GV355CEU Firmware Release Notes

GSM/GPRS/LTE CAT1/GNSS Tracker

TRACGV355CEURNR01A10V11

Version: 1.10.11

Driving Smarter IoT

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1 Preamble

This Release Note introduces GV355CEU firmware version **GV355CEUR01A10V11M128** and briefly describes the benefits over preceding release. Also you can find difference compared with preceding release.

Note

✧ **1** - Firmware versions A01/A02 cannot be upgraded directly to A08 over-the-air, please upgrade version A01/A02 to A03-A07 first and then from version A03-A07 to A08.

✧ **2** - Firmware versions earlier than A08V34 cannot be upgraded directly to A08V36 or higher versions over-the-air, please upgrade to A08V34 first and then from version A08V34 to a higher version.

2 Current Release

2.1 GV355CEUR01A10V11M128

2.1.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A10V11M128** supports @Track air interface protocol version 10.02. For detailed information about the protocol, please refer to the document **GV355CEU@Track_Air_Interface_Protocol_v1002**.

2.1.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A09V14M128**.

Item	Brief Description
1	Added the parameter <Total Fuel or Idle Fuel Used Expand> to <CAN Report Expansion Mask1> in the command AT+GTCAN to support petrol/diesel total fuel usage and gas total fuel usage.
2	Added Enhanced <Satellite in Use> to <+RSP Expansion Mask> and <+EVT Expansion Mask> in the AT+GTHRM command.
3	Added mode 6 and 7 to the command AT+GTAIS.
4	Added the parameter <Delta Voltage Threshold> to the command AT+GTAIS.
5	Added type 3 to parameter <ID Report Type> in the message +RESP:GTIDA.

2.1.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A09V14M128**.

Item	Brief Description
1	Fixed the issue where the configuration of AT+GTIDS command could be cleared by AT+GTRTO command.
2	Optimized the GTDOG function to enable the device to reboot the RF to check if the network is restored before triggering the GTDOG reboot.
3	Optimized the Jamming detection function.
4	Modified the value range of parameter <Satellites in Use>.

Item	Brief Description
5	Fixed an issue where the range of parameter <Max Threshold> in the AT+GTAIS command was incorrect.
6	Modified the format of <RS485 Device ID> in the +RESP:GTERI message.
7	Modified the method for erasing parameters <APN>, <APN User Name>, <APN Password>, <Backup APN>, <Backup APN User Name> and <Backup APN Password>.
8	Optimized reading speed of door status and central lock status.
9	Fixed an issue where the AT+GTTTR command could not be sent when the <Report Mode> was set to 2.

3 Release History

3.1 GV355CEUR01A09V14M128

3.1.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A09V14M128** supports @Track air interface protocol version 9.05. For detailed information about the protocol, please refer to the document **GV355CEU@Track_Air_Interface_Protocol_v0905**.

3.1.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A08V36M128**.

Item	Brief Description
1	Added Bit4 - Bit12 to parameter <CAN Report Expansion Mask1> in the AT+GTCAN command.
2	Supported Azure IoT Hub in the AT+GTMQT command.
3	Deleted mode 14 from parameter <GNSS Working Mode> in the command AT+GTCFG.
4	Added Bit8 - Bit10 to <CAN Information Mask> in the AT+GTRTO command.
5	Added the parameter <Tacho Driver Work Time Mode> to the AT+GTCAN command.
6	Added bit 11 to parameter <CAN Information Mask> in the AT+GTRTO command to support querying tachograph drivers working time mode.
7	Added type 9 to parameter <Sensor Type> in the command AT+GTFSC.
8	Added AT+GTCAS command to support to configure CAN module.
9	Deleted the parameter <Read Interval> from the command AT+GTBAS.

3.1.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A08V36M128**.

Item	Brief Description
1	Fixed an issue where parameters were abnormal and did not take immediate effect after the GTUPC upgrade failed.

