

## Router Donyx RM55x4 5G RedCap

Industrial 5G Router  
Support for Four NR5 (RedCap) Modules,  
Wi-Fi 5, GPS



This industrial-grade 5G router features quad-module redundancy with four 5G NR modules, each capable of delivering download speeds of up to 220 Mbps and upload speeds of up to 120 Mbps. This multi-module configuration provides enhanced connection resilience through automatic failover and load balancing, ensuring seamless operation and minimizing downtime.

Integrated redundancy features maintain connection stability. In the event of a primary network failure, the router automatically switches to a secondary cellular connection. Should all cellular connections become unavailable, the router seamlessly fails over to Ethernet or Wi-Fi, guaranteeing uninterrupted internet access in any environment.

Supporting up to four SIM cards, the router offers redundancy at both the module and carrier levels. Scheduled SIM management and failover capabilities mitigate the impact of physical SIM card failures and optimize network utilization.

Key features include five Gigabit Ethernet ports and dual-band Wi-Fi, offering fast and reliable connectivity for multiple devices. The router includes discrete GPI inputs for industrial system integration and a hardware-integrated GPS module for precise location tracking, ideal for asset tracking, fleet management, and remote monitoring.

Built for demanding conditions, the router operates within a wide temperature range, from -40°C to +65°C, and is housed in a rugged metal enclosure designed to withstand harsh industrial environments.

The router runs on an OpenWRT-based operating system, supporting modern encryption protocols like OpenVPN and IPsec to ensure secure data transmission. Enhanced with proprietary software, it provides advanced features such as custom VPN configurations, diagnostics tools, and flexible scripting capabilities, tailored for industrial and enterprise use.

This combination of powerful hardware and dedicated firmware delivers superior performance, security, and reliability, making the router an ideal solution for critical industrial and business applications.



Communication Standards

- 5G NR (New Radio) and LTE technologies, Wi-Fi 4, Wi-Fi 5, GNSS

Electrical Specifications

- Power supply voltage from 10 to 30 V (DC)
- Current consumption, maximum:
  - At power supply voltage +12 V – 1500 mA;
  - At power supply voltage +24 V – 750 mA;

Physical Specifications

- Maximum dimensions (including connectors): 180 × 180 × 50 mm
- Maximum weight: 770 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 and dynamic routing (OSPFv2, BGP)
Network Protocols	PPP, PPPoE, IPoE (Static, DHCP Client), 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, NAT helpers (H.323, SIP-alg, etc), pre-configured firewall rules, custom rules
DHCP	Static and dynamic IP address allocation, DHCP Relay, Relayd
DDNS	Quick settings for major providers and manual setup options for others

Network Backup	VRRP; Wired, Mobile, or WiFi WAN. Supports automatic failover to an alternative connection (Automatic Failover)
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Network Services	DHCP Server, NTP, DNS, VRRP, SSH, UPNP, SNMP, Telnet client, SMTP, NTRIP Client
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## Tunneling

OpenVPN	Ability to run multiple clients and servers simultaneously
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OpenVPN	Encryption: AES-128-CBC, AES-192-CBC, AES-256-CBC
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IPsec	IKEv1, IKEv2. Supported encryption algorithms: 3DES, AES128, AES192, AES256
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GRE	GRE TUN (Layer 3), GRE TAP (Layer 2)
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EoIP	MikroTik RouterOS protocol based on GRE RFC 1701
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PPTP, L2TP	Client mode support for L2TPv2, L2TPv3
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DMVPN	Client mode operation, additional IP Security encryption
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## Security Features

Authentication	Pre-shared key, digital certificates, X.509 certificates
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Firewall	Pre-configured firewall rules (managed via Web), unlimited firewall configuration; DMZ; NAT; NAT-T
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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)
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VLAN	Port and tag based VLAN separation
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Access control	WiFi access control (MAC address filter)
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## Hardware Specifications

Number of Cellular Modules	4 x NR5 (RedCap)
Processor	Quad-core ARM Cortex A7 717MHz
Dynamic RAM	512 MB
NAND Flash Memory Capacity	256 MB
Wi-Fi	2.4 GHz (802.11a/b/g/n), 5 GHz (802.11ac)

## Ports and Connectors

Ethernet Connector	5x LAN 10/100/1000 Mbps
SIM Card Slots	Mini SIM
CONSOLE Connector	RJ45 Console Port
Microfit4 Connector	Power
Breakaway Terminal Connector	RS485, 3 x GPI
RST Button	Reset Button

 Specifications may change without prior notice!