

# RobustOS Firmware Release Notes

## NOTES

- This release notes mainly describe all-new features, fixes, and other changes implemented in the RobustOS LTS (Long Term Support) version. Firmware upgrade information about all LTS versions will accumulate in this release note so that you can check the history here.
  - This release note applies to all routers using **RobustOS 5.x** version.
  - The firmware name prefix corresponds to the supported product models:
    - ❖ m120x : M1200, M1201
    - ❖ r1500 : R1500
    - ❖ r151x : R1510, R1510Lite, R1511, R1511P, R1511PL
    - ❖ r1520 : R1520
    - ❖ r201x : R2010, R2011
    - ❖ r3000 : R3000, R3000Lite, R3000Q
    - ❖ r3000lg : R3000LG
    - ❖ r2110 : R2110
    - ❖ r5020 : R5020
    - ❖ r3010 : R3010
  - Firmware from V3.x.x upgrade to **RobustOS5.x** requirements:
    - ❖ R5020 must upgrade the intermediate version firmware (V3.1.8 or later) before upgrading the RobustOS 5.0 firmware.
    - ❖ R3000LG must upgrade the intermediate version firmware (V3.1.9 or later) before upgrading the RobustOS 5.0 firmware.
    - ❖ R3010 must upgrade the intermediate version firmware (V3.1.3 or later) before upgrading the RobustOS 5.0 firmware.
    - ❖ Other devices can directly upgrade to the RobustOS 5.0
- Note:**
- ❖ Please be aware that if you downgrade the firmware from V5.x.x to V3.x.x, the router will reset the user management feature parameter to default, and you also need to clean the browser cache.
  - ❖ Please check the compatible module information of the firmware version before upgrading.
  - ❖ Starting from RobustOS V5.1, firmware updates no longer support R2000 series.

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## VERSION V5.1.4

Release Date: June 15, 2023

Previous Version: V5.1.3

## NEW FEATURES

N/A

## ENHANCEMENTS

1. Optimized R151x 2.4G Wi-Fi channel.
2. Optimized display of R2110/R5020 Wi-Fi signal strength.
3. The HTTP upload function supports uploading files larger than 20M.
4. OpenVPN function Backup Port allows configuration to be empty, and the default value is empty.
5. GPS message uploaded to the server supports deleting CR and LF characters.

## BUGS FIXED

1. Fixed issue that the frequency band cannot be locked when locking the Cat-M1/NB-IoT network.
2. Fixed issue that the EC200 series module has no data for a long time and the network connection is disconnected.
3. Fixed issue that Wi-Fi probabilistically fails to start when Wi-Fi changes from Client mode to AP mode.

## KNOWN BUGS & LIMITATIONS

1. When IP Passthrough feature is enabled, when the IP address of cellular module changes, the device connected to LAN port of router/gateway needs to disconnect the Ethernet port to obtain latest IP address assigned by cellular module

## COMPATIBLE MODULES

EC25, EG25-G, EC200S, EC200T, EC200N, EC200A, ME3630, ML620, EP06, BG95, BG96, UC20, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

From RobustOS V5.1 onwards, subsequent firmware updates no longer support **R2000 series**.

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## VERSION V5.1.3

Release Date: March 28, 2023

Previous Version: V5.1.2

## NEW FEATURES

N/A

## ENHANCEMENTS

N/A

## BUGS FIXED

1. Fixed issue that R2110/R5020 fails to initialize due to an error in obtaining OEM data.

## KNOWN BUGS & LIMITATIONS

1. When IP Passthrough feature is enabled, when the IP address of cellular module changes, the device connected to LAN port of router/gateway needs to disconnect the Ethernet port to obtain latest IP address assigned by cellular module

## COMPATIBLE MODULES

EC25, EG25-G, EC200S, EC200T, EC200N, EC200A, ME3630, ML620, EP06, BG95, BG96, UC20, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

From RobustOS V5.1 onwards, subsequent firmware updates no longer support **R2000 series**.

