

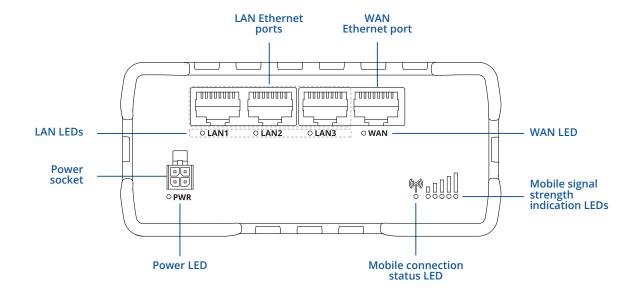
# RUT951



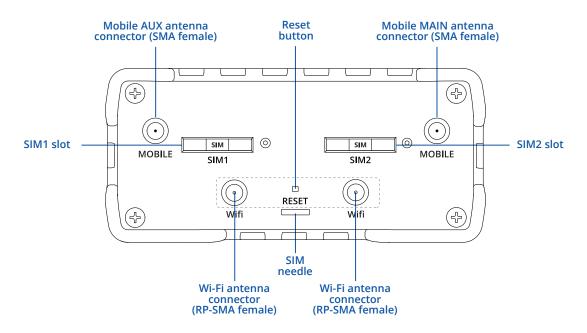


## **HARDWARE**

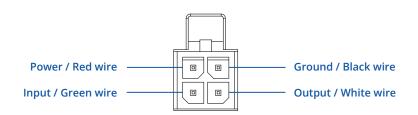
## **FRONT VIEW**



## **BACK VIEW**



## **POWER SOCKET PINOUT**





# **FEATURES**

## MOBILE

Malatia wa a akula	ACTIF Cot 4 are to 150 DU/50 UL Micro 2C are to 24 DU/5 7C UL Micro 2C are to 220 0 DU/22C 0 UL Idea
Mobile module	4G LTE Cat 4 up to 150 DL/50 UL Mbps; 3G up to 21 DL/5.76 UL Mbps; 2G up to 236.8 DL/236.8 UL kbps
3GPP Release	Release 10/11 depending on the hardware version
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	IMSI, ICCID, operator, operator state, data connection state, network type, bandwidth, connected band, signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP, data sent/received, LAC, TAC, cell ID, ARFCN, UARFCN, EARFCN, MCC, and MNC
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 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
WIRELESS	
Wireless mode	802.11b/g/n (Wi-Fi 4), Access Point (AP), Station (STA)
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	SSID stealth mode and access control based on MAC address
Wi-Fi users	Up to 100 simultaneous connections
Wireless Connectivity Features	Fast roaming (802.11r), Relayd, 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 Mbps, compliance IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX
LAN	1 x WAN port 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX 3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX
LAN	
LAN NETWORK	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX
NETWORK Routing	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SFTP, FTP, SMTP, SSL/TLS, ARP, VRRP, PPP, PPPoE, UPNP, SSH, DHCP,
NETWORK Routing Network protocols	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)
NETWORK Routing Network protocols VoIP passthrough support	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets
LAN  NETWORK  Routing  Network protocols  VolP passthrough support  Connection monitoring	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection
LAN  NETWORK  Routing  Network protocols  VoIP passthrough support  Connection monitoring  Firewall	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules
NETWORK Routing Network protocols VoIP passthrough support Connection monitoring Firewall Firewall status page	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules  View all your Firewall statistics, rules, and rule counters
NETWORK  Routing  Network protocols  VoIP passthrough support  Connection monitoring  Firewall  Firewall status page  Ports management	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules  View all your Firewall statistics, rules, and rule counters  View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on
NETWORK Routing Network protocols VoIP passthrough support Connection monitoring Firewall Firewall status page Ports management Network topology	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules  View all your Firewall statistics, rules, and rule counters  View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on  Visual representation of your network, showing which devices are connected to which other devices  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,
NETWORK Routing Network protocols VoIP passthrough support Connection monitoring Firewall Firewall status page Ports management Network topology Hotspot	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules  View all your Firewall statistics, rules, and rule counters  View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on  Visual representation of your network, showing which devices are connected to which other devices  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
NETWORK Routing Network protocols VoIP passthrough support Connection monitoring Firewall Firewall status page Ports management Network topology Hotspot DHCP QoS / Smart Queue	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules  View all your Firewall statistics, rules, and rule counters  View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on  Visual representation of your network, showing which devices are connected to which other devices  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  Static and dynamic IP allocation, DHCP relay, DHCP server configuration, status, static leases: MAC with wildcards
NETWORK Routing Network protocols VoIP passthrough support Connection monitoring Firewall Firewall status page Ports management Network topology Hotspot DHCP QoS / Smart Queue Management (SQM)	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules  View all your Firewall statistics, rules, and rule counters  View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on  Visual representation of your network, showing which devices are connected to which other devices  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  Static and dynamic IP allocation, DHCP relay, DHCP server configuration, status, static leases: MAC with wildcards  Traffic priority queuing by source/destination, service, protocol or port, WMM, 802.11e
NETWORK Routing Network protocols VoIP passthrough support Connection monitoring Firewall Firewall status page Ports management Network topology Hotspot DHCP QoS / Smart Queue Management (SQM) DDNS	3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX  Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules  View all your Firewall statistics, rules, and rule counters  View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on  Visual representation of your network, showing which devices are connected to which other devices  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  Static and dynamic IP allocation, DHCP relay, DHCP server configuration, status, static leases: MAC with wildcards  Traffic priority queuing by source/destination, service, protocol or port, WMM, 802.11e  Supported >25 service providers, others can be configured manually
NETWORK Routing Network protocols VoIP passthrough support Connection monitoring Firewall Firewall status page Ports management Network topology Hotspot  DHCP QoS / Smart Queue Management (SQM) DDNS DNS over HTTPS	Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing  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)  H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets  Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection  Port forward, traffic rules, custom rules  View all your Firewall statistics, rules, and rule counters  View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on  Visual representation of your network, showing which devices are connected to which other devices  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  Static and dynamic IP allocation, DHCP relay, DHCP server configuration, status, static leases: MAC with wildcards  Traffic priority queuing by source/destination, service, protocol or port, WMM, 802.11e  Supported >25 service providers, others can be configured manually  DNS over HTTPS proxy enables secure DNS resolution by routing DNS queries over HTTPS



