**ComX Computers**
Product Specification Sheet

# TTK-RUTX50

Teltonika Industrial 5G Router - Dual SIM

## Product Overview

Teltonika RUTX50 Industrial 5G Router - Dual SIM, Backwards compatible with 4G




## Specifications

**Overview:**

- RUTX50 is your future-proof, multi-network industrial router, offering 5G mobile communication for high-speed and data-heavy applications.
- 5G dual SIM cellular communication combined with 5 Gigabit Ethernet ports and dual-band Wi-Fi enables reliable ultra-low latency data transfer.
- The power of 5G technology, combined with a wide range of interfaces and industrial hardware features, ensures adaptability for future upgrades and expansions.
- RUTX50 comes with the RutOS, which provides advanced security features and specialized industrial protocols for a wide range of professional application scenarios, and is compatible with our Remote Management System (RMS), for optimized remote management and monitoring capabilities of large fleets of devices.

**Features:**

**5G**
Ultra-high cellular speeds of up to 3.3 Gbps

**SA & NSA**
Supports both architectures to leverage the 5G infrastructure

**ULTRA-LOW LATENCY**
Single-digit latency for mission-critical applications

**DUAL SIM**
Uninterrupted communication with auto-failover

**WI-FI 5**
Dual-band data throughput for up to 150 clients simultaneously

## FUTURE-PROOFING

Backward compatible with 4G (LTE CAT 20) and 3G network technologies

### Specifications:

© 2022 Respective owners and brand holders. This table has been carefully researched and generated by ComXpert International CC (http://www.comx.co.za), however, errors and omissions may occur. Only references to South Africa apply. All products are sourced in South Africa from the official suppliers and the warranty is that of the local supplier. E&OE. This table and our site's content may be used on condition that this notice and link remains intact and unaltered.

| Specifications | |
|---|---|
| **Product Code** | TTK-RUTX50 |
| **MOBILE** | |
| **Mobile module** | 5G Sub-6Ghz SA/NSA 2.1/3.3Gbps DL (4x4 MIMO), 900/600 Mbps UL (2x2), 4G (LTE) - LTE Cat 20 2.0Gbps DL, 200Mbps UL, 3G - 42 Mbps DL, 5.76Mbps UL |
| **Status** | Signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP Bytes sent/received, connected band, IMSI, ICCID. |
| **SMS/Call** | 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, Call utilities |
| **USSD** | Supports sending and reading Unstructured Supplementary Service Data messages |
| **Black/White list** | Operator black/white list |
| **Band management** | Band lock, Used band status display |
| **APN** | Auto APN |
| **Bridge mode** | Direct connection (bridge) between mobile ISP and device on LAN |
| **Passthrough** | Gateway assigns its mobile WAN IP address to another device on LAN |
| **Multiple PDN** | Possibility to use different PDNs for multiple network access and services |
| **WIRELESS** | |
| **Wireless mode** | 802.11b/g/n/ac Wave 2 (WiFi 5) with data transmission rates of up to 867 Mbps (Dual Band, MU-MIMO), 802.11r fast transition, Access Point (AP), Station (STA) |
| **WiFi security** | WPA3-EAP, WPA3-SAE, WPA2-Enterprise-PEAP, WPA2-PSK, WEP, AES-CCMP, TKIP, Auto Cipher modes, client separation |
| **ESSID** | ESSID stealth mode |
| **WiFi users** | Up to 150 simultaneous connections |
| **Wireless Hotspot** | Captive portal (Hotspot), internal/external Radius server, built-in customizable landing page |
| **Wireless mesh/roaming** | Wireless mesh (802.11s), fast roaming (802.11r) |
| **ETHERNET** | |
| **WAN** | 1 x WAN port (can be configured as LAN) 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossover |
| **LAN** | 4 x RJ45 port, 10/100/1000 Mbps, supports auto MDI/MDIX crossover |
| **NETWORK** | |
| **Network protocols** | TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SMTP, SSL v3, TLS, PPP, PPPoE, SSH, DHCP, SNMP, MQTT, Wake on LAN (WOL) |
| **Routing** | Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP) |

| | |
|---|---|
| **Connection monitoring** | Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection |
| **Firewall** | Port forwards, traffic rules, custom rules |
| **DHCP** | Static and dynamic IP allocation |
| **DDNS** | Supported >25 service providers, others can be configured manually |
| **SSHFS** | Possibility to mount remote file system via SSH protocol |
| **SECURITY** | |
| **Authentication** | Pre-shared key, digital certificates, X.509 certificates |
| **Firewall** | Pre-configured firewall rules can be enabled via the WebUI, unlimited firewall configuration via CLI, 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** | Set up custom data limits for SIM card |
| **WEB filter** | Blacklist for blocking out unwanted websites, Whitelist for specifying allowed sites only |
| **Access control** | Flexible access control of TCP, UDP, ICMP packets, MAC address filter |
| **VPN** | |
| **OpenVPN** | Multiple clients and a server can run simultaneously, 12 encryption methods |
| **OpenVPN Encryption** | DES-CBC, RC2-CBC, DES-EDE-CBC, DES-EDE3-CBC, DESX-CBC, BF-CBC, RC2-40-CBC, CAST5-CBC, RC2-64-CBC, AES-128-CBC, AES-192-CBC, AES-256-CBC |
| **GRE tunnel** | GRE Tunnel |
| **IPsec** | IKEv1, IKEv2, supports up to 5 x VPN IPsec tunnels (instances), with 5 encryption methods (DES, 3DES, AES128, AES192, AES256) |
| **SSTP** | SSTP client instance 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 |
| **PPTP, L2TP** | Client/Server services can run simultaneously, L2TPv3 support |
| **WireGuard** | WireGuard VPN client and server support |
| **ZeroTier** | ZeroTier VPN |
| **MODBUS TCP SLAVE** | |
| **ID filtering** | Respond to one ID in range [1, 255] or any |
| **Allow remote access** | Allow access through WAN |
| **Custom registers** | MODBUS TCP custom register block, which allows to read/write to a file inside the router, and can be used to extend MODBUS TCP slave functionality |
| **MODBUS TCP MASTER** | |
| **Supported functions** | 01, 02, 03, 04, 05, 06, 15, 16 |
| **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, ASCII |
| **MQTT GATEWAY** | |

