Maximum power consumption: 2.4W Idle working current: 120mA@12VDC Average working current: 150mA@12VDC
Work Environment	Working temperature: -30~75 ℃ Storage temperature: -40~85 ℃ Relative humidity: 5%~95% (no condensation)
Mechanical Properties	Shell: IP30 protection level, metal shell Dimensions (width x height x depth): 100mm x 22mm x 78mm (excluding antenna and mounting parts) Installation method: rail mounted/wall mounted installation Weight: ≤ 210g
Industry Standards	IEC 61000-4-2 (ESD, electrostatic discharge immunity), Level 3 Air discharge: ± 8kV Contact discharge: ± 6kV IEC 61000-4-4 (EFT, Electrical Fast Transient Burst Immunity), Level 3 Power supply: ± 2kV Ethernet interface: ± 1kV IEC 61000-4-5 (Surge, Level 3) Power supply: common mode ± 2kV, differential mode ± 1kV Ethernet interface: common mode ± 2kV, differential mode ± 1kV Impact: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6
Authentication	CE, FCC, RoHS
Warranty	5 years

Ordering Information

Model	100 Megabytes LAN	RS-232/485 serial port	SIM Card slot	WiFi Antenna interface	4G Antenna interface	Maximum Power Consumption	Source
IRT2000-A1-1T1D-12-LV	1	1	1	1	1	2.4W	6-35VDC

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