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## VERSION V5.1.2

Release Date: March 22, 2023

Previous Version: V5.1.1

## NEW FEATURES

N/A

## ENHANCEMENTS

1. Optimized display of Chinese language packs.

## BUGS FIXED

1. Fixed issue that WLAN client could not connect normally under certain circumstances.

## KNOWN BUGS & LIMITATIONS

1. When IP Passthrough feature is enabled, when the IP address of cellular module changes, the device connected to LAN port of router/gateway needs to disconnect the Ethernet port to obtain latest IP address assigned by cellular module

## COMPATIBLE MODULES

EC25, EG25-G, EC200S, EC200T, EC200N, EC200A, ME3630, ML620, EP06, BG95, BG96, UC20, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

From RobustOS V5.1 onwards, subsequent firmware updates no longer support **R2000 series**.

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## VERSION V5.1.1

Release Date: March 17, 2023

Previous Version: V5.1.0

## NEW FEATURES

N/A

## ENHANCEMENTS

N/A

## BUGS FIXED

1. Fixed issues of production testing.

## KNOWN BUGS & LIMITATIONS

1. When IP Passthrough feature is enabled, when the IP address of cellular module changes, the device connected to LAN port of router/gateway needs to disconnect the Ethernet port to obtain latest IP address assigned by cellular module

## COMPATIBLE MODULES

EC25, EG25-G, EC200S, EC200T, EC200N, EC200A, ME3630, ML620, EP06, BG95, BG96, UC20, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

From RobustOS V5.1 onwards, subsequent firmware updates no longer support **R2000 series**.

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## VERSION V5.1.0

Release Date: January 13, 2023

Previous Version: V5.0

## NEW FEATURES

1. Added feature of disabling the network port.
2. Added support for OpenVPN-Client backup mode.
3. Added support to view the network status through the CLI "status active\_link" command.
4. Added support for user role management.
5. Added option to configure the default rules of the INPUT chain on the WAN and LAN sides.
6. Added support for SFTP feature.
7. Added support for importing custom files.
8. Added support for importing custom APN list feature.
9. Added support for GRE interface configuration MTU feature.
10. Added support for GPS to add message station prefix feature.
11. Added feature of switching links immediately after the physical connection of the device WAN is disconnected.
12. Added support for deep recovery.
13. Added support to view all configurations of the current device through CLI "show all" command.
14. Added 'link\_connect' and 'link\_disconnect' script whitelist.
15. Added support for DI Counter timing reset feature.
16. Quectel module supports DFOTA feature.
17. R151x/R201x/R1520 supports WPA3 in Wi-Fi AP mode.
18. R1520 added support for serial port redirection.
19. R3000 LG added support for LoRa packet filtering feature.
20. R3000 Series/R3000 LG/R3010 added support network port specified negotiation mode.

## ENHANCEMENTS

1. Optimized Wi-Fi initial SSID and password.
2. Optimized the display of expandable status pages.
3. Optimized 5G status display.
4. Optimized display of cellular module status page.
5. Optimized OpenVPN and IPsec long text box certificate editing mechanism.
6. Optimized operating mode of ML620EU module.
7. Optimized USB connection stability.
8. Optimized SMS sending function.
9. Optimized the number of serial socket connections, and increase the maximum number of connections to 8.

10. Optimized the Event function.
11. Optimized the DI Counter function and add DI Counter timestamp.
12. Optimized R3000 LG LoRa page information display.
13. Optimized module support list of Verizon Auto APN.
14. Optimized Socket policy creation of Serial Port service. When the creation fails, keep trying to create it until succeed.

## BUGS FIXED

2. Fixed security loopholes and enhance system security.
3. Fixed issue where GRE and IPsec could cause the device to reboot under certain circumstances.
4. Fixed issue of 2.4 GHz channel selection.
5. Fixed issue of OpenVPN connection failure and static routing not taking effect.
6. Fixed issue of starting App after the IP Passthrough feature is enabled when device restarted.
7. Fixed issue that the NTP time server could not be manually synchronized.
8. Fixed issue that status of WAN traffic of a single SIM card device does not display.
9. Fixed issue that "\" or double quotation marks cannot be included in SMS content.

## KNOWN BUGS & LIMITATIONS

2. When IP Passthrough feature is enabled, when the IP address of cellular module changes, the device connected to LAN port of router/gateway needs to disconnect the Ethernet port to obtain latest IP address assigned by cellular module

## COMPATIBLE MODULES

EC25, EG25-G, EC200S, EC200T, EC200N, EC200A, ME3630, ML620, EP06, BG95, BG96, UC20, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

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