Item	Brief Description
2	Fixed an issue where the OUTPUT worked abnormally when the parameter <ICCID> contained letters in command AT+GTSIM.
3	Fixed an issue where the GTPEO command could trigger the output after the device reboot if the configuration of the GTPEO command was restored to default value.
4	Fixed an issue where the parameter <Charging States Optimization> in the +RESP:GTCAN message was incorrect when <Battery Charging Current> was greater than 0 in vehicle stationary state or ignition off.
5	Fixed an issue where the underscore "_" was missing in the parameter <File Name> of +RESP:GTFTP message.
6	Fixed an issue where the <GNSS Satellite Number> was greater than <GSV Number> in the message +RESP:GTUDT.
7	Optimized the logic of reporting cell information.
8	Fixed an issue where the reported message +RESP:GTUDT was incorrect when the parameter <Mode> was set 3 in command AT+GTAIS.
9	Fixed an issue where the message +RESP:GTUDT was reported after triggering TOW event when the parameter <IGF Sending Mode> was set to 0 in command AT+GTUDT.
10	Fixed an issue where the parameter <Device ID List> did not take effect if it was set to 00 for the first time in the AT+GTRAS command.

3.2 GV355CEUR01A08V36M128

3.2.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A08V36M128** supports @Track air interface protocol version 8.08. For detailed information about the protocol, please refer to the document **GV355CEU@Track_Air_Interface_Protocol_v0808**.

3.2.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A08V34M128**.

Item	Brief Description
1	N/A

3.2.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A08V34M128**.

Item	Brief Description
1	Improved production efficiency.

3.3 GV355CEUR01A08V34M128

3.3.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A08V34M128** supports @Track air interface protocol version 8.08. For detailed information about the protocol, please refer to the document **GV355CEU@Track_Air_Interface_Protocol_v0808**.

3.3.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A07V13M128**.

Item	Brief Description
1	Added mode 33 to the command AT+GTURT.
2	Added the command AT+GTMCT to configure multiple commands transferred through secondary serial port.
3	Added mode 12 to the command AT+GTTTR.
4	Added type 14/1 to <Accessory Type/Accessory Model> for ZWP-Q80 Bluetooth Accessory in the command AT+GTBAS.
5	Added command AT+GTIDS, and added option 2 to parameter <ID List Type> in AT+GTIDA.
6	Added <CAN1-bus Status> to <Message Type> in the +RESP:GTTTR message.
7	Supported reporting battery level of MAG ELA BLE accessories in the message +RESP:GTBAA/+RESP:GTERI.
8	Added the parameter <CAN Module SW Version/CAN Serial Number> to the message +RESP:GTDMR.
9	Converted non-ASCII characters in the parameters <Tachograph Driver 1/2 Card Number> and <Tachograph Driver 1/2 Name> to ASCII characters.
10	Added the parameter <Protocol Type> to the command AT+GTRAS.

Item	Brief Description
11	Added type 13 to <Command Type> in the AT+GTTTR command to support querying driver2 name/id/time related status.
12	Added type 10 to <Message Type> in the +RESP:GTTTR message.
13	Added the parameters <Primary DNS Server> and <Secondary DNS Server> to the commands AT+GTSRI and AT+GTQSS.
14	Added mode 4 to the parameter <Mode> in the command AT+GTIDA.
15	Added Bit16 (<Charge State Optimization>) to <Electric Report Mask> in the AT+GTCAN command.
16	Added the command AT+GTTPM to support RS232 TPMS accessory.
17	Added type 3C to parameter <Sub Command> in the command AT+GTRTO.
18	Added mode 41 to parameter <Mode> in the command AT+GTURT.
19	Changed the parameters name from <Cornering and Braking Threshold> and <Cornering and Braking Duration> to <Cornering Threshold> and <Cornering Duration>.
20	Added the parameter <1-wire Data Mask> to the command AT+GTACD.
21	Added the AT+GTHUM command and the +RESP:GTHUM message.
22	Added type 4 to <1-wire Device Type> in +RESP:GTERI message.
23	Modified the description of <1-wire Device Data> in the +RESP:GTERI message.

