GV500MAP Firmware Release Notes

EGPRS/LTE Cat-M1/LTE Cat-NB1/GNSS Tracker

TRACGV500MAPRN0511



Driving Smarter IoT

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Document Title	GV500MAP Firmware Release Notes
Version	N/A
Date	July 22, 2024
Status	Release
Document Control ID	TRACGV500MAPRN0511

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1. Current Release

1.1. GV500MAPR00A05V11M1024

1.1.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A05V11M1024** supports @Track air interface protocol version 5.00. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol V5.00.

1.1.2.MCU Firmware Version Support

The GV500MAP firmware **GV500MAPR00A05V11M1024** should work with the MCU firmware **GV500MA_McuR01V6.00**. If an upgrade error occurs or the match with another version of the GV500MAP firmware is required, please contact fae@queclink.com. We can't guarantee that the version mismatch of the GV500MAP firmware and the MCU firmware could work well.

1.1.3.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A05V11M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

1.1.4.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A04V18M1024**.

Item	Brief Description
1	Added **AT+GTSVR**.
2	Added 0x14 "**BLE**" in <*Sub Command*> of **AT+GTRTO**.

1.1.5.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A04V18M1024**.

Item	Brief Description
1	Fixed an issue that the device might reboot abnormally after inserting the Verizon SIM card.
2	Optimized BLE related functions.
3	Fixed an issue that OBD synchronization was lost after upgrading the device firmware OTA.
4	Optimized the **AT+GTUPD** function.

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2. Release History

2.1. GV500MAPR00A04V18M1024

2.1.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A04V18M1024** supports @Track air interface protocol version 4.00. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol V4.00.

2.1.2.MCU Firmware Version Support

The GV500MAP firmware **GV500MAPR00A04V18M1024** should work with the MCU firmware **GV500MA_McuR01V6.00**. If an upgrade error occurs or the match with another version of the GV500MAP firmware is required, please contact fae@queclink.com. We can't guarantee that the version mismatch of the GV500MAP firmware and the MCU firmware could work well.

2.1.3.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A04V18M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.1.4.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A03V10M1024**.

Item	Brief Description
3	Added **AT+GTBAS ,AT+GTCMD ,AT+GTUDF** and **+RESP:GTBAA.**
4	Added <*RLY Operation Mode*> and <*BAS Bind Index*> to **AT+GTRTO**.
5	Supported the function that upgrading the BLE firmware via "Queclink_Firmware_Upgrade_Tool_MDM".
6	Added <*Sub Command*> 3A: **RLY** in the **AT+GTRTO** command.

2.1.5.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A03V10M1024**.

Item	Brief Description
5	N/A

2.2. GV500MAPR00A03V10M1024

2.2.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A03V10M1024** supports @Track air interface protocol version 3.00. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol V3.00.

2.2.2.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A03V10M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.2.3.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A02V33M1024**.

Item	Brief Description
7	N/A

2.2.4.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A02V33M1024**.

Item	Brief Description
6	Fixed an issue that <*Vehicle Speed*> of **+RESP:GTOBD** would be 255km/h occasionally when the vehicle was in ignition off status.

7	Changed the default value of <*Send Failure Timeout*> in **AT+GTDOG** command from 0 to 60.
8	Fixed an issue that the device didn't report **+RESP:GTOSM** according to the <*Send Interval*> when setting <*Mode*> in **AT+GTOSM** command to 1 or 2.
9	Fixed an issue that the device would report **+RESP:GTBSF** many times when the BLE beacon list didn't change.
10	Fixed an issue that the device would fail to synchronize OBD protocol and kept in ignition on status when the device was removed from the OBD port and inserted again .
11	Fixed an issue that device would report **+RESP:GTFRI** as **+BUFF:GTFRI** when setting <*IGF Report Interval* > in **AT+GTFRI** to 2700s in 2G network.
12	Optimized mileage counting logic.

2.3. GV500MAPR00A02V33M1024

2.3.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A02V33M1024** supports @Track air interface protocol version 2.03. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol R2.03.

2.3.2.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A02V33M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.3.3.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A02V32M1024**.

Item	Brief Description
8	N/A

2.3.4.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A02V32M1024**.

Item	Brief Description
13	Fixed an issue that the device would stop to report messages for a long time occasionally.

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2.4. GV500MAPR00A02V32M1024

2.4.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A02V32M1024** supports @Track air interface protocol version 2.03. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol R2.03.

2.4.2.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A02V32M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.4.3.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A02V15M1024**.

Item	Brief Description
9	Added <*Lost Count*> to **AT+GTBSF**

2.4.4.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A02V15M1024**.

Item	Brief Description
14	Optimized the **AT+GTBSF** function.
15	Optimized the **AT+GTUPD** function.
16	Optimized AGPS function.
17	Fixed an issue that the <*Total Hour Meter Count*> was higher than the <*Current Hour Meter Count*> after setting the <*Hour Meter Enable*> of **AT+GTHMC** command to 1.
18	Fixed an issue that the device wouldn't try to connect the main server again once failed to report to the main server and switched to report to backup server successfully.

19	Fixed an issue that the device stopped reporting for hours.
20	Fixed an issue that the device couldn't register on network when setting <*APN Authentication Methods*> in **AT+GTBSI** command to 3.
21	Fixed an issue that the device would report **+RESP:GTOER** with code 001 for several times and the LED would blink slowly when the VIN query was not support.
22	Fixed an issue that the device couldn't enter ignition off status when rebooted the device which was in ignition on status and removed the device from OBD port and then inserted it back during rebooting process.
23	Fixed an issue that the <*GNSS UTC Time*> might be 1 second later than the <*Send Time*> of **+RESP:GTFRI**.

