INDUSTRIAL DIN RAIL ROUTER

This industrial LTE router is compact and small in size, making it suitable for various M2M and IoT applications such as smart metering and industrial automation. It can be mounted on a DIN-rail for easy installation.

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

This device enables the remote reading of multiple industrial systems and transmits the data to a central server, including 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 router, connected to multiple devices simultaneously, such as industrial measurement systems, utility meters, and sensors. The router features industry-standard interfaces and protocols, making it suitable for use in industrial automation and smart metering.

You can connect your devices to a central server by creating a transparent data link, allowing you to access them remotely. The router features several interfaces for connecting industrial devices, including Ethernet, RS232 and RS485 ports, and a DI (digital input) interface. It comes in a plastic IP31 housing that can be securely mounted to a 35mm DIN rail.

The device operates on the open-source, Linux-based OpenWRT® operating system and is compatible with our Device Manager® platform.

MAIN FEATURES

- Cellular modules (order options):
  - LTE Cat.1 / 2G or LTE Cat.1 / 3G / 2G
  - LTE Cat.M / Cat.NB (with 450MHz and 2G „fallback" options)
- Physical interfaces:
  - RJ45: Ethernet port (LAN, 10/100Mbps)
  - Terminal block: RS232 port, RS485 port, DI (digital input)
- DC power input
- Transparent data link
- OpenWrt® operation system
- Security, networking, and management protocols
- Configurable via OpenWrt web interface or Device Manager via TLS communication (order option)
- Remote firmware updates and configuration
- IP31 plastic modular casing, with 35mm DIN-rail fastening

APPLICATION

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

INDUSTRIAL DIN RAIL ROUTER

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 antenna connector (SMA, 50 Ohm)

INDUSTRIAL DIN RAIL ROUTER
ETHERNET / RS232 / RS485 / DI

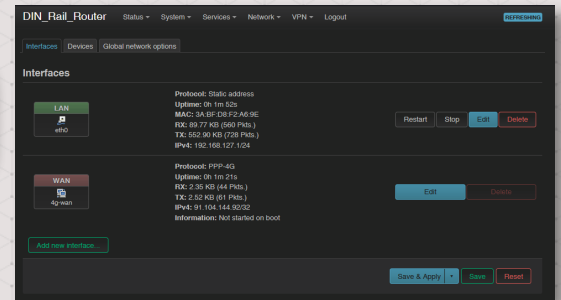| ONLINE MANAGEMENT | QoS & ANALYTICS | REMOTE FW UPDATES | CENTRAL CONTROL |

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

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.1		LTE Cat.M / Cat.NB			
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	Performance	ARM Cortex®-A7 M1, 1.2GHz processor / 64MB DDR2 memory					
	Cellular technology	LTE Cat.1 with 2G "fallback"	LTE Cat.1 / 3G / 2G	LTE Cat.M / Cat.NB	LTE Cat.M / Cat.NB with 2G "fallback"	LTE Cat.M / Cat.NB / 450MHz	LTE Cat.M / Cat.NB / 450MHz with 2G "fallback"
	Internet module	Quectel EG915N-EU	Quectel EG91-EX	Quectel BG95-M2	Quectel BG95-M3	Quectel BG95-M4	Quectel BG95-M8
Communication module	Bands / Frequency (MHz)	LTE Cat.1: B1(2100) / B3(1800) / B5(850) / B7(2600) / B8(900) / B20(800) • 2G: B3(1800) / B8(900)	LTE Cat.1: B1(2100) / B3(1800) / B7(2600) / B8(900) / B20(800) / B28(700) • 3G: B1(2100) / B8(900) • 2G: B3(1800) / B8(900)	LTE Cat.M: B1(2100) / B2(1900) / B3(1800) / B4(1700) / B5(850) / B8(900) / B12(700) / B13(700) / B18(850) / B19(850) / B20(800) / B25(1900) / B26(850) / B27(850) / B28(700) / B66(1700) / B85(700) • LTE Cat.NB: B1(2100) / B2(1900) / B3(1800) / B4(1700) / B5(850) / B8(900) / B12(700) / B13(700) / B18(850) / B19(850) / B20(800) / B25(1900) / B28(700) / B66(1700) / B71(600) / B85(700)	LTE Cat.M: B1(2100) / B2(1900) / B3(1800) / B4(1700) / B5(850) / B8(900) / B12(700) / B13(700) / B18(850) / B19(850) / B20(800) / B25(1900) / B26(850) / B27(850) / B28(700) / B66(1700) / B85(700) • LTE Cat.NB: B1(2100) / B2(1900) / B3(1800) / B4(1700) / B5(850) / B8(900) / B12(700) / B13(700) / B18(850) / B19(850) / B20(800) / B25(1900) / B28(700) / B66(1700) / B71(600) / B85(700) • 2G: B2(1900) / B3(1800) / B5(850) / B8(900)	LTE Cat.M: B1(2100) / B2(1900) / B3(1800) / B4(1700) / B5(850) / B8(900) / B12(700) / B13(700) / B18(850) / B19(850) / B20(800) / B25(1900) / B26(850) / B27(850) / B28(700) / B31(450) / B66(1700) / B72(450) / B73(450) / B85(700) • LTE Cat.NB: B1(2100) / B2(1900) / B3(1800) / B4(1700) / B5(850) / B8(900) / B12(700) / B13(700) / B18(850) / B19(850) / B20(800) / B25(1900) / B28(700) / B31(450) / B66(1700) / B72(450) / B73(450) / B85(700)	LTE Cat.M: B1(2100) / B2(1900) / B3(1800) / B4(1700) / B5(850) / B8(900) / B12(700) / B13(700) / B18(850) / B19(850) / B20(800) / B25(1900) / B26(850) / B27(850) / B28(700) / B31(450) / B66(1700) / B72(450) / B73(450) / B85(700) / B87(410) / B88(450) • LTE Cat.NB: B1(2100) / B2(1900) / B3(1800) / B4(1700) / B5(850) / B8(900) / B12(700) / B13(700) / B18(850) / B19(850) / B20(800) / B25(1900) / B28(700) / B31(450) / B66(1700) / B72(450) / B73(450) / B85(700) • 2G: B2(1900) / B3(1800) / B5(850) / B8(900)
	Speed (DL/UL)	• LTE: 10/5 Mbps • EDGE: 236.8/236.8 kbps • 2G: 85.6/85.6 kbps	• LTE: 10/5 Mbps • UMTS: 42/5.76 Mbps • WCDMA: Max 384/384 kbps • EDGE: 296/236.8 kbps • GPRS: 107/85.6 kbps	• LTE Cat.M1: 588/1119 kbps • LTE Cat.NB2: 127/158.5 kbps • LTE Cat.NB1: 32/70 kbps	• LTE Cat.M1: 588/1119 kbps • LTE Cat.NB2: 127/158.5 kbps • LTE Cat.NB1: 32/70 kbps • EDGE: 296/236.8 kbps • GPRS: 107/85.6 kbps	• LTE Cat.M1: 588/1119 kbps • LTE Cat.NB2: 127/158.5 kbps • LTE Cat.NB1: 32/70 kbps	• LTE Cat.M1: 588/1119 kbps • LTE Cat.NB2: 127/158.5 kbps • LTE Cat.NB1: 32/70 kbps • EDGE: 296/236.8 kbps • GPRS: 107/85.6 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 • Operation: Transparent communication					
	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	• IP31 plastic modular casing, mountable to 35mm DIN-rail					
	Dimension / Weight	• 90 x 62 x 18mm (without DIN-rail fasteners) / 98 x 62 x 18mm (with DIN-fail fasteners) • 45gr					

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