3.3.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A07V13M128**.

Item	Brief Description
1	Fixed an issue where the device could not report message +RESP:GTDIS after reboot if AT+GTPDS was enabled to save AT+GTDIS state and the DIS state was changed during the reboot.
2	Fixed an issue where the message +RESP:GTUPC-305 was reported after a normal reboot if the device failed to update the device configuration and reported +RESP:GTUPC-302.
3	Fixed an issue where the value of parameter <Crash Counter> in the HEX-formatted message +RESP:GTCRA was incorrect.
4	Fixed an issue where the serial number might start from 0 after reboot.
5	Optimized the DR200's card ID reporting logic in the message +RESP:GTIDA.
6	Fixed an issue where the device could not report messages when the command AT+GTOWL was enabled.
7	Fixed an issue where the total number of GLGSV was incorrect in NMEA.

Item	Brief Description
8	Fixed an issue where the device could not trigger AT+GTCMD after reboot when the parameter <Input ID Mask> was triggered in command AT+GTUDF.
9	Fixed an issue where the device worked abnormally when the parameter <Mode> was set 20 in command AT+GTURT.
10	Fixed an issue where the device kept rebooting after failing to update the device configuration and reporting +RESP:GTUPC-302.
11	Fixed an issue where the values of 3-axis might be 0 in message +RESP:GTACC.
12	Fixed an issue where the device did not report message +RESP:GTDUC when the data usage was greater than the set parameter value.
13	Fixed an issue where the device could not parse the commands sent via SMS that contained Chinese text fields.
14	Fixed an issue where the device reported message +RESP:GTDOS after reboot if AT+GTPDS was enabled to save AT+GTOEX state.
15	Fixed an issue where the device could not detect EIO100 when changing the parameter <EIO100 Connection> in command AT+GTACD.
16	Fixed an issue where the device reported HEX-formatted messages to cell phone via SMS.
17	Fixed an issue where the reported message +RESP:GTFRI was incorrect when the command AT+GTOWH was enabled and the parameter <Position Append Mask> in command AT+GTCFG was enabled.
18	Fixed an issue where the device could not parse command AT+GTCMD when parameter <Command String> contained multiple AT commands.

3.4 GV355CEUR01A07V13M128

3.4.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A07V13M128** supports @Track air interface protocol version 7.04. For detailed information about the protocol, please refer to the document **GV355CEU@Track_Air_Interface_Protocol_v0704**.

3.4.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A06V11M128**.

Item	Brief Description
1	Added Bit5 to <Additional Event Mask> in the AT+GTCAN command.

Item	Brief Description
2	Added Bit 3 to the parameter <Satellite Information Mask> in the command AT+GTRTO.
3	Added the parameter <Format Version> to the sub comand RTO-2 in command AT+GTRTO.
4	Deleted the parameters <Brake Speed Threshold>, <Delta Speed Threshold> and <Delta Heading Threshold> from the command AT+GTASC.
5	Added the parameter <Report Mode> to the command AT+GTASC.
6	Added type 9 to <Digital Fuel Sensor Type> in the AT+GTURT command.
7	Added <Validity Time> to the AT+GTDIS command.
8	Added <Format> to Mode 7 and 8 of <Working Mode> in the command AT+GTURT.
9	Added an interface to make it possible to display CAN BUS information in the new MT (Queclink @Track MT).
10	Modified the command AT+GTRCS to set RS485 communication configuration.
11	Added the command AT+GTRAS to configure RS485 accessory settings.
12	Added +RESP:GTRAS message to report information about the RS485 Modbus device.
13	Added the parameter <Fast STP Mode> to the command AT+GTSSR.
14	Added parameter <ID Filter Mode> to the command AT+GTIDA.
15	Modified the range of parameter <ID Validity Time> in the command AT+GTIDA.

3.4.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A06V11M128**.

