

# 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,R5020Lite
    - ❖ 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.

---

## VERSION V5.2.9

Release Date: September 19, 2024

Previous Version: V5.2.8

## NEW FEATURES

N/A

## ENHANCEMENTS

1. Added support for configuring the number of retransmission attempts for IPsec VPN.
2. R3000LG Basic Station added support for the private mode.
3. Firewall port mapping added support for the All interface option.
4. Firewall added support for MASQ.
5. Optimized IPsec VPN master/backup tunnel switching mechanism.
6. Optimized USB automatic upgrade function.

## BUGS FIXED

1. Fixed the CVE-2024-6387 vulnerability of OpenSSH.
2. Fixed the problem of R5020-Lite failing to uninstall the APP.
3. Fixed the problem of GRE VPN interface failing to add routes.
4. Fixed the problem of the Speedtest tool constantly refreshing the page after clicking the test twice in a row.
5. Fixed the problem of WireGuard VPN failing to generate a configuration file.
6. Fixed the problem of AAA application failing to log in using the local account of the device.
7. Fixed the problem that the device restarts when PPP dial-up obtains an empty DNS address.

## 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

EC20, EC25, EG25-G, EC200S, EC200T, EC200N, EC200A, EC200U, ME3630, ML620,ML660PC,EP06, BG95, BG96, UC20,

SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0

---

## VERSION V5.2.8

Release Date: July 2, 2024

Previous Version: V5.2.7

## NEW FEATURES

N/A

## ENHANCEMENTS

N/A

## BUGS FIXED

1. Fixed the problem of no full-duplex broadcast in auto-negotiation mode of Ethernet port of R151X/R1520/R201X.

## 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

EC20, EC25, EG25-G, EC200S, EC200T, EC200N, EC200A, EC200U, ME3630, ML620,ML660PC,EP06, BG95, BG96, UC20, SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0

---

## VERSION V5.2.7

Release Date: June 11, 2024

Previous Version: V5.2.6

## NEW FEATURES

N/A

## ENHANCEMENTS

1. Optimized the Flash driver of R2010/R2011.

## BUGS FIXED

N/A

## KNOWN BUGS & LIMITATIONS

3. 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

EC20, EC25, EG25-G, EC200S, EC200T, EC200N, EC200A, EC200U, ME3630, ML620,ML660PC,EP06, BG95, BG96, UC20, SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0

---

## VERSION V5.2.6

Release Date: May 27, 2024

Previous Version: V5.2.5

## NEW FEATURES

N/A

## ENHANCEMENTS

1. Optimized the module restart mechanism.

## BUGS FIXED

1. Fixed the problem that CLI commands cannot be used normally.

## 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, SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0

---

## VERSION V5.2.5

Release Date: May 7, 2024

Previous Version: V5.2.4

## NEW FEATURES

N/A

## ENHANCEMENTS

1. Added support for user-defined DDNS Check IP Server address.
2. Added support for the USR LED to be controlled by other applications when the USR LED light is configured as NONE.
3. The Check IP Server address of DynDNS and 3322 is updated to ip.3322.net.

## BUGS FIXED

1. Fixed the problem where restarting the R151x/R1520/R201x caused the device connected to the LAN obtains the IP address of the WAN port network segment.
2. Fixed the DFOTA problem with EC20 module.
3. Fixed the failure to upgrade firmware/import configuration file via USB issue.

## 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, SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0

---

## VERSION V5.2.4

Release Date: April 9, 2024

Previous Version: V5.2.2

## NEW FEATURES

N/A

## ENHANCEMENTS

1. Added support for DDNS fake-address option.
2. Added support for IPSec DPD option.
3. Optimized EC25 module network locking strategy.
4. R1520 supports SLM770A module..

## BUGS FIXED

1. Fixed issue where IPsec connection time is displayed abnormally.

## 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, SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0

---

## VERSION V5.2.2

Release Date: January 31, 2024

Previous Version: V5.2.1

## NEW FEATURES

N/A

## ENHANCEMENTS

1. Added support for IPsec VPN GCM functionality.
2. Added support for WLAN traffic statistics function.
3. Added support for WLAN traffic statistics events.
4. Added support for daily traffic statistics on WAN and WLAN interfaces.
5. Optimized the R2110/R5020/R5020lite partition to solve the problem of firmware exceeding 10M.
6. Optimized the Link Manager PING detection backup server address to 1.2.4.8.
7. Optimized certificate management. When the device saves the configuration, it will check whether there are any changes to the certificate and update it only if there are any changes.
8. Optimized the software restart mechanism. The device needs to be restarted when saving the configuration, and needs to wait until the configuration is saved before restarting.
9. R2110/5020/R5020lite added support for specifying a 1000M Ethernet port rate.
10. R1520/R201x series/R151x series added support for specified network port speed.
11. R151X series added support for SLM770A.
12. The EC25J module added support for DFOTA functionality.