## **SECURITY**

authentication, IP & login DMZ; NAT; NAT-T port scan prevention (SYN-FIN  , AES-128-CFB1 128, S-192-CFB8 192, AES-192-OFE 6, AES-256-CFB8 256,  ES128GCM8, AES192GCM8, S256GCM16)
, AES-128-CFB1 128, S-192-CFB8 192, AES-192-OF6 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
, AES-128-CFB1 128, S-192-CFB8 192, AES-192-OFI 6, AES-256-CFB8 256, .ES128GCM8, AES192GCM8, S256GCM16)
S-192-CFB8 192, AES-192-OFE 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
S-192-CFB8 192, AES-192-OFE 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
S-192-CFB8 192, AES-192-OFE 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
S-192-CFB8 192, AES-192-OFE 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
S-192-CFB8 192, AES-192-OFI 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
S-192-CFB8 192, AES-192-OFI 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
S-192-CFB8 192, AES-192-OFE 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
S-192-CFB8 192, AES-192-OFE 6, AES-256-CFB8 256, ES128GCM8, AES192GCM8, S256GCM16)
S256GCM16)
anges in the program's code
n be used to extend MODBUS
CBA (little-endian), CDAB,
server; Custom LUA scripting,
dir. e
nge data. For more informa-



## MONITORING & 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
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
MODBUS	Teltonika Remote Management System (RMS)
IOT PLATFORMS	retorma terrote management system (tims)
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: Walk Type, Walk Tr, Mobile Operator Name, Mobile Signal Strength, Mobile Retwork Type  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 be configured with Data to Server to send all the available parameters to the cloud. Has Direct method support which allows to execute RutOS API calls on the IoT Hub. Also has Plug and Play integration with Device Provisioning Service that allows zero-touch device provisioning to IoT Hubs
SYSTEM CHARACTERISTICS	
CPU	Mediatek, 580 MHz, MIPS 24KEc
RAM	128 MB, DDR2
FLASH storage	16 MB, SPI Flash
FIRMWARE / CONFIGURATION	ON
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 configuration
FIRMWARE CUSTOMISATIO	N
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 element 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 device
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	Email, RMS, SMS
I/O juggler	Allows to set certain I/O conditions to initiate event
POWER	
Connector	4-pin industrial DC power socket
Input voltage range	9 – 30 VDC, reverse polarity protection; surge protection >31 VDC 10us max
PoE (passivo)	Passive PoE over spare pairs. Possibility to power up through LAN1 port, not compatible with IEEE802.3af, 802.3at and 802.3b
PoE (passive)	standards, Mode B, 9 - 30 VDC



