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Make network communication more reliable



IRT5300L-5T2D-2P12_36

DIN-Rail Mounting

Industrial 4G Wireless Router

- Support 1 100M WAN port, 4 100M LAN ports, 1 RS-232/485/422 serial port, 2 2.4G WIFI antenna interfaces, 2 LTE antenna interfaces, 2 SIM card slots, etc
- Support all 4G networks, cellular wireless network types include: FDD/TDD/WCDMA/TD-SCDMA/HSPA/CDMA/EVDO
- Support multiple serial port work modes: Realcom, TCP Server, TCP Client, UDP Server, UDP Client
- Support dual-SIM card redundancy backup to ensure the stable connection of wireless network
- Support OpenVPN client, IPsec, PPTP and L2TP and provide a powerful data security mechanism
- Support dual power supply redundancy, power supply has non-polarity protection, input voltage: 12~36VDC
- Support -40~75℃ wide operating temperature range



Introduction

IRT5300L-5T2D-2P12_36 is industrial 4G router. It provides 100M WAN port, 100M LAN port, RS-232/485/422 serial port, I/O interface (reserved), Wi-Fi antenna interface, LET antenna interface and SIM card slot. It adopts DIN-Rail mounting, which can meet the requirements of different application scenes.

Network management supports multiple software functions, like Cellular WAN, Ethernet WAN, ICMP Link Test, DHCP Setting, VLAN Setting, Dynamic Domain Name, Routing Table Setting, WLAN Setting, Port Forwarding, Port Redirection, DMZ Setting, Serial Port Application and Setting, UPnP Setting, VRRP, RIP, OSPF and Static DHCP, etc. It also supports firewall functions, such as IP Filtering, MAC Filtering, URL Filtering, Keyword Filtering and IP address black/white list, etc. and VPN tunneling functions like GRE, IPSec, PPTP, L2TP, OpenVPN, etc. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

Adopt dual-SIM card redundancy to ensure the stable connection of wireless network. The input power supply has two inputs, which can ensure the normal operation of the device when one power supply fails. RESET button can reboot the device and restore factory defaults. The hardware adopts fanless, low power consumption, wide temperature and wide voltage design, which can adapt to various harsh industrial field environments and can be widely used in industrial application scenarios such as factory automation, petrochemical industry, electric power monitoring, water conservancy monitoring and so on.

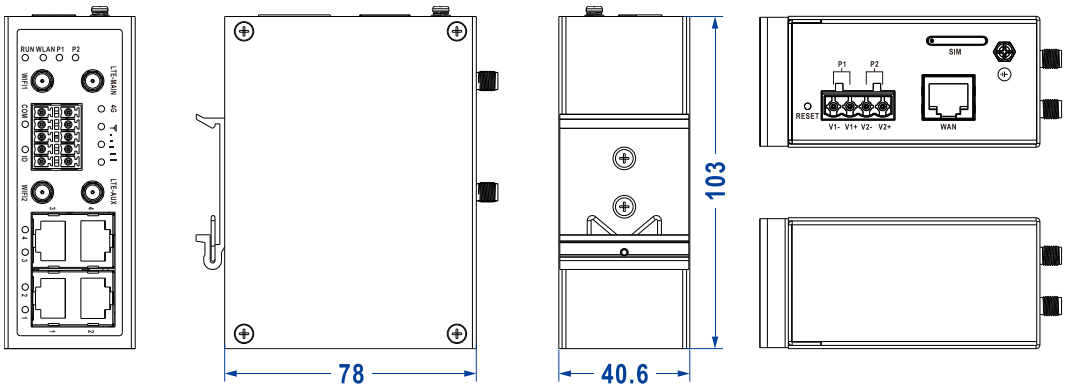
Features and Benefits

- Support dual SIM card redundancy backup and Cellular network. It's embedded with 2G/3G/4G wireless communication modules
- Support backup switch between PPPoE, DHCP, static IP and 4G networks to fit different scenes
- Support network firewall, which can implement rule filtering and forwarding of IP, MAC, URL, keyword, Ip address black/white list, etc.
- DHCP, DHCP server could be used to distribute IP address with different policies
- Support DDNS function, user can access server through domain names
- Support VPN encryption protocols like GRE, PPTP, L2TP, IPSEC and OpenVPN, which can ensure the privacy and integrity of data and prevent replay attack
- Support multiple serial port operating modes like RealCom, TCP Server, TCP Client, UDP Server, UDP Client, etc.
- Support VLAN settings, which can simplify network planning
- Log management records the information of booting, operation and connection
- VRRP, RIP, OSPF could implement dynamic router configuration
- Support timing reboot and ICMP link test reboot
- Support hardware watchdog, which ensures the reliability of the system

