Item no.: 395769

RUTC50 - - YOUR 5G WIRELESS MULTITOOL

Item no.: 395769
shipping weight: 0.50 kg
Manufacturer: Teltonika

📄 Product Description

RUTC50YOUR 5G WIRELESS MULTITOOLThe RUTC50 is a 5G router featuring dual-band Wi-Fi 6 technology with multi-user MIMO, ensuring ultra-high cellular speeds of up to 3.4 Gbps. This 5G router is also equipped with dual SIM with auto-failover, five Gigabit Ethernet ports, and GNSS for precise location tracking. The RUTC50 supports both SA and NSA 5G architectures and is backward compatible with 4G (Cat 20) and 3G, ensuring robust and reliable performance.-5G: Ultra-high cellular speeds of up to 3.4 Gbps-Wi-Fi 6: Dual-band multi-user MIMO wireless capabilities-PROCESSING POWER: Increased processing capacity for multi-user and edge computing applications-DUAL SIM: With auto-failover, backup WAN, and other switching scenariosFeatures: Mobile Mobile module 5G Sub-6Ghz SA/NSA 2.4/3.4Gbps DL (4x4 MIMO), 900/550 Mbps UL (2x2); 4G (LTE) – LTE Cat 20 2.0Gbps DL, 210Mbps UL; 3G – 42 Mbps DL, 5.76Mbps UL 3GPP Release Release 16 SIM switch 2 SIM cards, auto-switch cases: weak signal, data limit, SMS limit, roaming, no network, network denied, data connection fail, SIM idle protection Status Signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP, Bytes sent/received, connected band, IMSI, ICCID, SIM provider, operator, network type, cell ID, LAC, TAC, ARFCN, UARFCN, EARFCN SMS SMS status, SMS configuration, send/read SMS via HTTP POST/GET, EMAIL to SMS, SMS to EMAIL, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP USSD Supports sending and reading Unstructured Supplementary Service Data messages Black/White list Operator black/white list (by country or separate operators) Multiple PDN Possibility to use different PDNs for multiple network access and services Band management Band lock, Used band status display SIM idle protection service When working with devices with two SIM slots, the one not currently in use will remain idle until the device switches to it, meaning that no data is used on the card until then SIM PIN code management SIM PIN code management enables setting, changing, or disabling the SIM card's PIN APN Auto APN Bridge Direct connection (bridge) between mobile ISP and device on LAN Passthrough Router assigns its mobile WAN IP address to another device on LAN Framed routing Framed routing: support an IP network behind 5G UEWireless Wireless mode 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) Wi-Fi security WPA2-Enterprise - PEAP, WPA2-PSK, WPA-EAP, WPA-PSK, WPA3-SAE, WPA3-EAP, OWE; AES-CCMP, TKIP, Auto-cipher modes, client separation, EAP-TLS with PKCS#12 certificates, disable auto-reconnect SSID/ESSID ESSID stealth mode WiFi users Up to 512 simultaneous connections Wireless Connectivity Features Wireless mesh (802.11s), fast roaming (802.11r), BSS transition management (802.11v), radio resource measurement (802.11k) Wireless MAC filter Whitelist, blacklist Wireless QR code generator Once scanned, a user will automatically enter your network without needing to input login information. Ethernet WAN 1 x WAN port 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossover LAN 4 x LAN ports, 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossoverNetwork Routing Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing Network protocols TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SFTP, FTP, SMTP, SSL/TLS, ARP, VRRP, PPP, PPPoE, UPNP, SSH, DHCP, Telnet, SMPP, SNMP, MQTT, Wake On Lan (WOL) VoIP passthrough support H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets Network Management 802.1x port-based network access control client Connection monitoring Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection Firewall Port forward, traffic rules, custom rules Firewall status page View all your Firewall statistics, rules, and rule counters Ports management View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on Network topology Visual representation of your network, showing which devices are connected to which other devices DHCP Static and dynamic IP allocation, DHCP relay, DHCP server configuration, status, static leases: MAC with wildcards QoS / Smart Queue Management (SQM) Traffic priority queuing by source/destination, service, protocol or port, WMM, 802.11e DDNS Supported >25 service providers, others can be configured manually DNS over HTTPS DNS over HTTPS proxy enables secure