

RT-I-2TXRS-35 RT-I-5TXRS-WF-N-LTE GPRS/EDGE/UMTS/HSDPA/LTE ROUTER

Characteristics

- Multi-protocol Router
- WAN interfaces GPRS, EDGE, UMTS, HSDPA, and LTE : 2.5/2.75/3/3.5G/4G
- Dual SIM slots
- Optional Wifi 802.11n 2,4GHz Client (WAN) or AP (WLAN)
- Optional ADSL2+ router
- User interfaces
 - 2, 4 or 5 Fast Ethernet ports
 - 1x RS232 RJ45
 - 1x host USB 2.0

Security features

- VPN: GRE, OpenVPN, IPsec, IPsec pass-through
- Firewall: NAT/PAT/filtering
- Ethernet
- DHCP Server
- DynDNS
- Router: static, RIP 1

Asynchronous Conversion

- RAW TCP or UDP
- Modbus RTU to Modbus TCP

Management

- HTML
- CLI - Telnet, SSH
- SMS. Remote through 2G/3G and software
- Radius authentication

Environment

- Robust metallic case
- Optional DIN rail mounting
- Industrial operating temperature range: -25° to + 70°C
- Power input: 12Vdc
- Antenna provided and Antenna extension cable on option

VERSATILE CELLULAR ROUTER

RT-I-2TXRS-35 or **LTE** is an high speed industrial cellular router series represents a group of industrial routers especially designed for expansion of existing industrial networks, remote telemetry and data acquisition in hardened environments. Low transmission delay and very high data rates (up to 100Mbps) offered by existing cellular networks completely eliminate the need for very complex installation of wired infrastructure in industrial environments. Easy to install, reliable and high performance router models from **RT-I** series introduce a completely new dimension into industrial networking area.

This new **RT-I-2TXRS** Industrial Cellular Router Series enables users to develop their own software applications so the device can perform operations with no need for using PC application. That means router can independently communicate directly with the connected machine. RT-I router comes with versatile connectivity such as 3G/4G and WiFi option, 2 or 5 Ethernet ports, one RS-232C and one host USB interface.

The device is equipped with LCD display which makes possible to monitor router's status and detect a possible problem without need to access it via PC. Color-coded display can show present/active SIM card, signal strength, cellular network standard, interfaces in use, error alert and more.

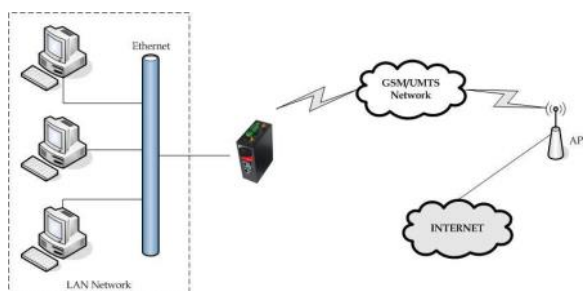
Complete series is based on reliable and high performance hardware platform using ARM Cortex-A8 microprocessor. For reliability all models have dual SIM card support to use two public networks. Thanks to the metal case, fan-less, quality components inside, working temperature, his size and the optional DIN rail mounting kit the router can be use in street cabinet for utilities and transportation activity.

This industrial router series is available with 2 or 5 Ethernet ports, and some model with WiFi client/AP local transmission.



Many useful features make RT-I industrial cellular routers a perfect solution for wide variety of mobile broadband industrial applications::

- Dual SIM card provides a solution in case of mobile network failure
- The different WAN and with options are securing the access of critical application to central
- VPN (GRE, IPsec and OpenVPN) tunnel to secure data transfer over cellular Network
- RS-232C for data acquisition, with Raw TCP encapsulation, ModbusRTU-to-ModbusTCP conversion to support Modbus SCADA networks over the cellular WAN.
- Web management, extended CLI, detailed log, SMS control feature, partial and full configuration Export/Import and remote management and monitoring software provide wide range of management functionalities.





RT-I-5TXRS-WF-N-LTE



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TECHNICAL SPECIFICATIONS

GPRS/EDGE/UMTS/HSPA/HSPA+/LTE

LTE: 800/900/1800/2100/2600 MHz
LTE: 800/850/900/1800/2100/2600 MHz
UMTS/ HSDPA/ HSUPA/ HSPA+ Dual band: 900/2100 MHz
GSM/ GPRS/ EDGE Three band: 900/1800/1900 MHz
GPRS multi-slot class 10, mobile station class B
EDGE multi-slot class 12, mobile station class B
LTE DL: 100Mbps, UL: 50Mbps HSPA+ DL: 21Mbps, UL: 5.76Mbps
HSDPA+ DL: 14.4Mbps, HSUPA UL: 5.76Mbps
UMTS DL: 384Kbps, UL: 384Kbps
EDGE DL: 236.8Kbps, UL: 236.8Kbps
GPRS DL: 85.6Kbps, UL: 42.8Kbps
Important note: All DL/UL speeds are given as speeds defined by standards. Actual speeds may vary and are not guaranteed.