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Ethernet	4 x RJ45 ports, 10/100 Mbps
I/O's	1 x Digital Input, 1 x Digital Output on 4-pin power connector
Status LEDs	1 x Bi-color connection status, 5 x Mobile connection strength, 4 x ETH status, 1 x Power
SIM	2 x SIM slots (Mini SIM - 2FF), 1.8 V/3 V, external SIM holders, eSIM (Optional)
Antennas	2 x SMA for LTE, 2 x RP-SMA for Wi-Fi antenna connectors
Reset	Reboot/User default reset/Factory reset button

#### PHYSICAL SPECIFICATION

Casing material	Aluminium housing, plastic panels
Dimensions (W x H x D)	110 x 50 x 100 mm
Weight	287 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

## **REGULATORY & TYPE APPROVALS**

Regulatory	CE, UKCA, ANRT, Kenya, CITC, ICASA, FCC, IC, PTCRB, RCM, Giteki, ECE R118, E-mark, CB, UL/CSA Safety, RoHS, REACH, C1D2
Operator	AT&T, Verizon, T-Mobile

## **EMC EMISSIONS & IMMUNITY**

Standards	EN 55032:2015 + A11:2020 EN 55035:2017 + A11:2020 EN IEC 61000-3-2:2019 + A1:2021 EN 61000-3-3:2013 + A1:2019 EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN 301 489-52 V1.2.1
ESD	EN 61000-4-2:2009
RS	EN 61000-4-3:2020
EFT	EN 61000-4-4:2012
Surge immunity (AC Power Line)	EN 61000-4-5:2014 + A1:2017
CS	EN 61000-4-6:2014
DIP	EN 61000-4-11:2020
RF	
	EN 300 328 V2.2.2

	EN 300 328 V2.2.2
	EN 301 511 V12.5.1
Standards	EN 301 908-1 V15.2.1
	EN 301 908-2 V13.1.1
	EN 301 908-13 V13.2.1

#### **SAFETY**

Standards

**CE**: EN IEC 62368-1:2020 + A11:2020, EN IEC 62311:2020, EN 50665:2017

Standards RCM: AS/NZS 62368.1:2022 CB: IEC 62368-1:2018

**UL/CSA Safety:** UL 62368-1 (3rd Ed., Rev. December 13, 2019), C22.2 No. 62368-1:19 (3rd Ed., Rev. December 13, 2019)

## SAFETY (ORDINARY LOCATIONS)

**CE:** EN IEC 62368-1:2020 + A11:2020, EN IEC 62311:2020, EN 50665:2017

RCM: AS/NZS 62368.1:2022

**CB:** IEC 62368-1:2018

UL/CSA Safety: UL 62368-1 (3rd Ed., Rev. December 13, 2019), C22.2 No. 62368-1:19 (3rd Ed., Rev. December 13, 2019)

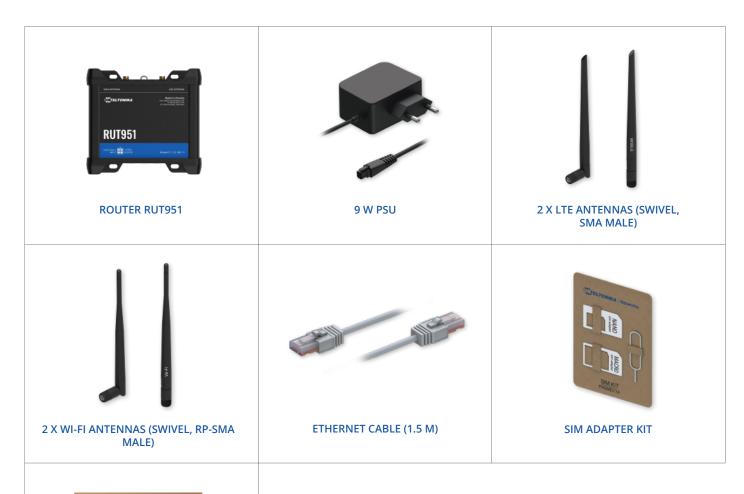
## **SAFETY (HAZARDOUS LOCATIONS)**

Standards	<b>UL/CSA Safety:</b> UL 121201, 9th Ed., Rev. April 1, 2021, CAN/CSA C22.2 No. 213, 3rd Ed. April 2021
ESD	Class I, Division 2, Groups A, B, C, D Class I, Zone 2, Group IIC -40°C ≤ Ta ≤ 75°C, T4, IP30



# **STANDARD PACKAGE\***

- Router RUT951
- 9 W PSU
- 2 x LTE antennas (swivel, SMA male)
- 2 x WiFi antennas (swivel, RP-SMA male)
- Ethernet cable (1.5 m)
- SIM Adapter kit
- QSG (Quick Start Guide)
- Packaging box





QSG

 $<sup>\</sup>mbox{\ensuremath{\star}}$  For all standard order codes standard package contents are the same, except for PSU.



