Router Donyx
RX44 LTE CAT.4



Industrial single-module LTE CAT.4 router
with Wi-Fi and GPS

This ruggedized industrial LTE router provides high-performance, reliable cellular connectivity for demanding applications. Supporting LTE/HSPA+/UMTS/EDGE/GPRS, it delivers data rates up to 150 Mbps downlink and 50 Mbps uplink through its integrated LTE CAT.4 module. Dual-SIM functionality ensures connection redundancy and allows for scheduled operation.

The router offers a comprehensive range of wired and wireless connectivity options. These include an integrated 802.11b/g/n Wi-Fi access point, four 10/100 Ethernet ports, RS-232 and RS-485 serial interfaces, and seven configurable GPIO pins offering maximum flexibility for integration with external devices. A high-precision Galileo/GLONASS/GPS receiver enables precise location tracking.
The hardware platform is built on a high-performance processor, ensuring reliable operation and efficient handling of networking tasks.

The router runs on an dnxOS operating system, supporting modern encryption, tunneling protocols like OpenVPN and IPsec to ensure secure data transmission. It provides advanced features such as custom VPN configurations, diagnostics tools, and flexible scripting capabilities, tailored for industrial and enterprise use.
Data transmission is secured with robust encryption protocols, ensuring the safety and integrity of transmitted information.

This adaptability allows the equipment to meet diverse application needs, from simple connectivity to advanced network configurations.

Designed for demanding industrial environments, the router features seamless WAN failover and a wide operating temperature range of -40°C to +65°C. This versatile connectivity solution is ideal for applications ranging from remote network connectivity and industrial control systems to secure data transmission for financial terminals and robust video surveillance deployments.

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Communication Standards

- LTE, HSUPA, HSDPA, EDGE, GPRS, GSM, GNSS, SMS

Electrical Specifications

- Power supply voltage from 8 to 30 V (DC)
- Current consumption, maximum:
  - At power supply voltage +12 V – 1000 mA;
  - At power supply voltage +24 V – 500 mA;
- Passive PoE-IN available on **Port 1**. Supported Passive PoE-IN voltage range : 8-30 V

Physical Specifications

- Maximum dimensions (including connectors): 135 × 120 × 40 mm
- Maximum weight: 300 g
- Enclosure Material: Aluminum
- Enclosure Protection Rating: IP30
- Operating Temperature Range: from -40°C to +65°C
- Storage Temperature Range: from -40 to 50°C

Network Functions

Routing	Static
Network protocols	PPP, PPPoE, DHCP, TCP, UDP, ARP, IPv4, ICMP, HTTP, HTTPS, TLS, SSL
Connection monitoring	Ping Reboot, Periodic Reboot, LCP and ICMP for link tracking
Firewall	Port forwarding, ZONE-based rules, pre-configured firewall rules, custom rules, NAT
DHCP	Static and dynamic IP address allocation
Network backup	VRRP; Wired, Mobile, or WiFi WAN. Supports automatic failover to an alternative connection (Automatic Failover)

Network Services	DHCP Server, NTP, DNS, SSH, SNMP

Tunneling

OpenVPN	Ability to run one server and multiple clients simultaneously. Encryption: Client - AES-128-CBC, AES-192-CBC, AES-256-CBC; Server - AES-128-CBC, AES-128-GCM, AES-192-CBC, AES-192-GCM, AES-256-CBC, AES-256-GCM
IPsec	IKEv1, IKEv2. Encryption: Client - AES-128, AES-192, AES-256; Server - AES-128, AES-128, AES-192, AES-192, AES-256, AES-256
GRE	GRE TUN (Layer 3)
EoIP	MikroTik RouterOS protocol based on GRE RFC 1701
PPTP, L2TP	Server and Client mode support for L2TPv2, L2TPv3
DMVPN	Client mode operation, additional IP Security encryption
Wireguard	WireGuard tunnels and peers

Security Features

Authentication	Pre-shared key, digital certificates, X.509 certificates
Attack prevention	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VLAN	Port and tag based VLAN separation
Access control	WiFi access control (MAC address filter)

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Hardware Specifications

Number of Cellular Modules	1 x LTE CAT.4
Processor	MIPS 24KEc 580 Mhz
Dynamic RAM	128 MB
Flash Memory Capacity	32 MB
Wi-Fi	2,4 GHz (802.11b/g/n 2T2R MAC)
WiFi Transmit Power	up to 16 dBm (40 mW)

Ports and Connectors

Ethernet Connector	4 x 10/100 Mbps
Microfit4 Connector	Power
DB9 connector	RS232
Terminal Block	RS485, 7 x GPIO, power
Card slot	MicroSDHC
SIM Card Slots	Mini SIM
RST Button	Reset Button

ⓘ Specifications may change without prior notice!