Wi-Fi option

Wireless Standards: IEEE 802.11b, 11g and 11n
Modes: Access point, Client
Frequency Band: 2.4GHz to 2.472GHz (1 to 13 channels)
Rates:

- 11b: 1, 2, 5.5, 11Mbps
- 11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
- 11n: 6.5, 7.2, 13, 14.4, 19.5, 21.7, 26, 28.9, 39, 43.3, 52, 57.8, 58.5, 65, 72.2 Mbs

Receive Sensitivity:
54 Mbps / -75.7 dBm and 11 Mbps / -88.7 dBm
Transmit power: 18.1 dBm max
Wireless Security: 64/128/256-bit WEP, TKIP or AES keys;
WPA and WPA2

Interfaces and connectors

1x embedded interface HSPA/HSPA+/LTE
Dual SIM slots (Push – Push)
GSM: 2xSMA female connector (50 Ω) for external antenna
Wifi: RPSMA female connector (50 Ω) for external antenna
2, 4 or 5x Ethernet interface 10/100 Bate-T, opt. ADSL2+
1x Serial RS-232 interface
1x USB Host 2.0 interface

Protocols and features

Network

DHCP server, RIP, VRRP, Port forwarding, DMZ support, SNMPv1.2c, DynDNS, NTP, Firewall (NAT, PAT, IP filtering, MAC filtering), Serial-to-IP, ModbusRTU-to- ModbusTCP, Radius

VPN

GRE, GRE Keepalive, 3.
Automatic NAT-T behind NAT (initiator and responder), IPsec tunnel failover, Open VPN, PPTP, L2TPv3

Management

Web application (HTTP), Command Line Interface on serial console, Telnet and SSH, GWR connection wizard, remote management and monitoring software, SMS control, Detailed system log, Default reset, Firmware upload, Partial or full configuration Export/Import, Radius Authentication

LCD navigation

LCD information available: Present/active SIM, GSM provider, SMS, roaming, signal strength/ quality/, GSM technology, interfaces, uptime, IP addresses, firmware version

LCD view: 67x39 mm (W x H)

Power requirements

12 VDC, 2A

Environmental

Operating temperature: -20°C to +70°C
Storage temperature: -40°C to +85°C
Relative humidity: 5% to 95% (non-condensing)

Housing

Robust metal housing with optional DIN rail mounting kit

Dimensions and weight

Dimensions (L x W x H): 160 x 100 x 31.5 mm, 600g

ORDERING INFORMATION

RT-I-2TXRS-35	3G router GPRS/UMTS/HSPA+ band 900/1800/1900/2100MHz, DIN-rail case -25 to +70°C, 2 Ethernet, 1 RS232 RJ45F, 1USB host. 2 removable antenna, DC power supply 12Vcc 2A.
RT-I-5TXRS-35	3G router GPRS/UMTS/HSPA+ band 900/1800/1900/2100MHz, DIN-rail case -25°C to +70°C, 5 Ethernet, 1 RS232 RJ45F, 1USB host. 2 removable antenna, DC power supply 12Vcc 2A.
RT-I-2TXRS-WF-N-35	3G router GPRS/UMTS/HSPA+ band 900/1800/1900/2100MHz, DIN-rail case -25°C to +70°C, 2 Ethernet, Wifi b.g.n 2.4GHz 72Mbps, 1 RS232 RJ45F, 1USB host. 2 removable antennas, DC power supply 12Vcc 2A.
RT-I-5TXRS-WF-N-35	Wireless router GPRS/UMTS/HSPA+ band 900/1800/1900/2100MHz, DIN-rail case -25°C to +70°C, ports: 5 Ethernet, Wifi b.g.n 2.4GHz 72Mbps, 1 RS232 RJ45F, 1USB host. 2 removable antennas, DC power supply 12Vcc 2A.
RT-I-2TXRS-LTE	LTE router GPRS/UMTS/HSPA+/LTE band 900/1800/1900/2100/2300MHz, DIN-rail case -25 to +70°C, 2 Ethernet, 1 RS232 RJ45, 1USB host. 2 removable antennas, 12Vdc power input
RT-I-5TXRS-LTE	LTE router GPRS/UMTS/HSPA+/LTE band 900/1800/1900/2100/2300MHz, DIN-rail case -25 to +70°C, 5 Ethernet, 1 RS232 RJ45F, 1USB host. 2 removable antennas, 12Vdc power supply
RT-I-2TXRS-WF-N-LTE	Wireless router GPRS/UMTS/HSPA+/LTE band 900/1800/1900/2100/2300MHz, DIN-rail case -25°C to +70°C, ports: 2 Ethernet, Wifi b.g.n 2.4GHz 72Mbps, 1 RS232 RJ45F, 1USB host. 3 removable antennas, DC power supply 12Vcc 2A.
RT-I-5TXRS-WF-N-LTE	Wireless router GPRS/UMTS/HSPA+/LTE band 900/1800/1900/2100/2300MHz, DIN-rail case -25°C to +70°C, ports: 5 Ethernet, Wifi b.g.n 2.4GHz 72Mbps, 1 RS232 RJ45F, 1USB host. 3 removable antennas, DC power supply 12Vcc 2A.
RT-I-ATXRS-35	3G router GPRS/UMTS/HSPA+ band 900/1800/1900/2100MHz, DIN-rail case -25 to +70°C, 1x Ethernet, 1x ADSL2+, 1 RS232 RJ45F, 1USB host. 2 removable antennas, 12Vcc power input
RT-I-ATXRS-LTE	LTE router GPRS/UMTS/HSPA+/LTE band 900/1800/1900/2100/2300MHz, DIN-rail case -25 to +70°C, 1 Ethernet, 1x ADSL2+, 1 RS232 RJ45, 1USB host. 2 removable antennas, 12Vdc power input
RT-I-A4TXRS-WF-N-LTE	Wireless router GPRS/UMTS/HSPA+/LTE band 900/1800/1900/2100/2300MHz, DIN-rail case -25°C to +70°C, ports: 4 Ethernet, 1 ADSL2+, Wifi b.g.n 2.4GHz 72Mbps, 1 RS232 RJ45F, 1USB host. 3 removable antennas, DC power supply 12Vcc 2A.