## BUGS FIXED

1. Fixed an issue where the imported OVPN file containing auth-user-pass would cause the device to fail to save configuration and restart when OpenVPN uses Auto mode.
2. Fixed the problem of SNMP failure to read RSRP.
3. Fixed the issue that the R2110/R5020 could not mount an SD card with partitions.

4. Fixed the issue where no event was generated when the traffic limit set in link manager exceeded the threshold.
5. Fixed the issue that the IP address of the cellular module (EC200A) could not be obtained from the downstream device after IP Passthrough was enabled.
6. Fixed the problem that event information could not be obtained when executing the status event command in CLI mode.
7. Fixed the problem of low probability of Uboot being modified after restarting R201x/ R2110/ R5020/R5020 lite
8. Fixed the issue that IP address assignment was incorrect when modifying WiFi configuration after Captive Portal was enabled.

## 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, SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0

---

## VERSION V5.2.1

Release Date: November 6, 2023

Previous Version: V5.2.0

## NEW FEATURES

N/A

## ENHANCEMENTS

N/A

## BUGS FIXED

1. Fixed the abnormal use problem of R2110/R5020/R5020lite WireGuard feature.
2. Fixed the problem of QoS speed limit failure.
3. Fixed the problem of abnormal usage of ACC feature.
4. Fixed the issue of incomplete system log sending.
5. Fixed the problem of DynDNS connection error.

## 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, SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0

---

## VERSION V5.2.0

Release Date: September 28, 2023

Previous Version: V5.1.6

## NEW FEATURES

1. Added WiFi STA status information on the home page (only for devices that support WiFi).
2. Added support for SpeedTest tool.
3. Added support for SLM750, ML620DE, and SLM770A modules.
4. Added support for R5020Lite.
5. Added support for PPPoE Bridge feature.

## ENHANCEMENTS

1. Updated the R2110/R5020/R5020Lite kernel version to 5.4.179.
2. Updated R2110/R5020/R5020Lite WiFi driver.
3. R2110/R5020 series/R151X series/R1520/R201X series supports WPA3 in Wi-Fi AP mode.
4. R2110/R5020 series/R151X series/R1520/R201X series support running WiFi AP and WiFi Client modes at the same time.
5. R2110/R5020/R5020Lite supports WiFi EAP-TLS authentication method.
6. Optimized the speed of L2TP VPN.
7. Added support for customizing the reporting interval of GPS data.
8. Added support for deleting CR and LF characters of GPS data.
9. Added support for custom WEB tags.
10. Added support for limiting the number of SMS sent by the SIM card.
11. Added support for displaying ENDC status in cellular status.
12. Added support for disabling DNS resolution feature.
13. Added the Contrack Flush feature to be enabled by default.
14. Added firewall support for WebFilter feature.
15. Added OpenVPN support for SHA384 authentication algorithm and TLS Crypt.
16. Added DI Counter to support reservation clearing feature.
17. Added support for configuring RSRP threshold in event feature.
18. Added support for Ethernet port UP/Down events.
19. Added support for daily traffic statistics events.
20. Optimized the log format to comply with RFC5424 specification.
21. Optimized the login security feature.
22. Optimized the TCP Server feature of the serial port.
23. Optimized OpenVPN's backup server address configuration to support being empty.

24. Updated the auto mode name in the WPA Version of WIFI to WPA/WPA2.
25. Updated the upload file size limit for R151x/R1520/R201x to 30MB.
26. Updated the name of DO status.
27. Updated the CA certificate list.

## BUGS FIXED

1. Fixed displaying wrong 5G network type when registering EN-DC network.
2. Fixed the problem that when WAN PPPoE+L2TP VPN is used at the same time, the WAN link and L2TP VPN keep restarting.
3. Fixed the problem of incomplete firewall domain name resolution.
4. Fixed the conflict between IPSecVPN interest flow and LAN.
5. Fixed the problem of low probability of restart failure using the reboot command.

## 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, SLM750, ML620DE, SLM770A, RM500Q, RM500U, RM520N, CUIoT-5GMZ-6M

## OTHERS

R5020Lite only supports upgrade from V5.0.0.2 and V5.0.0.5 to V5.2.0