

INDUSTRIAL DIN RAIL ROUTER LTE



Compact and cost-effective DIN-rail industrial LTE router for M2M and IoT applications

This industrial LTE Cat.4 router is compact and small in size, making it suitable for various M2M and IoT applications such as smart metering and industrial automation.

This device is a cost-effective solution for connecting multiple industrial devices, energy meters, and sensors with a single router.

It enables remote reading of multiple industrial including the AMI (HES) or Smart Grid infrastructures.



Our cellular router has been specifically designed for industrial and metering environments. It can be mounted on a DIN-rail as an external device and connected to multiple devices simultaneously, such as industrial measurement systems and utility meters, sensors.

The router features industry-standard interfaces and protocols, making it suitable for use in industrial automation, smart metering.

Connect your devices to a central server by creating a transparent data link, allowing you to access them remotely. The router can also read registers of connected PLCs and sensors on RS485 or RS232 (via Modbus RTU), on Ethernet (via Modbus TCP), and transmit data to the center, providing a cost-effective solution for industrial automation and smart grid connectivity.

The router comes in a plastic IP31 housing that can be securely mounted to a 35mm DIN rail. It operates on the open-source, Linux-based OpenWRT® operating system and it is compatible with our Device Manager® platform.

MAIN FEATURES

- LTE Cat.4 / 3G / 2G cellular module
- RJ45: Ethernet port (LAN, 10/100Mbps)
- Terminal blocks: RS232 port, RS485 port, DI (digital input)
- IP31 plastic modular casing, with 35mm DIN-rail fastening
- OpenWrt® operation system
- Transparent data link
- Data Acquisition: Reading PLC registers using Modbus, sending data to the data center / Transparent data transmitting
- Configurable via OpenWrt web interface or Device Manager via TLS communication (option) / Remote FW updates and configuration
- Protocols: DHCP, DynDNS, IP Route, NAT, IPv4/IPv6, (S)FTP, (S)NTP, OpenSSH, OpenSSL, HTTPS, IPsec/OpenVPN, TLS v1.2, LAN, WAN, Modbus RTU/TCP, MQTT
- Device Management platform (order option)



APPLICATION

- INDUSTRIAL AUTOMATION
- INDUSTRIAL MEASUREMENT
- UTILITY COMPANIES
- SMART METERING
- SMART GRID



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DESIGN AND OUTFIT

- IP31 plastic housing with 8 LEDs
- Ethernet port (RJ45, LAN, 10/100Mbps)
- RS232, RS485, and DI (digital input) terminal block connectors
- DC power input
- External LTE antenna connector (SMA, 50 Ohm)



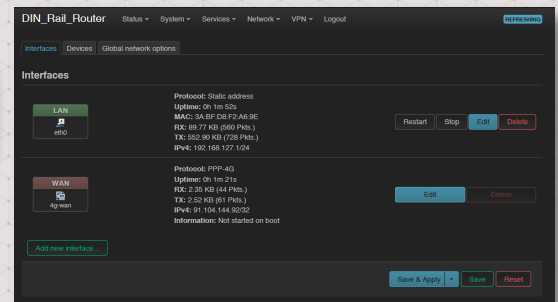
ONLINE MANAGEMENT QoS & ANALYTICS REMOTE FW UPDATES CENTRAL CONTROL

SOFTWARE SYSTEM

- Web user interface and Linux command line, UCI
- Security features include firewall, diagnostic monitoring of operational parameters, and remote control, including reboot and command execution via voice call
- Protocols: DHCP, DynDNS, IP route, NAT, IPv4 / IPv6, (S)FTP, (S)NTP, HTTP(S), IP passthrough, OpenSSH, OpenSSL, IPSec, OpenVPN, TLS, LAN, WAN, Modbus RTU/TCP, MQTT
- Transparent communication / Data Acquisition

ACCESSORIES (ORDER OPTIONS)

- 12V DC power adapter
- External antenna (SMA, 50 Ohm)
- Device Manager® software for updates and configuration



INDUSTRIAL DIN RAIL ROUTER®		LTE Cat.4
Power Voltage / Nominal Frequency		• 12V DC, 1A power supply (9-32VDC)
Power Consumption / Current		• Average: 200mA 12VDC (according to module version) / 2.4W, 12VDC
System		• ARM Cortex®-A7 M1, 1.2GHz processor / 64MB DDR2 memory
Communication module	Performance	• LTE Cat.4 / 3G / 2G
	Cellular technology	• LTE Cat.4 / 3G / 2G
	Internet module	• SIMCom A7602A
	Bands / Frequency (MHz)	• LTE-FDD: B1(2100) / B3(1800) / B5(850) / B7(2600) / B8(900) / B20(800) • LTE-TDD: B38(2600) / B40(2300) / B41(2500) • UMTS / HSPA+: 3G: B1(2100) / B2(1900) / B5(850) / B8(900) • GSM/GPRS/EDGE: B5(800) / B8(900) / B3(1800) / B2(1900)
	Speed (DL/UL)	• LTE Cat.4 release 9 compliant: 150/50 Mbps • HSPA+ Cat.20/Cat.6: 42/5.7 Mbps • UMTS: 384/384 kbps • EDGE: 236/236 kbps • GPRS: 85.6/85.6 kbps
	SIM card slot	• mini SIM card (2FF type, push-insert SIM)
Antenna connector		• External antenna connector (SMA, 50 Ohm)
Interfaces	Connectors	• RJ45 (10/100 Mbps, Ethernet LAN) • RS232 port (2-pin terminal block connector, up to 9600/19200 bps) • RS485 (4-pin terminal block connector) • Digital input connector (for monitoring, sabotage detection); 2-pin terminal block connector) • DC power input (2-pin terminal block connector)
	Switch	• Reset button
Operation	System / Services	• WebGUI / Luci® interface, OpenWrt® operation system, Linux command line, UCI • Protocols: DHCP, DynDNS, IP route, NAT, IPv4/IPv6, (S)FTP, SNTp time handlink, NTP time service, HTTP(S), OpenSSH, OpenSSL, IP passthrough, Modbus RTU/TCP, MQTT • Transparent communication • It can read registers of connected PLCs and sensors on RS485 or RS232 (via Modbus RTU), on Ethernet (via Modbus TCP), and transmit data to the center
	Security features	• Security: Firewall, diagnostic, and monitoring of the operation parameters, remote control (reboot and command execution by a voice call), OpenVPN, IPSec, TLS v1.2 • Management: Device Manager connection - optional
	Configuration	• OpenWRT® / Luci® web user interface (local/remote configuration) • Device Manager® software (firmware/software refresh, parameter modification, reboot) with TLS communication - order option
	Indication	• 8pcs of bi-color status LEDs (configurable)
Construction	Temperature	• Operating: from -20°C to +70°C at 95% rel.humidity • Storage: from -40°C to +80°C at 95% rel.humidity
	Enclosure Dimension / Weight	• IP31 plastic modular casing, mountable to 35mm DIN-rail • 90 x 62 x 18mm (without DIN-rail fasteners) / 98 x 62 x 18mm (with DIN-rail fasteners) • 45gr



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