



User Manual

Code: RUTX50

ACCESS POINT 5G +ROUTER **RUTX50** Dual SIM Wi-Fi 5, 2.4 GHz, 5 GHz, 867 Mbps Teltonika

Warning!

Please read the user manual included in this work as it contains important information related with safety of installation and use of the device.

Only persons who read the user manual may use the device.

The user manual must be kept because it may be required in the future. The device is to be used exclusively for purposes specified in this user manual.

The device must be unpacked prior to starting-up. After removing the packaging make sure the device is in working order. If the product has defects, it should not be used until it is repaired.

The product is intended for use at home and commercial use and may not be used for other than intended use.

The manufacturer is not liable for damages resulting from not adhering to the rules contained in the user manual, therefore, we recommend to follow the aforementioned safety rules for operation and maintenance of the device. In this way you will ensure yourself safety and avoid causing damage to the device.

The manufacturer and the supplier are not liable for losses or damages arising out of the product, including financial or intangible losses, loss of profits, income, data, pleasure from use of the product or other products related with it - indirect, incidental or consequential loss or damage. The above provisions apply whether the loss or damage concerns:

1. Deterioration of quality or the lack of operation of the products or products related with it due to damage as well as the lack of access to the product when it is undergoing repair, which results in stoppage the loss of user's time or a break in business activity;
2. Improper results of operation of the product or products related with it;
3. It applies to losses and damages according to any legal category, including negligence and other losses, termination of a contract, expressed or implied guarantee and strict liability (even if the manufacturer or the supplier was notified about the possibility of occurrence of such damages).

Safety measures:

Particular attention at designing was directed to quality standards of the device where ensuring safety of operation is the most important factor.

The device must be secured against contact with caustic, staining and viscous fluids.

The device was designed in such a way that it restarts operation when power supply is restored after a break.

Attention! We recommend using protections to further protect the device from possible overvoltages in installations. Surge protectors are effective protection against accidental pass to the device voltages higher than the rated. Damages caused by pass the voltages higher than specified in manual, are not under warranty.

Turn off the device before transporting it.

Prior to connecting the device to a power source check whether the supplied voltage is consistent with rated voltage specified in the user manual.

Proper product disposal:

A marking of a crossed out waste bin indicates that the product may not be disposed together with other household waste in the entire EU. To avoid possible damage to the natural environment of health due to uncontrolled waste disposal, therefore, it should be handed over for recycling, propagating in this way sustainable use of natural resources.

To return a worn-out product, use a collection and disposal system of this type of equipment or contact a seller from whom it was purchased. He will then be recycled in an environmentally-friendly way.

The RUTX50 Wireless Router, operating in accordance with the IEEE 802.11 b/g/n/ac standard, allows to share a network connection between several users in areas that are covered by 3G/4G/5G signal. The RUTX50 router broadcasts 2 separate wireless networks in the 5 GHz band and in the 2.4 GHz band with a maximum speed of 867 Mb/s. The device is equipped with 5 Ethernet ports (4 x LAN + WAN), 1 configurable digital input/output, USB port, 2 SIM card slots and connectors for 5G/LTE, WiFi and GNSS (Global Navigation Satellite Systems) antennas. The device is compatible with IoT (Internet of Things) technology.

The router is managed by the RutOS operating system and supports industrial protocols such as Modbus, DLMS, DNP3, OPC UA, and is compatible with the RMS management system, enabling efficient remote and local management of the device. The **Teltonika RMS** application is dedicated to management.

The Teltonika RUTX50 router has a 4-pin industrial power socket and supports a wide range of power supply voltages.



Frequency range:	<p>WiFi :</p> <ul style="list-style-type: none"> • 2.4 GHz (2.400 ... 2.500 GHz), • 5 GHz (4.950 ... 5.850 GHz), <p>5G/4G/3G :</p> <ul style="list-style-type: none"> • 617 ... 960 MHz, • 1710 ... 2690 MHz, • 3300 ... 6000 MHz , <p>GNSS :</p> <ul style="list-style-type: none"> • 1575.42 ... 1602 MHz
Antenna type:	<ul style="list-style-type: none"> • 2 x Omnidirectional antenna Wi-Fi - 3 dBi (SMA-RP connector), • 4 x Omnidirectional antenna 5G/4G/3G - 4 dBi (SMA connector), • 1 x Omnidirectional antenna GNSS - 28 dB (SMA connector)
Standards:	<ul style="list-style-type: none"> • 2.4 GHz Wi-Fi : IEEE 802.11 b/g/n , • 5 GHz Wi-Fi : IEEE 802.11 a/n/ac, • 5G Sub-6 SA/NSA, LTE Cat. 20, 3G WCDMA • GNSS : GPS, GLONASS, BeiDou, Galileo, QZSS
Baud rates:	<ul style="list-style-type: none"> • WiFi : max. 867 Mbps • 5G Sub-6 SA/NSA : 2.1 / 3.3 Gb/s DL 4x4 MIMO, 900 / 600 Mbps UL 2x2 MIMO, • 4G LTE : 2 Gb/s DL, 200 Mbps UL, • 3G : 42 Mbps DL, 5.76 Mbps UL
LAN ports:	4 x 10/100/1000 Mbps
WAN interface:	1 x 10/100/1000 Mbps