- Ping Test, System Log, Router Tracing could achieve network diagnosis and troubleshooting

Dimension

Unit: mm



Specification

Standard & Protocol	IEEE802.11b/g/n for WLAN IEEE802.11i for wireless security IEEE802.11r for fast roaming IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX
Cellular Network	3G/4G cellular network, network type FDD-LTE/TDD-LTE/WCDMA/TD-SCDMA/HSPA/CDMA/EVDO
Network Settings	WAN Network, Wireless WiFi, PPPoE Dialing, Mobile network Detection, VLAN, DDNS, Routing Table, Wireless Client Filtering, Port Forwarding , Port Redirection, DMZ Settings, Serial Port Application, UPnP Settings, Static DHCP, VRRP, RIP, OSPF
Firewall	IP Filtering, MAC Filtering, URL Filtering, Keyword Filtering, IP address Black/White List
VPN Tunnel	GRE, PPTP Client/Server, L2TP Client/Server, IPSec, OpenVPN Client
System Management	NTP Client, Access Settings, Timed Restart, Backup Recovery, Log Server, Firmware Upgrade
Troubleshooting	System Log, Ping Test and Route Tracking

WiFi Transmission Rate	802.11n: 6.5~300Mbps 802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps
WiFi Radio Frequency	Channel: 2.412GHz~2.4835GHz RF power output: 20dBm Modulation methods: DBPSK, DQPSK, CCK, OFDM, 16-QAM, 64-QAM
WiFi Receiving Sensitivity	802.11n_HT40: -82dBm@MCS0, -64dBm@MCS7 802.11n_HT20: -85dBm@MCS0, -67dBm@MCS7 802.11g: -91dBm@6Mbps, -72dBm@54Mbps 802.11b: -93dBm@1Mbps, -87dBm@11Mbps
WiFi Transmitting Power	802.11n_HT40: 20dBm@MCS0, 20dBm@MCS7 802.11n_HT20: 20dBm@MCS0, 20dBm@MCS7 802.11g: 20dBm@6Mbps, 20dBm@54Mbps 802.11b: 23dBm@1Mbps, 20dBm@11Mbps
LTE Operating Frequency Band (Chinese Version)	TDD-LTE: Band 38/39/40/41 FDD-LTE: Band 1/3/5/7/8/20 WCDMA: Band 1/5/8 TD-SCDMA: Band 34/39 EVDO/CDMA1X: BC0 GSM: Band 3/8
LTE Operating Frequency Band (European & African & Middle East Version) Note: This version can be used in Southeast Asia in most cases.	TDD-LTE: Band 38/40/41 FDD-LTE: Band 1/3/7/8/20/28A WCDMA: Band 1/8 GSM/EDGE: Band 3/8
LTE Operating Frequency Band (North American Version)	FDD-LTE: Band 2/4/5/12/13/14/66/71 WCDMA: Band 2/4/5
LTE Operating Frequency Band (Latin American & Australian & New Zealand Version)	TDD-LTE: Band 40 FDD-LTE: Band 1/2/3/4/5/7/8/28 WCDMA: Band 1/2/5/8 GSM/EDGE: Band 2/3/5/8
LTE Operating Frequency Band (Global Version)	TDD-LTE: Band 34/38/39/40/41 FDD-LTE: Band 1/2//3/4/5/7/8/12/13/18/19/20/25/26/28/66 WCDMA: Band 1/2/4/5/6/8/19 GSM/EDGE: 850/900/1800/1900 MHz
LTE Bandwidth (Downstream, Upstream)	TDD-LTE: Rel 9 Cat4 TDD-LTE 112Mbps/30Mbps FDD-LTE: Rel 9 Cat4 FDD-LTE 150Mbps/50Mbps DC-HSPA+: 42Mbps/5.76Mbps HSPA+: 21Mbps/5.76Mbps

