RTDI-5100

5G/4G INDUSTRIAL ROUTER

Introduction

It is a wireless communication router for the Internet of Things (IoT), it uses a high-performance industrial level 32-bit communication processor and wireless module, embedded with the real-time operating system as the software platform, and using 3G/4G/5G cellular network to provide users with wireless long-distance large data transmission function.

Industrial-grade Design

• High-performance industrial-grade wireless module

• High-performance industrial-grade 32-bit communication processor

• Metal shell, protection grade IP30. Metal housing and system safety isolation

• Wide power input range 9~36V

Stability & Reliability

• WDT Watchdog design to ensure system stability

• Adopt a complete anti-drop mechanism to ensure that the data terminal is always online

• Built-in 1.5KV electromagnetic isolation protection for Ethernet interface

• SIM/UIM card interface built-in 15KV ESD protection

• Built-in reverse phase protection and over voltage protection for power interface

Standard & Convenience

- Standard Ethernet and WIFI Interface

- Standard W AN port (support standard PPPOE protocol) which can be directly connected to ADSL equipment

- Intelligent data terminal, can enter data transmission state after power on

- Easy to use, flexible, multiple working mode options

- Convenient system configuration and maintenance interface (WEB/CLI)

- Support wall-mounted installation

High Performance

- Support 3G/4G/5G and wired WAN dual link backup（optiona), Auto-switching SIMs

- VPN TuClient/Server: PPTP/L2TP/IPSEC (Only available in VPN version)

- Remote management SYSLOG/SNMP/TELNET/SSH/HTTPS

- WIFI support WEP/WPA/WPA2 encryption

- Support multiple online and offline trigger modes

- Support APN/VPN

- Support SNMP, I2TP, GRE, SSL,IKE, OSPFv2, RIPv2, BGP

- Support DHCP server/DHCP client/DHCP binding MAC/DDNS/NAT/Port Forwarding/DMZ/QOS

- Support SPI firewall

- Support URL filter

- Support IPV6/IPV4, 5G LAN

- Support lock frequency, lock resident

- Support EOIP, bridge mode, VxLAN, virtual IP, GRETAP, etc.

- Support traffic statistics, VLAN management, and VLAN division

Specifications

Cellular Specification

- Module
  - 5G NR NSA：
    n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79
  - 5G NR SA：
    n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79

- Frequency
  - LTE-FDD：
    B1/B2/B3/B4/B5/B7/B8/B9/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71
  - LTE-TDD：
    B34/B38/39/B40/B41/B42/B43/B48
  - WCDMA:
    B1/B2/B3/B4/B5/B6/B8/B19

Note: B32/B46 supports receiving only. The supported frequency band varies according to the version of the selected region

- Theoretical Bandwidth
  - 380 Mbps
  - LTE: DL:487Mbps   UL:150Mbps
  - WCDMA   DL:42Mbps   UL:11Mbps

WIFI Specification

- WIFI Protocol   IEEE802.11 a/b/g/n/ac/ax
- Frequency   2.4GHz + 5GHz
- Theoretical Bandwidth 2.4GHz 2x2MIMO 11ax, 0.573Gbps
                         5GHz 2x2MIMO 11ax, 1.2Gbps
- WIFI Bandwidth   20MHz, 40MHz, 80MHz
- MESH Network   Support CXR router and CPE to build the MESH network

Hardware System

- CPU   880MHz dual core CPU
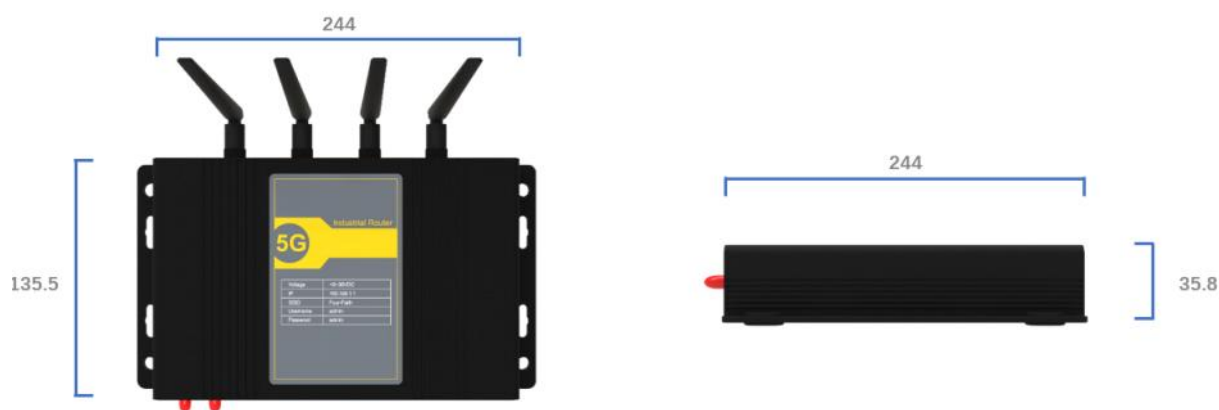- FLASH   128MB
- DDR3   512MB

Interfaces

- WAN   1*1G Ethernet (RJ45) Auto MDI/MDIX
- LAN   4*1G Ethernet (RJ45) Auto MDI/MDIX
- Console   1 x RS232 (Built-in 1.5KV ESD
- Indicators Signal, 5G, 4G, WIFI, Power
- SIM Card   2 x Standard drawer SIM card interface compatible patch eSIM
- Antenna   Cellular：4 x SMA female, characteristic impedance 50 ohms

              WIFI：2 x SMA male, characteristic impedance 50 ohms
- Power   2.5mm DC interface built-in power reverse protection

- Reset Button   Through this button, the parameter configuration can be restored to the factory

Power Supply

- Standard   DC 12V/1.5A (external power adapter 230Vac/12Vdc-1.5A included in the package)

- Range   DC 9~36V

- Consumption   <1.2A (12V)

Physical Properties

- Shell   Metal shell, protection grade IP30

- Size   244 * 135.5 * 35.8 mm (Does not include antenna and mounting parts)

- Weight   980g
- Operating Temperature   -35~+70°C
- Storage Temperature   -40~+85°C
- Relative Humidity   95% (No condensation)
- MTBF >130000Hours

Dimension (mm)

Ordering Code	Description
RTDI-5100-5G	• Cellular router (5G) 2.4G/5G, 4 LAN + 1 WAN/LAN Eth 1G, Dual SIM and eSIM, Wifi b/g/n/ac. IP30. IPv4/v6, VPN, Power supply 9 to 36VDC. Removables Antennas. 1 com RS232 + 1 COM RS485. Leds indicators. Power consumption 14Watts. Temp -35°C to +75°C. External power adapter 230Vac/12Vdc-1.5A included in the package.
RTDI-5100-4G	Cellular router 4G NR / FDD LTE / TDD LTE / WCDMA,, 4 LAN + 1 WAN/LAN Eth 1G, Dual SIM and eSIM, Wifi b/g/n/ac. IP30. IPv4/v6, VPN, Power supply 9 to 36VDC. Removables Antennas. 1 com RS232 + 1 COM RS485. Leds indicators. Power consumption 14Watts. Temp -35°C to +75°C.External power adapter 230Vac/12Vdc-1.5A included in the package.

Ordering Information

Smart Solutions for Smart Networks
The information contained in this document are not contractual. CXR continuously improves its products. Specifications are subject to change without notice.