

RUT976

REDCAP 5G ROUTER



RUT976 360° VIEW

The RUT976 is an industrial Redcap 5G router supporting SA architecture, carving a balanced niche between 4G and full-capacity 5G. This 5G router can wirelessly support up to 100 end devices and features the low latency of 5G—at affordable pricing. In case of limited 5G coverage, the RUT976 is backward compatible

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REDCAP 5G

Low latency, high capacity, affordable pricing

FUTURE-PROOFING

Backward compatible with 4G LTE Cat 4

DUAL-SIM

With auto-failover, backup WAN and other switching scenarios

MULTIPLE INTERFACES

Ethernet, RS232, RS485, & multiple I/Os





MANAGEMENT

ALFRTS

CONFIGURATION

ACCESS

FOTA



HARDWARE

| Mobile | 5G Sub-6Ghz SA 223 Mbps DL , 123 Mbps UL; 4G LTE Cat 4 – LTE 195 Mbps DL, 105 Mbps UL |
|---------------------------|--|
| CPU | Mediatek, 580 MHz, MIPS 24KEc |
| RAM | 128 MB, DDR2 |
| Flash storage | 32 MB, NOR Flash |
| Powering options | 4-pin industrial DC power socket, 9 - 30 VDC |
| SIM | 2 x SIM slots (Mini SIM - 2FF), 1.8 V/3 V, external SIM holders, 2x MFF2 size eSIM (can be installed upon request) |
| SD Card | Micro SD (internal) |
| Antenna connectors | 2 x SMA for Mobile, 3 x RP-SMA for Wi-Fi, 1 x SMA for GNSS |
| Ethernet | $4 \times R$ J45 ports, 10/100 Mbps: $1 \times WAN$ (configurable as LAN), $3 \times LAN$ |
| Wi-Fi | IEEE 802.11b/g/n (Wi-Fi 4), Access Point (AP), Station (STA) |
| GNSS | GPS, GLONASS, BeiDou, Galileo and QZSS |
| Inputs/Outputs | 1 x digital dry input (0 - 3 V), 1 x digital galvanically isolated input (0 - 30 V), 1 x analog input (0 - 24 V), 1 x Digital non-isolated input (on 4-pin power connector, 0 - 5 V detected as logic low, 8 - 30 V detected as logic high), 1 x digital open collector output (30 V, 250 mA), 1 x SPST relay output (40 V, 4 A), 1 x Digital open collector output (30 V, 300 mA, on 4-pin power connector) |
| Serial | RS232, RS485 |
| Grounding | 1 x Grounding screw |
| Status LEDs | 1 x Bi-color connection status, 5 x Mobile connection strength, 4 x ETH status, 1 x Power |
| Operating temperature | -40 °C to 75 °C |
| Housing | Aluminum housing, plastic panels |
| Dimensions (W x H x D) | 110 x 50 x 100 mm |
| Weight | 295 g |
| SOFTWARE | |
| Operating system | RutOS (OpenWrt based Linux OS) |
| Mobile features | SIM switch, Status, SMS, USSD, Black/White list, Multiple PDN, Band management, SIM idle protection service, SIM PIN code management, APN, Bridge, Passthrough, Framed routing |
| Network features | VoIP passthrough support, Network Management, Connection monitoring, Firewall, Firewall status page, Ports management, Network topology, Hotspot, DHCP, QoS / Smart Queue Management (SQM), DNS over HTTPS, DDNS, Network backup, Load balancing, SSHFS |
| Security | Authentication, Firewall, Attack prevention, VLAN, Mobile quota control, WEB filter, Access control, SSL certificate generation |
| VPN and tunneling | OpenVPN, OpenVPN Encryption, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard, Tinc |
| Monitoring and Management | WEB UI, FOTA, SSH, SMS, Call, Email, TR-069, MQTT, SNMP, JSON-RPC, RMS |
| Cloud solutions | RMS, Cloud of Things, ThingWorx, Cumulocity - Cloud of Things, Azure IoT Hub |
| Services | BacNET, OPC UA, Modbus, Data to Server, Modbus MQTT GATEWAY, DNP3, DLMS |
| Location Tracking | GNSS, Coordinates, NMEA, NTRIP, Server software, Geofencing |