2.5. GV500MAPR00A02V15M1024

2.5.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A02V15M1024** supports @Track air interface protocol version 2.02. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol R2.02.

2.5.2.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A02V15M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.5.3.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A01V52M1024**.

Item	Brief Description
10	Added IPV6 surpport feature
11	Added Query GTRDF Configration by **GTRTO**
12	Added Query GTAIF Configration by **GTRTO**;

13	Added <*Sub Command Parameter*> in **AT+GTRTO**
14	Added <*Encryption Mode*> in **AT+GTSRI**
15	Added command **AT+GTBTS,AT+GTBSF**.

2.5.4.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A01V52M1024**.

Item	Brief Description
24	Optimize online AGPS functions
25	Fixed an issue that if the location fails, the device ignition to trigger the location. The **+RESP:GTFRI** packet location information is not accurate.
26	Fixed an issue that the UPC record update time is not updated when the command **AT+GTTMA** is executed.
27	Fixed an issue that when the <*Server IP/Domain Name*> is empty, the existing parameters will be cleared
28	Fixed an issue that when the mask of +EVT in HEX format is the default value, the **+RESP:GTPNA** message reported by the device is abnormal
29	Fixed an issue that the **+RESP:GTCRD** packet is occasionally abnormal and contains multiple 0x00 packets
30	Fixed an issue that the heartbeat message is not reported
31	Fixed an issue that change **GTVVS** parameters, dynamic voltage and Offest maintain the previous values
32	Fixed an issue that **AT+GTCRA** has probabilistic failure of ignition sampling mode
33	Fixed an issue that the first message of **+RESP:GTFRI** does not match the normal performance in mode 4.
34	Fixed an issue that after FOTA is upgraded, the first packet is **+RESP:GTMPN**, and no **+RESP:GTPNA** packet is sent
35	Optimized the **AT+GTUPD** upgrade and reporting functions
36	Fixed an issue that when the threshold is less than 1G, **+RESP:GTCRA** will be reported continuously even if the device is stationary
37	Fixed an issue that getting ack from **AT+GTSPD** or **AT+GTTOW** takes more than 10 minutes

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38	Fixed an issue that when TCP long connection ,Buffer Mode5,SMS Ack are enabled,the ack does not return to mobile phone when send message via mobile phone.

2.6. GV500MAPR00A01V52M1024

2.6.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A01V52M1024** supports @Track air interface protocol version 1.00. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol R1.00.

2.6.2.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A01V52M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.6.3.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A01V49M1024**.

Item	Brief Description
1	N/A

2.6.4.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A01V49M1024**.

Item	Brief Description
39	Optimized the **AT+GTUPD** function.
40	Optimized the messages reporting when using UDP report mode and setting <*SACK Enable*> to 0.
41	Fixed a bug that **+ACK:GTHBD** message might not be reported under LTE Cat-M1 network.
42	Fixed a bug for the adhesion of report packets.

2.7. GV500MAPR00A01V49M1024

2.7.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A01V49M1024** supports @Track air interface protocol version 1.00. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol R1.00.

2.7.2.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A01V49M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.7.3.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A01V44M1024**.

Item	Brief Description
1	N/A

2.7.4.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A01V44M1024**.

Item	Brief Description
1	Optimized the **AT+GTUPC** function.
2	Optimized the **AT+GTUPD** function.

2.8. GV500MAPR00A01V44M1024

2.8.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A01V44M1024** supports @Track air interface protocol version 1.00. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol R1.00.

2.8.2.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A01V44M1024** needs to work with Modem Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.8.3.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A01V42M1024**.

Item	Brief Description
1	N/A

2.8.4.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A01V42M1024**.

Item	Brief Description
1	Optimized the logic for downloading data in AGPS offline mode.
2	Fixed a bug where the device could not report **+RESP:GTIGF** when the parameter <*IGF Debounce Time*> in **AT+GTOBD** was not zero.

2.9. GV500MAPR00A01V42M1024

2.9.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A01V42M1024** supports @Track air interface protocol version 1.00. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol R1.00.

2.9.2.BG96 Modem Firmware Version

GV500MAP firmware **GV500MAPR00A01V42M1024** needs to work with Modem

Firmware Version 1.6 (i.e. <*Modem Firmware Version*> reported in the **+RESP:GTATI** message queried by sub command 0x1C of **AT+GTRTO** is 0106). Please choose the proper BG96 modem OTA bin according to the current <*Modem Firmware Version*> in the **+RESP:GTATI** message.

2.9.3.New Features

The following table lists new features compared with the preceding firmware release, version **GV500MAPR00A01V38M1024**.

Item	Brief Description
1	N/A

2.9.4.Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV500MAPR00A01V38M1024**.

Item	Brief Description
1	Fixed an issue where the GNSS could not turn off when fix failed in ignition off sate.
2	Optimized AGPS online feature.
3	Optimized the network searching process after warm reboot.
4	Fixed a bug where the device could not reboot according to the <*No Network Interval*> setting in **AT+GTDOG** after disconnecting from the network for a long time.
5	Fixed a bug where the device would stop reporting messages if the SIM card was in network roaming state.
6	Fixed a bug where the format of **+RESP:GTATI** was not consistent with @Track protocol.

2.10. GV500MAPR00A01V38M1024

2.10.1.@Track Protocol Support

GV500MAP firmware **GV500MAPR00A01V38M1024** supports @Track air interface protocol version 1.00. For detailed information about the protocol, please refer to the document GV500MAP @Track Air Interface Protocol R1.00.

This is the initial firmware release of GV500MAP.