# **CLASSIFICATION CODES**

HS Code: 851762 HTS: 8517.62.00

For more information on all available packaging options – please contact us directly.

# **AVAILABLE VERSIONS**

HARDWARE VERSION	SUPPORTED FREQUENCIES	STANDARD ORDER CODE / PACKAGE CONTAINS
RUT951 <b>0</b> ***** Europe¹, The Middle East, Korea, Thailand	<b>4G (LTE-FDD)</b> : B1, B3, B7, B8, B20, B28A <b>3G</b> : B1, B8 <b>2G</b> : B3, B8	RUT951000000 / Standard package with EU PSU RUT951000400 / Standard package with Power cable with 4-way screw terminal RUT951000200 / Standard package with UK PSU RUT951000300 / Mass packing code
RUT951 1***** Europe¹, The Middle East, Africa, Korea, Thailand	4G (LTE-FDD): B1, B3, B5, B7, B8, B20 4G (LTE-TDD): B40 3G: B1, B5, B8 2G: B3, B8	RUT951100000 / Standard package with EU PSU RUT951100200 / Standard package with UK PSU RUT951100400 / Standard package with Power cable with 4-way screw terminal RUT951100300 / Mass packing code
RUT951 2***** Global <sup>1</sup>	4G (LTE-FDD): B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B25, B26, B28 4G (LTE-TDD): B38, B39, B40, B41 3G: B1, B2, B4, B5, B6, B8, B19 2G: B2, B3, B5, B8	RUT951200000 / Standard package with EU PSU RUT951200300 / Mass packing code
RUT951 6***** South America, Australia, New Zealand, Taiwan	<b>4G (LTE-FDD)</b> : B1, B3, B4, B5, B7, B8, B28 <b>4G (LTE-TDD)</b> : B40 <b>3G</b> : B1, B2, B4, B5, B8 <b>2G</b> : B2, B3, B5, B8	RUT951600000 / Standard package with EU PSU RUT951600600 / Standard package with AU PSU RUT951600500 / Standard package with Universal PSU RUT951600800 / Standard package with US PSU RUT951600300 / Mass packing code
RUT951 <b>9</b> ***** Japan	<b>4G (LTE-FDD)</b> : B1, B3, B8, B18, B19, B26 <b>4G (LTE-TDD)</b> : B41 <b>3G</b> : B1, B6, B8, B19	RUT951900A00 / Standard package with JP PSU RUT951900300 / Mass packing code
RUT951 <b>A*****</b> North America <sup>2</sup>	<b>4G (LTE-FDD)</b> : B2, B4, B5, B12, B13, B14, B66, B71 <b>3G</b> : B2, B4, B5	RUT951A00800 / Standard package with US PSU RUT951A00300 / Mass packing code

The price and lead-times for region (operator) specific versions may vary. For more information please contact us. 1 - Regional availability - excluding Russia & Belarus 2 - For more detailed information about certified carriers, visit our Wiki page



## **RUT951 SPATIAL MEASUREMENTS**

## MAIN MEASUREMENTS

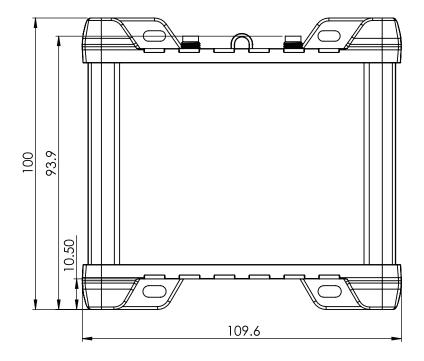
W x H x D dimensions for RUT951:

Device housing\*: 110 x 50 x 100 mm Box: 355 x 60 x 175 mm

\*Housing measurements are presented without antenna connectors and screws; for measurements of other device elements look to the sections below.