| | |
|---|---|
| **Gateway** | Allows sending commands and receiving data from MODBUS Master through the MQTT broker |
| **DNP3** | |
| **Supported modes** | TCP Master, DNP3 Outstation |
| **DATA TO SERVER** | |
| **Protocols** | HTTP(S), MQTT, Azure MQTT, Kinesis |
| **IoT PLATFORMS** | |
| **Clouds 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, Mobile Cell ID, ICCID, IMEI, Connection Type, Operator, Signal Strength, WAN Type and IP |
| **Azure IoT Hub** | Can send device IP, Number of bytes send/received/ 3G 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 type, Temperature, PIN count to Azure IoT Hub server |
| **MONITORING & MANAGEMENT** | |
| **WEB UI** | HTTP/HTTPS, status, configuration, FW update, CLI, troubleshoot, event log, system log, kernel log |
| **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 |
| **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 |
| **JSON-RPC** | Management API over HTTP/HTTPS |
| **MODBUS** | MODBUS TCP status/control |
| **RMS** | Teltonika Remote Management System (RMS) |
| **SYSTEM CHARACTERISTICS** | |
| **CPU** | Quad-core ARM Cortex A7, 717 MHz |
| **RAM** | 256 MB (100 MB available for userspace) |
| **FLASH storage** | 256 MB (80 MB available for userspace) |
| **FIRMWARE / 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 |

| | |
|---|---|
| **FIRMWARE CUSTOMIZATION** | |
| **Operating system** | RutOS (OpenWrt based Linux OS) |
| **Supported languages** | Busybox shell, Lua, C, C++ |
| **Development tools** | SDK package with build environment provided |
| **LOCATION TRACKING** | |
| **GNSS** | GPS, GLONASS, BeiDou, Galileo and QZSS |
| **Coordinates** | GNSS coordinates via WebUI, SMS, TAVL, RMS |
| **NMEA** | NMEA 0183 |
| **Server software** | Supports server software: TAVL, RMS |
| **Geofencing** | Multiple configurable geofence zones |
| **USB** | |
| **Data rate** | USB 2.0 |
| **Applications** | Samba share, USB-to-serial, Modbus gateway |
| **External devices** | Possibility to connect external HDD, flash drive, additional modem, printer |
| **Storage formats** | FAT, FAT32, NTFS |
| **INPUT/OUTPUT** | |
| **Input** | 1 x Digital Input, 0 - 6 V detected as logic low, 8 - 30 V detected as logic high |
| **Output** | 1 x Digital Output, Open collector output, max output 30 V, 300 mA |
| **Events** | SMS, Email, RMS |
| **I/O juggler** | Allows setting certain I/O conditions to initiate event |
| **POWER** | |
| **Connector** | 4-pin industrial DC power socket |
| **Input voltage range** | 9 - 50 VDC, reverse polarity protection, surge protection >51 VDC 10us max |
| **PoE (passive)** | Mode B, LAN1 Port, 9 - 50 VDC |
| **Power consumption** | Idle: |
| **PHYSICAL INTERFACES (PORTS, LEDS, ANTENNAS, BUTTONS, SIM)** | |
| **Ethernet** | 5 x RJ45 ports, 10/100/1000 Mbps |
| **I/Os** | 1 x Digital Input, 1 x Digital Output on 4-pin power connector |
| **Status LEDs** | 3 x connection status LEDs, 3 x connection strength LEDs, 10 x Ethernet port status LEDs, 4 x WAN status LEDs, 1x Power LED, 2 x 2.4G and 5G WiFi LEDs |
| **SIM** | 2 x SIM slot (Mini SIM - 2FF), 1.8 V/3 V |
| **Power** | 1 x 4-pin DC power connector |
| **Antennas** | 4 x SMA for Mobile, 2 x RP-SMA for WiFi, 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 screw |
| **PHYSICAL SPECIFICATION** | |

| | |
|---|---|
| **Casing material** | Aluminum housing |
| **Dimensions (W x H x D)** | 132 x 44.2 x 95.1 mm |
| **Weight** | 533 g |
| **Mounting options** | DIN rail (can be mounted on two sides), flat surface placement |
| **OPERATING ENVIRONMENT** | |
| **Operating temperature** | -40 degreesC to 75 degreesC |
| **Operating humidity** | 10 % to 90 % non-condensing |
| **Ingress Protection Rating** | IP30 |

## Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

**Product page: https://www.comx-computers.co.za/TTK-RUTX50-Teltonika-Industrial-5G-Router-Dual-SIM-p-274098.php**

*Images and specifications are provided for reference and are subject to change without notice. E&OE.*

Terms of Use: https://www.comx-computers.co.za/terms-of-use.php
Terms of Sale: https://www.comx-computers.co.za/terms-of-sale.php

PDF generated: 2026-11-09 21:46:00.

This PDF was generated automatically and may include content prepared or assisted by automated or AI-based systems. While reasonable care is taken to ensure accuracy, errors or omissions may occur.

For the most current and accurate product information, please refer to the product information available on our website. If any specification or other information differs from information published elsewhere, please confirm the details with us before relying on the information or making a purchasing decision.

If you identify an error or discrepancy, please report it to us so that we may investigate and correct it where necessary.