Item	Brief Description
1	Fixed an issue where the device would report the message +RESP:GTACN when the parameter <Tacho Report Mask> in command AT+GTCAN was set to 0.
2	Fixed an issue where the device failed to save the SSR status in a location failure environment when AT+GTPDS function was enabled.
3	Fixed an issue where the message +RESP:GTDOS was reported after the flashing waveform when the AT+GTSPD function was enabled with mode 3 or 4.
4	Fixed an issue where the output continued to be activated when the WTH300 configuration was switched from satisfying the low power alarm to not satisfying.
5	Fixed an issue where the new output id would not be re-triggered when modifying the output id after the output was triggered in the AT+GTBAS function.
6	Fixed an issue where the GNSS information in +RESP:GTUDT messages was controlled by the parameter <Report Item Mask> in the AT+GTCFG command.

Item	Brief Description
7	Fixed an issue where the device could not return OK after sending command AT+GTDAT via serial UART.
8	Fixed an issue where the parameter <Backup Battery Voltage> was 0 in the HEX format +RESP:GTDMR message when the device was not connected to the internal battery.
9	Fixed an issue where the +RESP:GTFLA message would not be reported in ignition off state if the cumulative drop of fuel level was greater than <Ex Fuel Lost Alarm IGF>.
10	Fixed an issue where ID could be authorized if swiping the DR100 card when the <Mode> was set to 2 and <ID List Type> was set to 1 in command AT+GTIDA.
11	Fixed an issue where the device reported +RESP:GTDOS message when switching between roaming state and home state via the AT+GTRMD function.
12	Optimized the logic of network reconnection to solved the problem of devices not reporting messages.
13	Fixed an issue where the bit14 of <Detailed Information/Indicates> was incorrect in +RESP:GTCAN message.
14	Optimized Jamming detection function for 2G/3G network.
15	Fixed an issue where only the latest output was triggered when multiple IDs were set in AT+GTCLT.
16	Fixed an issue where the <Digital Output Status> reported in message +RESP:GTCLT and +RESP:GTDOS was inconsistent.
17	Fixed an issue where the parameter <Tacho Driver1 Name> was reported as a non-ASCII value in the +RESP:GTCAN message.
18	Fixed an issue where the output was still activated but no photo was actually uploaded when <Camera ID> in AT+GTTAP command was misconfigured.
19	Fixed an issue where the +RESP:GTDOS message was still reported after reboot when the Bit5 in the AT+GTPDS command was enabled to record state of wave shape 1 and all outputs in OEX were triggered.
20	Fixed an issue where the state of IEX/OEX reported in the +RESP:GTFRI message was still active after IEX/OEX was deactivated.
21	Fixed an issue where the device reported +RESP:GTFLA message when the state changed from ignition on to ignition off after the fuel level dropped beyond the parameter <Ex Fuel Lost Alarm IGF>.
22	Fixed an issue where the reported <Position Append Mask> in message was incorrect.
23	Fixed an issue where the value of parameter <Modem IMEI> in the message +RESP:GTATI was incorrect in HEX format.
24	Fixed an issue where the output was still active when the AT+GTACD command was reset by the AT+GTRTO-4 command.
25	Fixed an issue where the file format reported to GTFTP did not match the set value after the file format was set via GTTTR-11.

Item	Brief Description
26	Fixed an issue where the device restart when the device UPC upgrades all configuration files and send AT+GTRTO-4.
27	Fixed an issue where the output state reported in the +RESP:GTCLT message might be 0 when the output was activated for the first time.
28	Fixed an issue where the values outside the specified range of parameter <Output Status> in AT+GTCLT/AT+GTBID commands could be send successfully.
29	Fixed an issue where the state was not exited for a long time after bad driving behavior was detected when AT+GTHBM mode was set to 5.
30	Fixed an issue where the OUTPUT could not be stopped when the parameter <Output ID> was set to 0 in command AT+GTDOS.
31	Fixed an issue where the commands with double % in the header sent by SMS channel could not be parsed correctly.
32	Optimized the logic of AT+GTPEO/AT+GTGEO functions to solved the problem of devices not reporting messages.
33	Fixed an issue where the message +ACK:GTSRI could not be controlled by the parameter <Filter Mode> in command AT+GTMSF.