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Transmitter power:	<ul style="list-style-type: none">≤ 20 dBm @ 2.4 GHz Wi-Fi≤ 23 dBm @ 5 GHz Wi-Fi≤ 23 dBm @ 5G≤ 23 dBm @ 4G+ LTE≤ 24 dBm @ 3G WCDMA
LED indicators:	<ul style="list-style-type: none">• Power• WiFi : 2.4, 5• WAN : SIM 1, SIM 2, WiFi, ETH• 3G, 4G, 5G, 3 x Signal indicator• 5 x Link/Act : 4 x LAN + WAN
Network type:	<ul style="list-style-type: none">• 5G NR NSA : n1/3/5/7/8/20/28/38/40/41/77• 5G NR SA : n1/3/5/7/8/20/28/38/40/41/77/78• 4G LTE-FDD: B1/3/5/7/8/20/28/32• 4G LTE-TDD: B38/40/41/42/43• 3G WCDMA: B1/5/8
LTE:	✓
QSS:	—
WDS:	—
SIM card slot:	2 x Mini SIM - 2FF
DDNS:	Support > 25
DHCP server:	✓
Port USB:	USB 2.0
Protections:	<ul style="list-style-type: none">• WPA2-Enterprise - PEAP, WPA2-PSK, WPA-EAP, WPA-PSK, WPA3-SAE, WPA3-EAP, OWE, AES-CCMP, TKIP, EAP-TLS• Auto Cipher modes• Client separation• SSID hiding• Firewall• DDOS, SYN, SSH, HTTP/HTTPS attack defense• Configurable, independent data limits for each SIM card• Black list / White list• MAC addresses filtering • Protection against the effects of reverse polarity power connection• Overvoltage protection > 51 V DC / 10 μs
Management interface:	Web browser, Teltonika RMS application, SMS
Default IP address:	192.168.1.1
Operating system:	RutOS (Linux OS based)
Firmware update:	✓



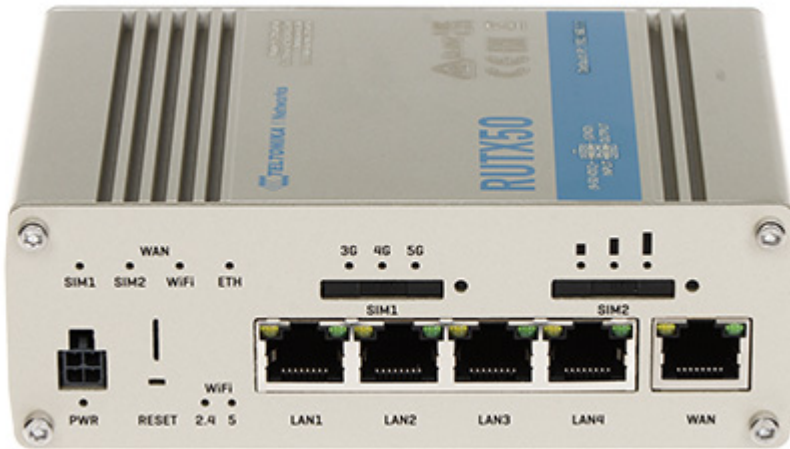
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Main features:	<ul style="list-style-type: none">• Dual SIM• MU-MIMO - a multi-antenna transmission function that allows to increase the bandwidth and reliability of connection with the client of the network• Support for Mesh technology• Checking the fast roaming function - in accordance with the IEEE 802.11r standard (only if used access points support this function)• Seamless Roaming - 802.11k/v roaming function switches clients automatically to the AP with the optimal signal with a seamless transition when moving. This allows sensitive applications like VoIP and video conferences to go uninterrupted,• Compliance with the Modbus, DLMS, DNP3, OPC UA protocol• MDI/MDI-X auto detection feature - auto detecting the data transmission mode• Static / dynamic routing• Support for VoIP technology,• Ability to work as a Hotspot• View topology and network status• WMM support (QoS mechanism of the 802.11e standard)• DHCP Relay support• VLAN support• VPN networks: IPsec VPN, L2TP VPN, PPTP VPN, Open VPN• Compliance with the MQTT protocol• SNMP v1/v2/v3/Trap• WAN Connection Backup - thanks to the fully functional WAN / LAN port, you can use various types of backup connections, including cable, fiber and DSL modems• Support for IoT (Internet of Things) systems,• Configuration using the Teltonika RMS application• Durable aluminum housing• Shock-proof• Industrial wide temperature design.• RESET button• Port USB 2.0 - possibility to connect external HDD, flash drive, additional modem, printer, USB-serial adapter• 4-pin industrial power socket,• Wide range of supported supply voltages,• 1 digital input / output - ability to set certain I/O conditions to initiate event• Grounding• "Index of Protection" : IP30• Ethernet cable included
Power supply:	<ul style="list-style-type: none">• 12 V DC / 1.5 A (power adapter included)• 9 ... 50 V DC• 9 ... 50 V DC - Passive PoE, Powering from LAN1
Power consumption:	≤ 18 W
Operation temp:	-40 °C ... 75 °C
Permissible relative humidity:	10 % ... 90 % (non-condensing)
Weight:	0.53 kg
Dimensions:	132 x 103 x 44 mm
Manufacturer / Brand:	Teltonika
Guarantee:	2 years

Connectors:



In the kit:



PACKAGE

Dimensions (L x W x H): 0x0x0 mm	Gross Weight: 0 kg
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