



GL300M Firmware Release Note

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

Firmware Version: R20A11V09

International Telematics Solutions Innovator

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Contents

0. Preface.....	1
1. For Firmware Version R20A11V09	2
2. For Firmware Version R20A11V08	3
3. For Firmware Version R20A11V07	4
4. For Firmware Version R20A11V04	5
5. For Firmware Version R20A11V01	6
6. For Firmware Version R20A10V04	7
7. For Firmware Version R20A09V01	8
8. For Firmware Version R20A08V03	9
9. For Firmware Version R20A07V06	10
10. For Firmware Version R20A07V05	11
11. For Firmware Version R20A06V02	12
12. For Firmware Version R20A05V05	13
13. For Firmware Version R20A05V02	14
14. For Firmware Version R20A03V05	15
15. For Firmware Version R20A02V09	16
16. For Firmware Version R20A01V08	17
17. For Firmware Version R20A01V06	18
18. For Firmware Version R20A01V05(initial version)	19

0. Preface

This Release Note introduces the latest change of GL300M firmware and briefly describes the improvements over preceding versions. You can also find the whole history of all the changes of GL300M Firmware in this document.

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1. For Firmware Version R20A11V09

GL300M Firmware Version	GL300M_1713_R20A11V09
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V9.04
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V2.0.2
Problems Fixed	N/A
New Features	N/A
Firmware Optimization	1. Optimized QSS command

2. For Firmware Version R20A11V08

GL300M Firmware Version	GL300M_1713_R20A11V08
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V9.04
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V2.0.2
Problems Fixed	N/A
New Features	1. Changed the minimum of “check interval ” in AT+GTFRI command to 1 second
Firmware Optimization	1. Optimized manage tool

3. For Firmware Version R20A11V07

GL300M Firmware Version	GL300M_1713_R20A11V07
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V9.03
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V2.0.0
Problems Fixed	N/A
New Features	1. Added the field of reset level in AT+GTRTO RESET command
Firmware Optimization	N/A

4. For Firmware Version R20A11V04

GL300M Firmware Version	GL300M_1713_R20A11V04
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V9.02
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.30
Problems Fixed	N/A
New Features	1. Added drop detection event alarm
Firmware Optimization	1. Optimized CELL ID update strategy 2. Updated manage tool

5. For Firmware Version R20A11V01

GL300M Firmware Version	GL300M_1713_R20A11V01
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V9.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.29
Problems Fixed	N/A
New Features	1. Added manually register in AT+GTECF command
Firmware Optimization	N/A

6. For Firmware Version R20A10V04

GL300M Firmware Version	GL300M_1713_R20A10V04
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V8.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.28
Problems Fixed	N/A
New Features	<ol style="list-style-type: none"> 1. Added GIR, ATI, and DELBUF sub commands in RTO command list 2. Added 2G first mode in AT+GTBSI 3. Added mode 4 in AT+GTTEM 4. Added mode 3 and 4 in AT+GTSPD 5. Added report mode of NMR report in AT+GTNMD 6. Added AT+GTECF command which could enable GTGSM report and configure low battery threshold 7. Added CMD/UDF query mask in AT command in AT+GTRTO
Firmware Optimization	<ol style="list-style-type: none"> 1. Optimized QMS 2. Optimized buffer function: If buffer function disabled, buffer reports will not be recorded in the device, and the previous buffered reports will also be deleted.

7. For Firmware Version R20A09V01

GL300M Firmware Version	GL300M_1713_ R20A09V01
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V7.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.24
Problems Fixed	N/A
New Features	1. Heartbeat packet is also supported under UDP with fixed local port mode
Firmware Optimization	1. Optimized QMS

8. For Firmware Version R20A08V03

GL300M Firmware Version	GL300M_1713_R20A08V03
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V7.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.22
Problems Fixed	N/A
New Features	<ol style="list-style-type: none">1. Firmware supports full-band2. Added GSV query command in RTO command list3. Backup server is also supported in TCP-Long connection4. Added UDP with fixed local port mode
Firmware Optimization	<ol style="list-style-type: none">1. Optimized manage tool interface

9. For Firmware Version R20A07V06

GL300M Firmware Version	GL300M_1713_ R20A07V06
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V6.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.21
Problems Fixed	N/A
New Features	N/A
Firmware Optimization	1. Optimized network connection