3.5 GV355CEUR01A06V11M128

3.5.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A06V11M128** supports @Track air interface protocol version 6.05. For detailed information about the protocol, please refer to the document **GV355CEU @Track Air Interface Protocol V6.05**.

3.5.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A05V09M128**.

Item	Brief Description
1	Added "OUT" information to <Tachographer Information Expand> in the message +RESP:GTCAN.
2	Added type 11 to the parameter <Command Type> in the command AT+GTTTR.
3	Added Bit 36/37/47/48/51/52 to the parameter <Input ID Mask> in the command AT+GTUDF.
4	Added parameters <Tachograph Driver1 Working Time Mask> and <Tachograph Driver2 Working Time Mask> to the command AT+GTCAN.

Item	Brief Description
5	Added <Tacho Timestamp> to <CAN Report Expansion Mask1> in the AT+GTCAN command.
6	Added "ferry/train crossing condition" information to <Tachographer Information Expand> in the +RESP:GTCAN message.
7	Added Bit6 to <Additional Event Mask> in the AT+GTCAN command.
8	Added the parameter <Format Version> to the command AT+GTRTO.

3.5.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A05V09M128**.

Item	Brief Description
1	Fixed an issue where the configuration of AT+GTLTP could be queried by AT+GTRTO.
2	Fixed an issue where the device did not report message with type TTR-8,0 when the THR100 accessory was rebooted manually in the authentication process or reading a file.
3	Fixed an issue where the <Configuration Version> would still be changed in the +RESP:GTDMR message when the AT+GTFVR command was issued but the AT+GTUPC command was not executed.
4	Fixed an issue where the message +RESP:GTUPD with code 301 could not be reported to the QMS server after BB firmware was successfully upgraded.
5	Fixed an issue where the parameter <Configuration Update Time> in +RESP:GTDMR was error after the AT+GTUPC upgrade.
6	Added support for WTH300 and WMS301 temperature accuracy to one decimal place.
7	Fixed an issue where it failed to download large files of 3-month DDD by using AT+GTTTR function.
8	Fixed an issue where enabling AT+GTSRI and AT+GTMSI functions resulted in duplicate SMS sending.
9	Fixed an issue where LTE Authentication ERROR occurred without username and password.
10	Fixed an issue where the parking fence was deleted after the device reboot.
11	Fixed an issue where AGPS could not update ephemeris normally when the device is powered off for more than one day after successful download.
12	Fixed an issue where the +RESP:GTIOB message would not be reported when the AT+GTIOB was configured to use EIO100 and digital input while the AT+GTIEX and AT+GTDIS functions were not enabled.
13	Fixed an issue where the WMS301/WRL300/WTH301 accessories could be scanned by name.