	UMTS: 384kbps/384kbps EVDO RevA: 3.1Mbps/1.8Mbps EVDO Rev0: 2.4Mbps/153.6kbps TD-HSPA: 4.2Mbps/2.2Mbps TD- SCDMA: 2.8Mbps/2.2Mbps CDMA 1x: 153.6kbps/153.6kbps EDGE: 236.8kbps/236.8kbps GPRS: 85.6kbps/85.6kbps
LTE Sensitivity	GSM: <-108dBm WCDMA: <-109dBm TD-SCDMA: <-108dBm TDD-LTE: ● Band38/39/40: <-100dBm@5MHz BW ● Band41: <-98dBm@5MHz BW FDD-LTE: ● Band1: <-100dBm@5MHzBW ● Band3/8: <-97dBm@5MHzBW ● Band5: <-98dBm@5MHzBW CDMA: <-108dBm EVDO: <-108dBm
Maximum Transmission Power of LTE	LTE-FDD/TDD: 23 ±2dBm WCDMA: 24 +1/-3dBm TD-SCDMA: 24 +1/-3dBm EVDO/CDMA 1X: 24 ±1dBm GSM850/900: 33±2dBm GSM1800/1900: 30±2dBm
Serial Port Parameter	Standard: EIA RS-232C, RS-485, RS-422 Quantity of serial port: 1 3IN1 serial port RS-232 signal: RXD, TXD, GND RS-485 signal: D+, D-, GND RS-422 signal: T+, T-, GND, R+, R- Baud rate: 300~115200bps Data bit: 7bit, 8bit Parity bit: None, Even, Odd Stop bit: 1bit, 2bit Direction control: RS-485 direction adopts Automatic Data Direction Control (ADDC) Load capacity: RS-485/422 end supports 32-node polling environment Transmission distance: RS-232, 15m; RS-485/422, 1200m Work mode: RealCom, TCP Client, TCP Server, UDP Client, UDP Server
Interface	WAN port: 1 10/100Base-T(X) RJ45 port LAN port: 4 10/100Base-T(X) RJ45 port Serial port: 1 RS-232/485/422, with 2x5-pin 3.81mm pitch terminal (occupies 6 pins)

	I/O port (reserved): 1 DI input and 1 DO output, adopt 2×5 3.81mm pitch terminal block (occupies 4 pins) SIM slot: 2 SIM slots, redundancy backup, support Micro SIM card Antenna interface: 2 LTE antenna interfaces, SMA-K (Female), the master antenna is used to send/receive information, and the slave antenna is used to receive information; 2 WIFI antenna interfaces, RP-SMA-K (Female)
Indicator	Running indicator, WLAN indicator, power indicator, LTE signal strength indicator, 4G indicator, LAN/WAN port indicator, COM indicator and IO indicator
Power Supply	Dual 12~36VDC power supply input, dual power supply redundancy, support non-polarity, adopt 4-pin 5.08mm pitch terminal blocks
Power Consumption	No-load: 2.4W@24VDC Full-load: 8.1W@24VDC (high temperature)
Working Environment	Operating temperature: -40 ~ 75℃ Storage temperature: -40~85℃ Relative humidity: 5%~95% (no condensation)
Physical Characteristic	Housing: IP40 protection, metal Dimension (W x H x D): 40.6mm x 103mm x 78 mm(exclude antenna) Installation: DIN-Rail mounting Weight: ≤ 270g
Industrial Standard	IEC 61000-4-2 (ESD, electrostatic discharge), Level 3 ● Air discharge: ±8kV ● Contact discharge: ±6kV IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3 ● Power supply: ±2kV ● Ethernet port: ±1kV IEC 61000-4-5 (Surge), Level 3 ● Power supply: common mode±2kV, differential mode±1kV ● Ethernet port: common mode±2kV, differential mode±1kV Shock: 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	100M WAN	100M LAN	RS-232/485 /422 Serial Port	SIM Card Slot	2.4G WIFI Antenna interface	LTE Antenna Interface	Power Supply
IRT5300L-5T2D-2P12_36	1	4	1	2	2	2	12~36VDC

Version Specification

Article Number	Version	Applicable Area	Remark
5012030301001-003	Chinese version	China	American-Chinese regular
5012030301001-004	Global version	All regions	British-English regular
5012030301001-005	Global version	All regions	European-English regular
5012030301001-006	Global version	All regions	American-English regular
5012030301001-007	European & African & Middle East version Note: This version can be used in Southeast Asia in most cases.	Europe & Africa & Middle East & Southeast Asia	European-English regular
5012030301001-008	North American version	North America	American-English regular
5012030301001-009	Latin American & Australian & New Zealand version	Latin America, Australia, New Zealand	American-English regular

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