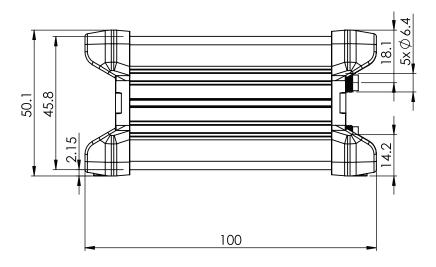
## **TOP VIEW**

The figure below depicts the measurements of RUT951 and its components as seen from the top:



## **RIGHT VIEW**

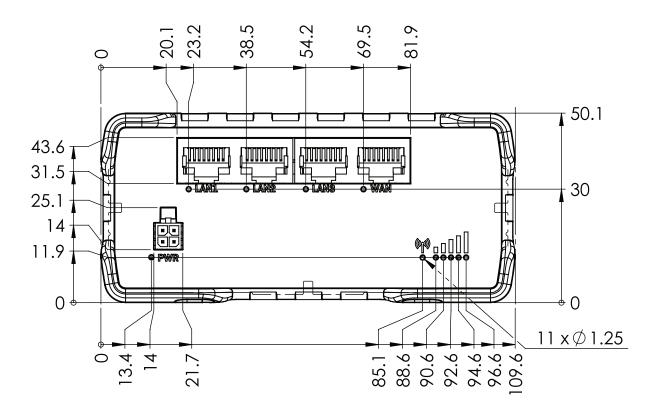
The figure below depicts the measurements of RUT951 and its components as seen from the right side:





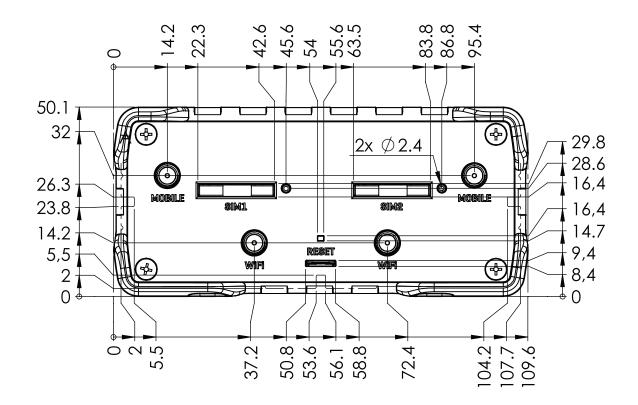
#### **FRONT VIEW**

The figure below depicts the measurements of RUT951 and its components as seen from the front panel side:



## **REAR VIEW**

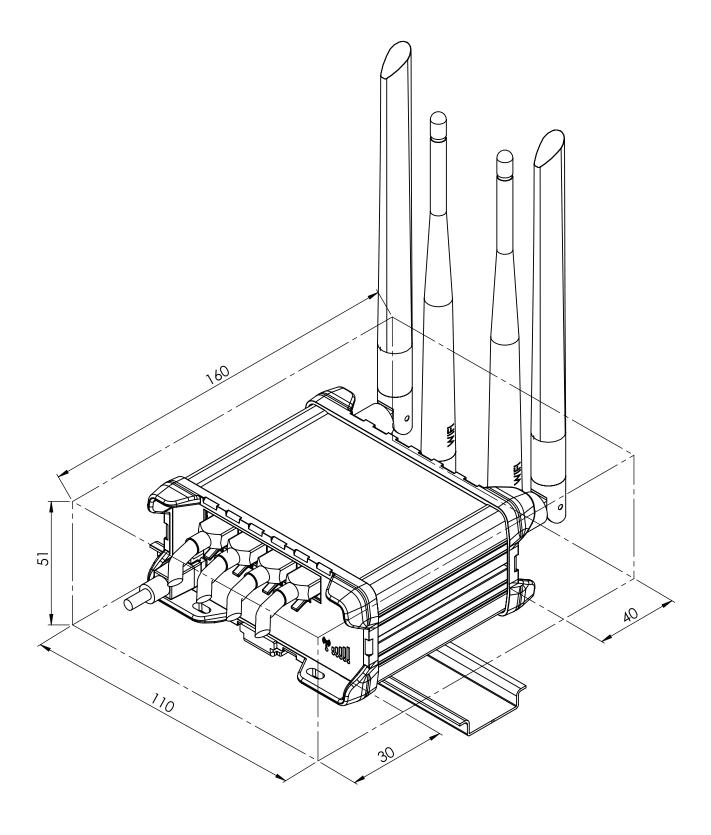
The figure below depicts the measurements of RUT951 and its components as seen from the back panel side:  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left($ 





## MOUNTING SPACE REQUIREMENTS

The figure below depicts an approximation of the device's dimensions when cables and antennas are attached:





## DIN RAIL

The scheme below depicts protrusion measurements of an attached DIN Rail:

