RUTM50 Firmware Downloads

Main Page > RUTM Routers > RUTM50 > **RUTM50 Firmware Downloads**

This page contains firmware files for RUTM50 devices. Look to the table below or the changelog to find download links.

To upgrade firmware using WebUI, follow the instructions in RUTM50 Firmware.

RUTM50					
File	**Type**	**Release date**	**Size**	**MD5**	**Changelog**
RUTM_R_00.07.07.1_WEBUI.bin	Latest FW	2024.05.03	21.5 MB	650b8b26bace4c75a34717934a737881	Link
RUTM_R_00.07.06.10_WEBUI.bin	Mass production FW	2024.04.04	22.0 MB	6dcf15d99ad421bdbdfc21735158b672	Link
RUTM_R_GPL_00.07.07.1.tar.gz	SDK	2024.05.03	40.06 MB	09b056c4031c55991fbab382722f6ba0	

Note: packages for Package Manager are independent from firmware and can be downloaded in the Package Downloads page.

Note: RUTM50 device firmware cannot be downgraded (only upgrades).

FW checksums

Checksums for firmware files can be found **here**.

Changelog

RUTM_R_00.07.07.1 | 2024.05.03

- **New**
  - **Network**
    - WebUI: added ESM/EMM message notifications
    - WebUI: added internet status tracking configuration and overview widget
    - LAN: added a new IPv6 LAN status page
    - Static Leases: added a new IPv6 Static Leases page
    - WebUI: added custom domain name resolve option in "DNS" configuration page
    - Auto APN: added "uno.au-net.ne.jp" APN for "KDDI" operator
    - Auto APN: added 'eprivate010.tisparkle.com' APN for "Sparkle" operator
    - QoS: added mobile interface select option
    - Mobile: added framed routing support
    - Mobile: improved connection establish time for uqmi protocol
    - Failover: added additional connection flush options
    - Wireless: added auto-reconnect disable functionality
    - Wireless: added ability to use PKCS#12 certificates for EAP-TLS authentication
    - VRF: added initial Virtual Routing and Forwarding support

- **Services**
  - Post/Get: added I/O invert support
  - DLMS Client: added persistent TCP connections
  - Events Reporting: added unexpected shutdown event
  - Modbus Client: added 64bit data types
  - IPerf3: added iPerf3 to Package Manager
  - DNP3 Outstation: added I/O objects
  - Modbus Serial Server: added option 'Mobile data type'
  - TR-069: added PCI, LAC, TAC, EARFCN and Neighbour cells data to Device.MobileInfo node
  - Hotspot: added domain and subdomain options for external landing page
  - Over IP: added option 'Keep alive enable'
- **System**
  - WebUI: added the ability to generate random passwords for password input fields
  - WebUI: added reset to "Factory defaults" option
  - System: changed firmware certificate verification tool
  - IP Block: added time-based login attempt blocking
  - WebUI: added firmware update notification support
  - PAM: added the ability to set port for TACACS+
  - Logging: added multiple remote syslog servers support
- **Improvements**
  - **Network**
    - Static Leases: added possibility to use MAC with wildcard
    - WebUI: added ability to disable modem update notifications
    - Topology: changed network devices scanning application
    - WebUI: improved design of Status - LAN page
    - DHCP: simplified DHCP configurations in other pages and moved full DHCP configuration to a separate page
    - DHCP: removed default disabled server configuration for WAN interface
    - WebUI: simplified data entry of DNS forwardings by separating hostname and IP address fields
    - BGP: added Virtual Routing and Forwarding (VRF) support
    - BGP: added multiple BGP instance support
    - WebUI: adjusted responsive design breakpoints
    - WebUI: added additional field for warning threshold to allow entering value as percentage in Mobile Data Limit section
    - Mobile: improved mobile services stability when SIM card is lost during SMS sending
    - Mobile: updated bridge/passthrough mode logic to flush ARP and add static ARP entry if MAC is specified
    - Mobile: improved SIM switch logging and protection on failure to acquire data
    - WebUI: added partial data loading to APN database page
    - Mobile: improved SMS sending timeouts during network issues
    - Mobile: improved connection handling when data limit is reached
    - Mobile: added metric to default gateway when using passthrough mode
    - WebUI: added validation for 2 same APNs
    - WebUI: updated Band selection field to show duplex modes in Mobile General page
    - WebUI: added an information icon and disabled delete button for wireless instance when it is associated with a hotspot interface
    - Wireless: improved hidden AP handling when showing scan results

- Wireless: added a range of channels to 5 Ghz radio to use as fallback if it drops after radar detection when using DFS channel
- Dnsmasq: updated dnsmasq to version 2.89
  - **Services**
    - Wireguard: added option to bind tunnel to a specific interface
    - OPC UA Client: added limits (10 servers, 20 groups, 50 nodes per server, 50 values per group)
    - DLMS Client: increased maximum count of connection sections to 30
    - DLMS Client: added short name referencing
    - SNMP: set strict default community access when IPv6 address is used
    - SNMP: improved sysName OID to set device's hostname
    - Network Shares: moved to Package Manager
    - Auto Reply: added available SMS message parameters to "Message text" input
    - Modbus Client: allow using diacritics in SMS alarms
    - Hotspot: moved MAC blocking option from Access Control to Hotspot page
    - WebUI: added MAC authentication support when using RADIUS authentication mode
    - WebUI: moved licenses to footer
    - AVL: added HDOP in TAVL settings
    - AVL: added ADC and ACL I/O types for secondary AVL rules
    - NTRIP: added a limit of 20 configurations
    - OpenVPN: added the bridge option for selecting the network device to be bridged with
    - OpenVPN: added possibility to create more than one TAP client
    - SSTP: updated package version to 1.0.19
    - Mosquitto: updated package version to 2.0.17
    - Tailscale: updated package version to 1.62.1
  - **System**
    - WebUI: added more strict password requirements for restoring backup
    - SMTP: added option to either not verify SMTP server or upload SMTP server's CA file to verify authenticity
    - WebUI: Added the ability to choose the ROOT CA when using certificates from the device
    - WebUI: unified time format to ISO8601 across the entire WebUI
    - WebUI: added ability to choose imported certificate and key as 'Server certificate' and 'Server key' in 'Access Control'
    - WebUI: added 'Hosts' and 'IP Addresses' options for 'Simple' certificate generation and certificate signing
    - WebUI: changed firmware update option to server as a default option
    - WebUI: improved first login password change logic
    - Certificates: updated Root CA certificates
    - GPL: added offline package preparation command for GPL builds
    - Speedtest: added multiple connections support to improve accuracy
    - Libcap: updated package version to 2.69
- **Fix**
  - **Network**
    - Topology: fixed showing interfaces with assigned VLAN
    - WebUI: fixed static routing creation for GRE instance
    - Network: fixed DHCPv4 relay mode enabling
    - Mobile: fixed PIN code set after modem restart
    - Mobile: fixed cases where 5G NSA network type was shown incorrectly

- Mobile: fixed an issue where using SIM change command on one SIM slot modems would reset connection
- Mobile: fixed an issue where message storage would not be checked correctly
- Mobile: fixed temperature value sometimes returning 0
- Mobile: fixed denied roaming flag set
- SIM Switch: fixed an issue when low "Check interval" was causing connection to fail
- SIM Idle Protection: fixed problem when the SIM slot remained unchanged
- Mobile: fixed an issue where SIM switch would fail when switching to PUK blocked SIM
- Mobile: fixed an issue where sim switch would be executed twice immediately causing sim to not be switched
- Mobile: fixed SIM PIN saving for non primary SIM cards
- Failover: fixed Failover missing active rules when using multiple source and destination IP addresses
- Failover: fixed an issue where failover would not function correctly while using a mobile interface
- Failover - WebUI: fixed network and failover interface metric sorting synchronization issue
- Failover - WebUI: fixed failover rule policy save issue with newly added WAN interface
- Interfaces: fixed failover value for new WAN being taken from WAN that was just deleted
- Wireless: fixed Wifi Scanner not saving scanned WiFi SSIDs
- Wireless: fixed missing CCMP-256 and GCMP-256 cipher types in scan results
- Wireless: fixed missing GCMP-256 cipher when using WPA3-EAP encryption in Client mode
- Wireless: fixed skipped MAC address value for interface in Client mode
- Wireless: fixed issue which caused client interfaces to not connect after device reboot
- Wireless: fixed setup issue when client or mesh interfaces are configured on both radios
- WebUI: fixed mesh nodes not being shown in Status->Wireless->Interfaces page
- WebUI: fixed proposed configuration settings when connecting to a mesh point network
- MultiAP: fixed client not switching to another AP if incorrect password was provided
- **Services**
  - Modbus Client: allow using negative floating point values in requests
  - Azure IoT Hub: fixed Data to Server minor WebUI dependency bugs
  - Data to Server: fixed DLMS data formating
  - Data to Server: fixed Network link state data display
  - DLMS Client: fixed segfault while reading profile generic COSEM object
  - DLMS Client: fixed profile generic entries reading
  - DLMS Client: fixed application memory allocation issues
  - SSTP: fixed route adding when default route is enabled
  - SNMP: fixed VLAN OID naming
  - OpenVPN: added fixes for instance status tracking functionality
  - OpenVPN: resolved uptime counting issues
  - PPTP: fixed PPTP instance deletion problem
  - Azure IoT Hub: fixed 'contentType' telemetry message parameter

- Hotspot: fixed password validation for locally created users and signed-up users
            - Hotspot: fixed session invalidation after deleting registered user
            - Hotspot: fixed SMS OTP password reuse
            - Hotspot: fixed firewall rule creation
            - PPTP: fixed problem related with routes when failover is enabled
            - Modbus Client: fixed issue where service freezes when SMS alarm is sent
            - Modem over serial: improved robustness against modem reboots
            - Modbus TCP Over Serial Gateway: fixed gateway returning corrupted data with larger baud rates
            - Modbus Server: updated 'GPS fix time' register to store the UTC date and time of GPS position
            - WebUI: fixed data loading error in Input/Output > Post/Get page
            - UPnP: updated package version to 2.3.4
        - **System**
            - NTP Client: fixed 'Count of time synchronizations' execution when synchronization to mobile operator is chosen
            - Package Manager: fixed spinner message when restarting network after package upload or download
            - Package Manager: fixed supported devices check when installing a package from server
            - WebUI: fixed language install from uploaded package after upgrade with keep settings
            - WebUI: fixed an issue when a user was not logged out after changing profiles
            - Telnet: fixed segmentation fault during concurrent connections
            - CLI: fixed enter key issue on mobile chromium based browsers
            - System Users: fixed SSH session close after deleting user or disabling SSH access
            - Profiles: fixed profile migration with installed packages
            - JavaVM: fixed package installation
            - WebUI: fixed Hotspot log page table search functionality
            - Speedtest: fix missing download speed on some servers
            - PAM: updated libpam to version 1.6.0
- **CVE Patches**
    - CVE-2022-4603
    - CVE-2022-23308
    - CVE 2022-45061
    - CVE-2023-0466
    - CVE-2023-6129
    - CVE-2023-7042
    - CVE 2023-24329
    - CVE 2023-27043
    - CVE-2023-31083
    - CVE-2023-42366
    - CVE-2023-46218
    - CVE-2023-46219
    - CVE-2023-46752
    - CVE-2023-46753
    - CVE-2023-48795
    - CVE-2024-2397
    - CVE-2024-25062
    - CVE-2024-27913
    - CVE-2024-22365

[RUTM_R_00.07.06.10](#) | 2024.04.04

- Global changelog for **R_00.07.06.10** - [LINK](#)

RUTM_R_00.07.06.8 | 2024.03.25

- Firmware **R_00.07.06.8** was removed due to an issue with inefficient memory allocation for LED control.