10. For Firmware Version R20A07V05

GL300M Firmware Version	GL300M_1713_ R20A07V05
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V6.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.21
Problems Fixed	N/A
New Features	1. Odometer value is also increasing in GPS On Need Mode
Firmware Optimization	1. Optimized motion sensor related functions

11. For Firmware Version R20A06V02

GL300M Firmware Version	GL300M_1713_R20A06V02
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V5.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.19
Problems Fixed	N/A
New Features	N/A
Firmware Optimization	<ol style="list-style-type: none"> 1. All functions that require GPS request will be suspended once the device enters into the SFM, GPS will be opened only by the GPS open interval. 2. Reduced the time the GPS is open while in SFM: <ul style="list-style-type: none"> 1st GPS open interval timeout 2 minutes 30 seconds. 2nd GPS open interval timeout 2 mins 3rd GPS open interval timeout 1 mins 4th and after GPS open interval timeout 45 secs <p>Once GPS fixed successful, this mechanism will be reset</p>

12. For Firmware Version R20A05V05

GL300M Firmware Version	GL300M_1713_R20A05V05
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V5.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.19
Problems Fixed	N/A
New Features	N/A
Firmware Optimization	<ol style="list-style-type: none">1. Optimized the manage tool2. Optimized SFM that GPS could open at regular interval when device is in SFM.3. Optimized AGPS so that AGPS download will stop after 5 minutes when it is enabled and then restart to download after 6 days.

13. For Firmware Version R20A05V02

GL300M Firmware Version	GL300M_1713_ R20A05V02
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V5.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.18
Problems Fixed	N/A
New Features	N/A
Firmware Optimization	<ol style="list-style-type: none">1. Optimized the manage tool2. Optimized SFM that SFM is still valid in “GPS on need mode”

14. For Firmware Version R20A03V05

GL300M Firmware Version	GL300M_1713_R20A03V05
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol_V5.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.17
Problems Fixed	N/A
New Features	1.Added SFM mode
Firmware Optimization	<ol style="list-style-type: none">1. Optimized battery life2. Optimized the LED indicator when device charging under sleep state3. Optimized the watchdog, it is enabled by default and device auto restarts at 02:00 every 7 days4. Optimized DMS, improved user agent safety that the DMS link can't be downloaded through other ways or other devices except for Queclink devices.5. Optimized UPC and UPD logic, if UPC task is executing, UPD command will not be executed and the report return code is 202

15. For Firmware Version R20A02V09

GL300M Firmware Version	GL300M_1713_R20A02V09
Applicable @Track Air Protocol Version	GL300M_Series_@Track_Air_Interface_Protocol_V3.05
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.17
Problems Fixed	1. Resolved the risk that probably some exceptions would happen if device continuously worked for over 49.7 days 2. Resolved the risk that device IMEI would auto backs to module IMEI
New Features	1.Added DMS
Firmware Optimization	N/A

16. For Firmware Version R20A01V08

GL300M Firmware Version	GL300M_1713_R20A01V08
Applicable @Track Air Protocol Version	GL300M_Series_@Track_Air_Interface_Protocol_V3.05
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.15
Problems Fixed	1. Resolved TMA sync bug, report maybe can't be sent out if TMA sync failed.
New Features	1. Added temperature and motion status in the GTRTL report. 2. Added APN authentication methods, this is to meet the requirement of some customers whose APN with user name and password
Firmware Optimization	1. Optimized the debounce time of power button. 2. Optimized the bug that FOTA update is rejected when device internal battery is low even if the external battery kit is connected. 3. Optimized the bug that PWR LED still slow flash when device internal battery is low even if the external battery kit is connected. 4. Optimized the power consumption of the integrated device. 5. Optimized "Fixed Distance Report mode" of FRI report

17. For Firmware Version R20A01V06

GL300M Firmware Version	GL300M_1713_R20A01V06
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol V3.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.7
Problems Fixed	N/A
New Features	N/A
Firmware Optimization	1. Optimized the bug that time unit of “Non-movement duration”

18. For Firmware Version R20A01V05(initial version)

GL300M Firmware Version	GL300M_1713_R20A01V05
Applicable @Track Air Protocol Version	GL300M Series @Track Air Interface Protocol V3.01
Applicable Manage Tool Version	Queclink_GL300M_Manage_Tool_V1.7
Problems Fixed	N/A
New Features	N/A
Firmware Optimization	N/A