

RTDI-4100

4G INDUSTRIAL ROUTER



Introduction

RTDI-4100 is an intelligent cellular router designed for industrial applications requiring faultless connectivity. It provides a secure, reliable, real-time, remote connectivity for SCADA, distribution management systems, metering, etc. Software-defined, multi-carrier networking, dual SIM models, 802.11n and global 2.5G/3G/HSPA+/LTE options make it easy to get connected. With DIN-rail mounting, wide operating temperature range, and IP30 metal housing, the RTDI-4100 is a convenient yet reliable solution for any industrial wireless application.

Industrial-grade Design

- High-performance industrial-grade wireless module
- High-performance industrial-grade 32-bit communication processor
- Using metal shell, protection grade IP30.
- Wide power input range 5~36V

Stability & Reliability

- WDT Watchdog design
- Complete anti-dropping 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 RS232 or RS485/RS422 (optional), Ethernet and WIFI Interface
- Provide standard wired WAN port (support standard PPPOE protocol)
- Plug and Play
- Multiple working mode options
- Configuration and maintenance interface
- Support DIN rail and wall-mounted
- Support local and remote WEB mode or CLI mode

High Performance

- Multiple WAN connection methods, include Static IP/DHCP/PPPOE/DHCP-4G
- Support 3G/4G and wired WAN dual link backup (optional)
- VPN Tunnel: PPTP/L2TP/IPSEC/OPENVPN/GRE
- Remote management SYSLOG/SNMP/TELNET/SSH/HTTPS
- Support local upgrade and remote upgrade
- Import and export configuration files NTP / Build-in RTC
- Support DDNS
- Support VLAN, MAC address clone
- WIFI Support 802.11b/g/n/ac. Support AP/AP Client/Bridge mode
- WIFI Support WEP, WPA, WPA2 and multiple SSID
- Support Private APN SIM card Support APN/VPDN
- Support DHCP server and DHCP client, NAT, DMZ, QOS
- Support TCP/IP, UDP, FTP (optional), HTTP and other network protocols
- Support SPI firewall, VPN pass through, ACL, URL filter, SSL
- Support hardware encryption (optional)
- Traffic statistics, real-time display of data transmission rate

Specifications

Cellular Specification

- Module Industrial grade wireless module
- Frequency Support for FDD LTE: Band 1/3, Band 2/4/5/13/17/25/43
Support CDMA 1XRTT/EVDO 800/1900MHz
Support the whole network (Optional): TDD-LTE, FDD-LTE, EVDO, WCDMA, TD-SCSDMA, CDMA1X
GPRS/EDGE
- Bandwidth FDD LTE (Downlink 100Mbps, Uplink 50Mbps)
TDD LTE (Downlink 61Mbps, Uplink 18Mbps)
CDMA2000 1X EVDO Rev A (Downlink 3.1Mbps, Uplink 1.8Mbps)
WCDMA (Downlink 42Mbps, Uplink 5.76Mbps)
TD-SCDMA (Downlink 4.2Mbps, Uplink 2.2Mbps)
- Power <23dBm
- Sensitivity <-93.3dBm

WiFi Specification

- Frequency Support IEEE802.11b/g/n
- Bandwidth IEEE802.11b/g: 54 Mbps
IEEE802.11n: 150Mbps
- Security Support WEP, WPA, WPA2 and other encryption methods, WPS (optional)
- Power 15dBm (11n), 17dBm (11g), 18 dBm (11b)
- Sensitive <-72dBm @ 54 Mbps

Hardware System

- CPU Industrial-grade 32-bit communication processor
- FLASH 16MB, Extensible to 32MB
- DDR3 64MB

Interfaces

- WAN 1*10/100M Ethernet (RJ45) Auto MDI*MDIX, Built-in 1.5kV electromagnetic isolation protection
- LAN 4*10/100M Ethernet (RJ45) Auto MDI*MDIX, Built-in 1.5kV electromagnetic isolation protection
- Serial 1 x RS232 (RS422/RS485), Built-in 1.5KV electromagnetic isolation protection
Data bit: 5, 6, 7, 8 Stop bit: 1, 1.5 (Optional), 2 Calibration: null, even, odd, SPACE (optional) and MARK (optional) Baud rate: 2400~115200bits/s
- Indicators "PWR", "SYS", "WIFI", "SIM", "Online", "Signal Strength"
- I/O Port 6-pin 3.5mm wiring terminal
2 inputs, 1 output, 1 relay; Controlled by Modbus protocol
Input high level: 5 to 30 VDC
Input low level: 0 to 3 VDC
Load current: 50mA @ 30VDC
Relay load 1A 250V AC/ 30V DC
- Antenna Cellular: 2 standard SMA female antenna interfaces, characteristic impedance 50 ohms
WIFI: 1 standard SMA male antenna interfaces, characteristic impedance 50 ohms
GPS: 1 calibrated SMA male antenna interface, characteristic impedance 50 ohms
- SIM/UIM Standard drawer type user card interface
Support 1.8V/3V SIM/UIM card, built-in 15KV ESD protection
- Power Terminal power socket 2 pins terminal power socket, built-in power reverse protection and overvoltage protection
- Reset Button

Power Supply

- Standard DC 12V/1.5A
- Range DC 5~36V
- Consumption <500mA (12V)

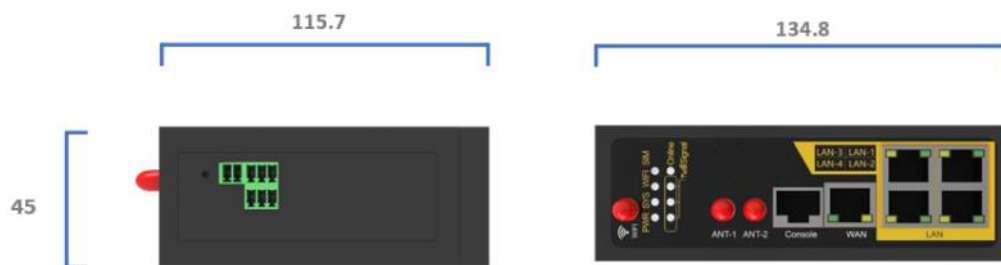
Physical Properties

- Shell Metal shell, protection grade IP30
- Size 134.8 * 115.7 * 45 mm (Does not include antenna and mounting parts)
- Weight 520g

Others

- Operating Temperature -35~+75 °C (-31~+167 °F)
- Storage Temperature -40~+85 °C (-40~+185 °F)
- Relative Humidity 95% (No condensation)

Dimension



Ordering Information

Ordering Code	Description
RTDI-4100	Wireless router 4G LTE -35 °C to +75 °C, 5 Ethernet 1G, Power 5-36Vdc. 2 SIM card slots, 2 removable antennas. 1 com RS232 (RS422/485), GPS. 12W



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