Item	Brief Description
14	Fixed an issue where the message could not be reported when the current PLMN is first in the blacklist and then in the whitelist.
15	Fixed an issue where the device would reboot abnormally after sending multiple commands via the serial port when AT+GTURT mode was set to 28.
16	Fixed an issue where the <LED State> might be reported as 0 in the message +RESP:GTINF.
17	Fixed an issue where the corresponding digit input could not be detected after the digit input in AT+GTDIS was enabled and the pin mode in AT+GTCFG was set.
18	Fixed an issue where AT+GTPDS failed to detect ignition off after reboot if saving the ignition on state.
19	Fixed an issue where the <RAW DATA> reported in +RESP:GTERI was incorrect when the temperature was below 0℃
20	Fixed an issue where the output was abnormal after WTH300 accessory configuration changed from meeting the low power alarm to not meeting the low power alarm.
21	Fixed an issue where switching the parameter <Pin Mode> of AT+GTCFG would result in incorrect reporting of +RESP:GTDIS messages.
22	Fixed an issue where the state was not exited for a long time after bad driving behavior was detected when AT+GTHBM mode was set to 5.
23	Fixed an issue where the range of parameter <Client ID> in AT+GTMQT was inconsistent with the protocol.
24	Fixed an issue where it failed to save the value of parameter <Discard Unknown Event> in AT+GTHBM if it was changed.
25	Fixed an issue where the +RESP:GTBAA message was not reported when WMS301 closed was detected.
26	Fixed an issue where the device did not report +RESP:GTSTR after reboot in motion state if AT+GTPDS was enabled to save AT+GTSSR state.
27	Modified the range of parameter <Initial Hour Meter Count> to 00000:00:00 - 1193000:00:00 in the command AT+GTHMC.
28	Fixed an issue where the <Network Type> reported in the message +RESP:GTINF was empty.
29	Fixed an issue where the queried configuration of the command AT+GTRCS was inconsistent with the protocol.
30	Fixed an issue where there was no <RS485 Sensor Data> in the message +RESP:GTERI when connected with RS485.
31	Fixed an issue where the interval between two adjacent +RESP:GTACC reports was incorrect.
32	Fixed an issue where the AT+GTGEO function could not be triggered again after modified the parameters in AT+GTGEO when the engine was off and the AT+GTGEO function have already been triggered

3.6 GV355CEUR01A05V09M128

3.6.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A05V09M128** supports @Track air interface protocol version 5.02. For detailed information about the protocol, please refer to the document **GV355CEU @Track Air Interface Protocol V5.02**.

3.6.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A04V08M128**.

Item	Brief Description
1	Added Bit13 and Bit14 to <Expansion Information> in the message +RESP:GTCAN .
2	Added type 32 to parameter <Working Mode> in the command AT+GTURT.
3	Added Bit16 to the parameter <ERI Mask> in the command AT+GTFRI.
4	Added type 8 to the parameter <UART Device Type> in the message +RSEP:GTERI.
5	Added the command AT+GTMQT to support MQTT.
6	Added the command AT+GTTLS to support TLS encryption.
7	Added the command AT+GTRTP to support downloading CA certificate file from the backend server.
8	Added the command AT+GTLTP to support writing the CA certificate file to the device by subcontracting.
9	Added the parameter <CAN Report Expansion Mask1> to the command AT+GTCAN.
10	Added the parameter <Retarder Usage> to the <CAN Report Expansion Mask1> in the command AT+GTCAN.
11	Added the parameter <Power Mode> to the <CAN Report Expansion Mask1> in the command AT+GTCAN.
12	Added Bit6 and Bit7 to the parameter <Filter Mask> in the AT+GTMSF command.

3.6.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A04V08M128**.

Item	Brief Description
1	Fixed an issue where the device status directly changed to 12 (Ignition Off Motion) after moving when <Fake Tow Delay> was set to 0 and the device went from stationary to motion in ignition off state.
2	Fixed an issue where it failed to download large files of 3-month DDD by using AT+GTTTR function.
3	Optimized the Protocol Application triggered output feature so that when a new output configuration was changed, the old output only stopped when an exit or entry condition was met.
4	Fixed an issue where the device would not report +RESP:GTVGF when it was stationary if <Virtual Ignition On Logic> was set to 1 and the voltage was not satisfied.
5	Improved the accuracy of the interval between two adjacent +RESP:GTFRI reports.
6	Fixed an issue where a +RESP:GTIDA authorization end message with an empty ID would be reported after the ignition was switched off if AT+GTIDA command was issued while the device was in the ignition on state.
7	Fixed an issue where the device could not report +RESP:GTACN according to the parameter <Tacho Report Interval> when the ignition was on and the parameter <Tacho Report Mask> was set to 0.
8	Fixed an issue where the Bit 14 was still selected when Bit 14 in the <INF Expansion Mask> parameter was unselected in the AT+GTHRM command.
9	Fixed an issue where the device could stop working during normal test.
10	Fixed an issue where the <Configuration Version> would still be changed in the +RESP:GTDMR message when the AT+GTFVR command was issued but the AT+GTUPC command was not performed.
11	Optimized the AT+GTOWL function to disconnect from the operator when illegal PLMN was detected.
12	Fixed an issue where the reserved Bit 22 in the <CAN Data Mask> was still valid after it was selected in the AT+GTCLT command.
13	Fixed an issue where the AT+GTOWL function was abnormal when switching working modes.