DNS resolution by routing DNS queries over HTTPS Network backup Wi-Fi WAN, Mobile, VRRP, Wired options, each of which can be used as an automatic Failover Load balancing Balance Internet traffic over multiple WAN connections Hotspot Captive portal (hotspot), internal/external Radius server, Radius MAC authentication, SMS authorisation, SSO authentication, internal/external landing page, walled garden, user scripts, URL parameters, user groups, individual user or group limitations, user management, 9 default customisable themes and optionality to upload and download customised hotspot themes SSHFS Possibility to mount remote file system via SSH protocolSecurity Authentication Pre-shared key, digital certificates, X.509 certificates, TACACS+, Internal & External RADIUS users authentication, IP & login attempts block, time-based login blocking, built-in random password generator Firewall Pre-configured firewall rules can be enabled via WebUI, unlimited firewall configuration via CLI; DMZ; NAT; NAT-T 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 Mobile quota control Mobile data limit, customizable period, start time, warning limit, phone number WEB filter Blacklist for blocking out unwanted websites, Whitelist for specifying allowed sites only Access control Flexible access control of SSH, Web interface, CLI and Telnet SSL certificate generation Let's encrypt supportVPN OpenVPN Multiple clients and a server can run simultaneously, 27 encryption methods OpenVPN Encryption DES-CBC 64, RC2-CBC 128, DES-EDE-CBC 128, DES-EDE3-CBC 192, DESX-CBC 192, BF-CBC 128, RC2-40-CBC 40, CAST5-CBC 128, RC2-64-CBC 64, AES-128-CBC 128, AES-128-CFB 128, AES-128-CFB1 128, AES-128-CFB8 128, AES-128-OFB 128, AES-128-GCM 128, AES-192-CFB 192, AES-192-CFB1 192, AES-192-CFB8 192, AES-192-OFB 192, AES-192-GCM 192, AES-256-CBC 256, AES-256-CFB 256, AES-256-CFB1 256, AES-256-CFB8 256, AES-256-OFB 256, AES-256-CBC 256 IPsec XFRM, IKEv1, IKEv2, with 14 encryption methods for IPsec (3DES, DES, AES128, AES192, AES256, AES128GCM8, AES192GCM8, AES256GCM8, AES128GCM12, AES192GCM12, AES256GCM12, AES128GCM16, AES192GCM16, AES256GCM16) GRE GRE tunnel, GRE tunnel over IPsec support PPTP, L2TP Client/Server instances can run simultaneously, L2TPv3, L2TP over IPsec support Stunnel Proxy designed to add TLS encryption functionality to existing clients and servers without any changes in the program's code DMVPN Method of building scalable IPsec VPNs SSTP SSTP client instance support ZeroTier ZeroTier VPN client support WireGuard WireGuard VPN client and server support Tinc Tinc offers encryption, authentication and compression in it's tunnels. Client and server support. Tailscale Tailscale offers speed, stability, and simplicity over traditional VPNs. Encrypted point-to-point connections using the open source WireGuard protocolOPC UA Supported modes Client, Server Supported connection types TCPMODBUS Supported modes Server, Client Supported connection types TCP, USB Custom registers MODBUS TCP custom register block requests, which read/write to a file inside the router, and can be used to extend MODBUS TCP Client functionality Supported data formats 8-bit: INT, UINT; 16-bit: INT, UINT (MSB or LSB first); 32-bit: float, INT, UINT (ABCD (big-endian), DCBA (little-endian), CDAB, BADC), HEX, ASCIIDATA TO SERVER Protocol HTTP(S), MQTT, Azure MQTT, Kinesis Data to server Extract parameters from multiple sources and different protocols, and send them all to a single server; Custom LUA scripting, allowing scripts to utilize the router's Data to server featureMQTT Gateway Modbus MQTT Gateway Allows sending commands and receiving data from MODBUS Server through MQTT brokerDNP3 Supported modes Station, Outstation Supported connection TCPDLMS DLMS Support DLMS - standard protocol for utility meter data exchange Supported modes Client Supported connection types TCP, USBAPI Teltonika Networks Web API (beta) Expand your device's possibilities by using a set of configurable API endpoints to retrieve or change data. For more information, please refer to this documentation: https://developers.teltonika-networks.comMonitoring & Management WEB UI HTTP/HTTPS, status, configuration, FW update, CLI, troubleshoot, multiple event log servers, firmware update availability notifications, event log, system log, kernel log, Internet status FOTA Firmware update from server, automatic notification SSH SSH (v1, v2) SMS SMS status, SMS