[RUTM_R_00.07.06.6](#) | 2024.03.04

- Global changelog for **R_00.07.06.6** - [LINK](#)

[RUTM_R_00.07.06.5](#) | 2024.02.21

- Global changelog for **R_00.07.06.5** - [LINK](#)

[RUTM_R_00.07.06.3](#) | 2024.01.17

- Global changelog for **R_00.07.06.3** - [LINK](#)

[RUTM_R_00.07.06.1](#) | 2024.01.04

- **Fix**
  - **Services**
    - Fixed issue with NTPclient zombie processes
  - **WebUI**
    - Fixed issues with VoLTE status and 5G network type display

[RUTM_R_00.07.06](#) | 2023.12.20

- **New**
  - **Network**
    - Enabled IPv6 by default for mobile interfaces
    - Added operator blacklisting and whitelisting based on mobile country code
    - Added SIM card not inserted event in Events Log
    - Added 802.11v BSS Transition Management and 802.11k Radio Resource Measurement
  - **Services**
    - Added OPC UA Server
    - Added the ability to set port for TACACS+ in PAM service
    - Added switch to enable using root certificate authority for MQTT alarms in Modbus Client services
    - Added new alarm action "Ubus event" in Modbus Client services

- Added new input "Modbus alarms" in Data to Server service
- Added wget ping subtype support in Events Reporting service
- Added new I/O SNMP OID that returns numeric I/O state
- Added new Post/Get service action "mobile_sim_pin" for changing used SIM PIN code on the device
- Added TLS support for OverIP serial functionality
  - **WebUI**
    - Added Tailscale VPN support
    - Renewed user interface design
    - Added network interface name change functionality
    - Added last resort configuration option for multiwan policy rules
    - Added indication when new modem firmware is available
    - Added mobile connection establishment display in mobile status page
    - Added default value for "Reset threshold" field in Low Signal Reconnect feature
  - **System**
    - Added ability to enable/disable SSH access for specific users in System Users
    - API support
- **Improvements**
  - **Network**
    - Disabled operator scan when SIM card is not inserted
    - Added two radio support on one SSID in Wireless
  - **Services**
    - Expanded GRE VPN keep alive functionality to disable routes from unreachable tunnel
    - Added PKCS#12 certificate container authentication method in IPsec VPN
    - Added TLV message_payload support for SNMP service
    - Added Purple.ai configuration profile
    - Replaced option "No leading zeros" with "Remove all zeros" in Over IP serial functionality
    - Added possibility to assign mobile interface in SQM service
    - Added reboot on storage device disappearance and re-appearance
    - Added additional anonymous phone number validation in Mobile Utilities service
    - Added "N/A" signal strength response in DNP3 service if SIM card is not inserted
  - **WebUI**
    - Improved Events Log page loading by adding asynchronous pagination
    - Removed requirement for Diffie-Hellman parameters in OpenVPN service
    - Added improvements for creating OpenVPN IPv6 configurations
    - Added auto redirect after changing router's IP address or port
    - Added "Interface" dropdown for interfaces selection in Wake on LAN service
    - Increased Data to Server service MQTT topic length limit to 65535 characters
    - Added OSPF external routes section to Status page
    - Moved device menu entry "Reboot" to header menu
    - Added indication in Overview, Status -> Mobile and WAN pages when mobile data limit is reached
    - Updated Operator state field to show if modem is in limited service
    - Combined Mobile Usage day, week, month and total pages into one
    - Updated Realtime data -> Mobile signal page design to show all available modems and their bands data in one graph
    - Added message when SIM card requires PIN/PUK code in Status -> Mobile page
    - Moved WiFi scanner page to Services section
  - **System**

- Added Mosquitto CVE patch 2023-28366
- Added Mosquitto CVE patch 2023-3592
- Updated mt76 package version to 2022-12-22
- Updated hostapd version to 2023-09-08
- Updated cURL version to 8.4.0
- Updated kernel version to 5.10.199
- Updated Mac80211 version to 6.1.24
- Added RMS data display to generated troubleshoot
- Added downloaded Package Manager packages list to generated troubleshoot
- Added process activity load list to generated troubleshoot
- Changed default OPKG feed to use Teltonika's URL

