TELTONIKA

RUTC50

5G POWERHOUSE WITH WI-FI 6

RUTC50 360° VIEW

Unleash the full potential of your edge applications with the RUTC50 5G router. This compact powerhouse combines ultra-fast 5G (up to 3.4 Gbps), dual-band Wi-Fi 6, and enhanced processing power with 1GB RAM and 8GB flash memory. Featuring dual SIM and eSIM for global, touch-free deployments, the RUTC50 delivers lightning-fast, low-latency communication for mission-critical operations. Rugged, powerful, and future-ready.

5G
Ultra-high cellular speeds up to 3.4 Gbps

Wi-Fi 6
Dual-band multi-user MIMO for superior wireless

PROCESSING POWER
1GB RAM and 8GB flash for edge computing applications

eSIM
Global, touch-free deployments

RMS
REMOTE MANAGEMENT SYSTEM

COMPATIBLE WITH RUTC50

MANAGEMENT | ALERTS | CONFIGURATION | ACCESS | FOTA

KEY FEATURES

HARDWARE

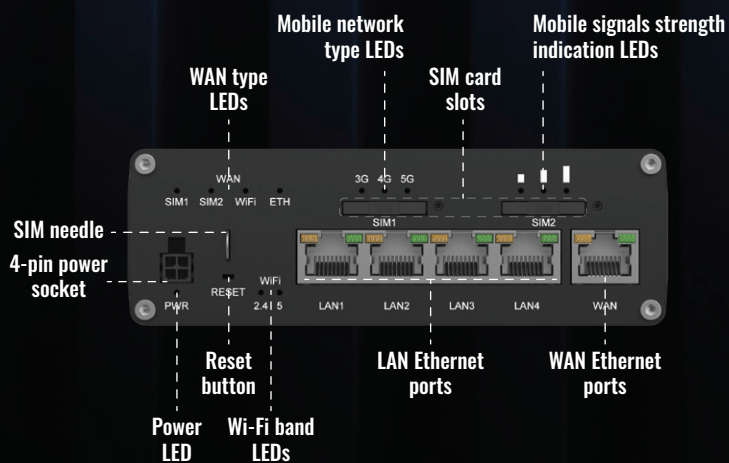|	
Mobile	5G Sub-6 Ghz SA/NSA 2.4/3.4 Gbps DL (4x4 MIMO), 900/550 Mbps UL (2x2); 4G (LTE) – LTE Cat 19 1.6 Gbps DL, Cat 18 200 Mbps UL; 3G – 42 Mbps DL, 5.76 Mbps UL
CPU	Mediatek, Dual-core, 1.3 GHz, ARM Cortex A53
RAM	1GB, DDR4
Storage	16MB serial NOR flash, 8GB eMMC
TPM	Identification and authentication module, TPM 2.0 standard
Powering options	4-pin industrial DC power socket, 9 - 50 VDC
eSIM	Consumer type eSIM, profile download and removal operations, up to 7 eSIM profiles; does not include data plans
SIM	2 x SIM slots (Mini SIM - 2FF), 1.8 V/3 V, external SIM holders
Antenna connectors	4 x SMA for Mobile, 3 x RP-SMA for Wi-Fi, 1 x SMA for GNSS
Ethernet	5 x RJ45 ports, 10/100/1000 Mbps: 1 x WAN (configurable as LAN), 4 x LAN
Wi-Fi	802.11b/g/n/ac/ax (Wi-Fi 6) with data transmission rates up to 2402Mbps on 5GHz, 576Mbps on 2.4GHz (Dual Band, MU-MIMO)
GNSS	GPS, GLONASS, BeiDou, Galileo and QZSS
Inputs/Outputs	1 x Configurable digital Input, 0 - 6 V detected as logic low, 8 - 50 V detected as logic high, 1 x Configurable digital Output, Open collector output, max output 50 V, 300 mA
Grounding	1 x Grounding screw
Status LEDs	4 x WAN status, 3 x Mobile connection type, 3 x Mobile connection strength, 10 x LAN status, 1 x Power, 2 x 2.4G and 5G Wi-Fi
Operating temperature	-40 °C to 75 °C
Housing	Anodized aluminum housing and panels
Dimensions (W x H x D)	130.4 x 42.6 x 103.4 mm
Weight	452 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	eSIM, SIM switch, Status, SMS, USSD, Block/Allow list, Multiple PDN, Band management, SIM idle protection service, SIM PIN code management, APN, Bridge, Passthrough, Framed routing
Wireless features	Wi-Fi security, SSID/ESSID, Wi-Fi users, Wireless Connectivity Features, Wireless MAC filter, Wireless QR code generator, TravelMate
Network features	Routing, Network protocols, VoIP passthrough support, Connection monitoring, Firewall, Firewall status page, Ports management, Network topology, DHCP, QoS / Smart Queue Management (SQM), DNS over HTTPS, DDNS, Network backup, Load balancing, Hotspot, Hotspot 2.0, SSHFS, VRF support , Traffic Management, Port Mirroring
Security	Authentication, Firewall, Attack prevention, VLAN, Mobile quota control, WEB filter, Access control, TPM, SSL certificate generation, 802.1x
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard, Tinc, Tailscale
Monitoring and management	WEB UI, FOTA, SSH, SMS, Call, Email, TR-069, MQTT, SNMP, JSON-RPC, MODBUS, RMS
Cloud solutions	RMS, ThingWorx, Cumulocity - Cloud of Things, Azure IoT Hub
Services	OPC UA, Modbus, Data to Server, Modbus MQTT GATEWAY, DNP3, DLMS/COSEM
Location tracking	GNSS, Coordinates, NMEA, NTRIP, Server software, Geofencing

FRONT VIEW

Mobile network type LEDs

WAN type LEDs

SIM card slots

Mobile signals strength indication LEDs

SIM needle

4-pin power socket

WAN   SIM1 SIM2 WiFi ETH   3G 4G 5G

SIM1   SIM2

SIM needle

RESET   WiFi   LAN1 LAN2 LAN3 LAN4   WAN
2.4I 5
PWR

Power LED

Reset button

Wi-Fi band LEDs

LAN Ethernet ports

WAN Ethernet ports

BACK VIEW

Mobile antenna connector

Mobile antenna connector

Mobile antenna connector

GPS antenna connector

Mobile antenna connector

MOBILE   MOBILE   GPS   MOBILE   MOBILE

WiFi   WiFi   WiFi   USB

Grounding screw

Wi-Fi antenna connector

Wi-Fi antenna connector

Wi-Fi antenna connector

Wi-Fi antenna connector

USB port