configuration, send/read SMS via HTTP POST/GET Call Reboot, Status, Mobile data on/off, Output on/off, answer/hang-up with a timer, Wi-Fi on/off Email Receive email message status alerts of various services TR-069 OpenACS, EasyCwmp, ACSLite, tGem, LibreACS, GenieACS, FreeACS, LibCWMP, Friendly tech, AVSystem MQTT MQTT Broker, MQTT publisher SNMP SNMP (v1, v2, v3), SNMP Trap, Brute force protection JSON-RPC Management API over HTTP/HTTPS RMS Teltonika Remote Management System (RMS)IoT Platforms Cloud of Things Allows monitoring of: Device data, Mobile data, Network info, Availability ThingWorx Allows monitoring of: WAN Type, WAN IP, Mobile Operator Name, Mobile Signal Strength, Mobile Network Type Cumulocity Allows monitoring of: Device Model, Revision and Serial Number, WAN Type and IP, Mobile Cell ID, ICCID, IMEI, Connection Type, Operator, Signal Strength Azure IoT Hub Can send device IP, Number of bytes send/received, Temperature, PIN count to Azure IoT Hub server, Mobile connection state, Network link state, IMEI, ICCID, Model, Manufacturer, Serial, Revision, IMSI, SIM State, PIN state, GSM signal, WCDMA RSCP, WCDMA EC/IO, LTE RSRP, LTE SINR, LTE RSRQ, CELL ID, Operator, Operator number, Connection typeSystem Characteristics CPU Mediatek, Dual-core, 1.3 GHz, ARM Cortex A53 RAM 512MB DDR3 FLASH storage 16MB serial NOR flash, 512MB serial NAND flashFirmware / Configuration WEB UI Update FW from file, check FW on server, configuration profiles, configuration backup FOTA Update FW RMS Update FW/configuration for multiple devices at once Keep settings Update FW without losing current configuration Factory settings reset A full factory reset restores all system settings, including the IP address, PIN, and user data to the default manufacturer's configurationFIRMWARE CUSTOMISATION Operating system RutOS (OpenWrt based Linux OS) Supported languages Busybox shell, Lua, C, C++ Development tools SDK package with build environment provided GPL customization You can create your own custom, branded firmware and web page application by changing colours, logos, and other elements in our firmware to fit your or your clients' needs Package Manager The Package Manager is a service used to install additional software on the deviceLocation Tracking GNSS GPS, GLONASS, BeiDou, Galileo and QZSS Coordinates GNSS coordinates via WebUI, SMS, TAVL, RMS NMEA NMEA 0183 NTRIP NTRIP protocol (Networked Transport of RTCM via Internet Protocol) Server software Supported server software TAVL, RMS Geofencing Configurable multiple geofence zonesUSB Data rate USB 2.0 Applications Samba share, USB-to-serial External devices Possibility to connect external HDD, flash drive, additional modem, printer, USB-serial adapter Storage formats FAT, FAT32, exFAT, NTFS (read-only), ext2, ext3, ext4Input / Output Input 1 x Configurable digital Input, 0 - 6 V detected as logic low, 8 - 50 V detected as logic high Output 1 x Configurable digital Output, Open collector output, max output 50 V, 300 mA Events Email, RMS, SMS I/O juggler Allows to set certain I/O conditions to initiate eventPower Connector 4-pin industrial DC power socket Input voltage range 9 - 50 VDC, reverse polarity protection, voltage surge/transient protection PoE (passive) Possibility to power up through LAN1 port, not compatible with IEEE802.3af, 802.3at and 802.3bt standards, Mode B, 9 - 30 VDC (Available from: HW revision 0003, Batch number 007) Power consumption Idle: < 4.5 W, Max: < 13.5 WPhysical Interfaces Ethernet 5 x RJ45 ports, 10/100/1000 Mbps I/O's 1 x Digital Input, 1 x Digital Output on 4-pin power connector Status LEDs 4 x WAN status LEDs, 3 x Mobile connection type, 3 x Mobile connection strength, 8 x LAN status, 1 x Power, 2 x 2.4G and 5G Wi-Fi, 2 x WAN status SIM 2 x SIM slots (Mini SIM - 2FF), 1.8 V/3 V, external SIM holders, eSIM (Optional) Power 1 x 4-pin power connector Antennas 4 x SMA for Mobile, 3 x RP-SMA for Wi-Fi, 1 x SMA for GNSS USB 1 x USB A port for external devices Reset Reboot/User default reset/Factory reset button Other 1 x Grounding screwPhysical Specification Casing material Anodized aluminium housing and panels Dimensions (W x H x D) 130.4 x 42.6 x 103.4 mm Weight 452 g Mounting options DIN rail, wall mount, flat surface (all require additional kit)Operating Environment Operating temperature -40 °C to 75 °C Operating humidity 10% to 90% non-condensing Ingress Protection Rating IP30

📄 Specifications