- **Fix**
  - **Network**
    - Fixed DMVPN firewall rule creation issues
    - Fixed Failover missing active rules when using multiple source and destination IP addresses
    - Fixed mobile service crash due to buffer overflow while reading partially overwritten SMS
    - Fixed an issue with Manual APN connection making attempts too rapidly
    - Fixed deny data roaming functionality when transitioning between roaming and home operator network
    - Fixed network disconnection on mobile network detach and DHCP lease loss situations
    - Fixed VoLTE configuration after modem reboot
    - Fixed Mobile interface bridge and passthrough mode connectivity loss
    - Fixed an issue where rarely PIN code would get removed after SIM switch
    - Fixed mobile operator list being not updated after changes in WebUI
    - Fixed issue where mobile interface was unreachable after device reboot or interface restart while using Failover service
    - Fixed low Wireless mesh throughput
    - Fixed concurrent Wireless STA and AP functionality on 5 GHz band
  - **Services**
    - Fixed SSH module enable in PAM service
    - Added minimum free space check when saving logs to flash in Logging service
    - Fixed "Set multiple coils" function sending too many bytes in Modbus Client services
    - Fixed multiple Events Reporting messages being sent when Firewall configuration is changed
    - Fixed VRRP instances advertising wrong virtual IPs
    - Added Hotspot information in SNMP MIB file
    - Fixed registered Hotspot Local Users showing random username
    - Fixed selection of MAC Auth for LAN interfaces in Hotspot service
    - Fixed inconsistent Hotspot login behaviour when using MAC Auth with Password
    - Fixed instance shutdown after last local user deletion
    - Fixed Cumulocity app not sending any telemetry data
    - Fixed Call Utilities failure when caller id is hidden during a call
    - Fixed AVL with poor mobile connections
    - Fixed default profile SMS Utilities I/O status rule configuration in Profiles functionality
    - Fixed serial timeout not working in Over IP serial functionality

- Removed "Echo" option in Modbus TCP over Serial functionality
- Fixed CRC verification failing when CRC is correct in Modbus TCP over Serial functionality
- Fixed crash when getting unexpected messages from RTU in Modbus TCP over Serial functionality
- Fixed mobile cell ID retrieval in TR-069 service
  - **WebUI**
    - Fixed side menu style issues when Japanese language is used
    - Fixed displaying of vendor names in Topology page
    - Fixed language packs being selectable when still in Package Manager queue
    - Added ability to configure IPv6 BGP peer
    - Fixed RelayD configuration issues after keep settings
    - Fixed realtime graphs responsive design issues
    - Fixed Network Shares users deletion
    - Fixed not all LAN interfaces shown in dropdown in Hotspot service page
    - Fixed modem updater legacy firmware flashing
    - Fixed wireless realtime data to show signal as unavailable with no connected clients
    - Fixed WiFi scanner disconnecting AP users
    - Fixed setup wizard errors in Wireless configuration page
  - **System**
    - Patched FRR CVE-2023-38406
    - Patched FRR CVE-2023-38407
    - Patched FRR CVE-2023-41358
    - Patched FRR CVE-2023-41360
    - Patched FRR CVE-2023-41909
    - Patched FRR CVE-2023-47234
    - Patched FRR CVE-2023-47235
    - Patched OpenSSL CVE-2023-3446
    - Patched OpenSSL CVE-2023-3817
    - Patched LibXML2 CVE-2023-39615
    - Patched LibXML2 CVE-2023-45322
    - Patched FFMPEG CVE-2021-28429
    - Patched FFMPEG CVE-2022-48434
    - Patched dnsmasq CVE-2023-28450
    - Fixed running out of space when SSHFS is mounted in /tmp while generating troubleshoot

RUTM_R_00.07.05.4 | 2023.11.09

- **Improvements**
  - **WebUI**
    - Improved asynchronous pagination in events log pages
    - Optimized Overview page load
    - Added resource loading cancellation after switching to different page

RUTM_R_00.07.05 | 2023.10.09

- **New**
  - **System**
    - Initial firmware release