3.7 GV355CEUR01A04V08M128

3.7.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A04V08M128** supports @Track air interface protocol version 4.02. For detailed information about the protocol, please refer to the document **GV355CEU @Track Air Interface Protocol V4.02**.

3.7.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A03V19M128**.

Item	Brief Description
1	Added type 6 to <Power On Reason> in the message +RESP:GTPNR.
2	Added parameter <Reboot Device Type> to the command AT+GTDOG.
3	Added model 5 to parameter <Accessory Model> in the command AT+GTBAS.
4	Added the parameter <Electric Report Mask> to the command AT+GTCAN to support reading some parameters of the electric vehicles.
5	Added the parameter <Gaseous Fuel Level> to the <CAN Report Expansion Mask> in the command AT+GTCAN.
6	Added type 10 to parameter <Command Type> in the command AT+GTTTR, which supports checking the current TachoReader connection environment and checking whether the device is ready to download DDD files.
7	Added support for reporting message +RESP:GTIDA when BID Bluetooth accessory is scanned.

3.7.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A03V19M128**.

Item	Brief Description
1	Optimized message reporting order to support reporting +RESP:GTHBM/+RESP:GTHBE before +RESP:GTCRA when both HBM and CRA were triggered.
2	Fixed an issue where only 1 decimal place was reported when the unit of parameter <Fuel Level> in +RESP:GTCAN was liter in some vehicles.
3	Fixed an issue where the same ID would be reported in the message +RESP:GTTRD.
4	Fixed an issue where the device would reboot abnormally after the external power supply was reconnected if removing the external power supply after UPD-340 was reported when upgrading the Bluetooth firmware.
5	Fixed an issue where the device might reboot abnormally when it was taken out after working properly for 11 days in the shielding box.
6	Optimized the Bluetooth UPD upgrade process.
7	Fixed an issue where the output was not exited if the Bluetooth accessory could not be scanned after +RESP:GTBAA was reported and the output was triggered.
8	Fixed an issue where the backup function was abnormal.

Item	Brief Description
9	Fixed an issue where the reserved bit of parameter <Input ID Mask> in the command AT+GTUDF read back was valid.
10	Fixed an issue where the <GNSS Accuracy> reported in event report messages was inconsistent with the actual positioning situation.
11	Fixed an issue where the value of <Send Time> reported in +RESP:GTRTO/+RESP:GTDOG was incorrect.
12	Fixed an issue where the output was not triggered if the device status was saved after reboot when output was triggered and AT+GTPEO was saved by AT+GTPDS.
13	Fixed an issue where the reserved bit of parameter <UPD Fields Mask> in the command AT+GTUPD read back was valid.
14	Fixed an issue where the configuration of some parameters was not updated after the AT+GTUPC upgrade
15	Fixed an issue where two +RESP:GTUDT messages with the same time were reported after reboot if FRI was configured when the ignition was on.
16	Optimized the detection logic of 1-wire temperature sensor.
17	Fixed an issue where the AT+GTTOW would change the status of output LED when the device engine was on.
18	Optimized the logic of WKF300 accessories judgment.
19	Fixed an issue where the interval between <GNSS UTC Time> and <Send Time> in the message +RESP:GTTOW was incorrect.
20	Fixed an issue where the output1 could not output square waves.
21	Fixed an issue where the messages +RESP:GTSTR and +RESP:GTSTP would be reported when the device engine was off.
22	Fixed an issue where the device could not be stationary if <Speed Mode> in AT+GTGAM was set to 0 after it was detected that the device was moving.
23	Fixed an issue where the device would abnormally trigger the wave shape 1 in low power alarm state when the <Output Status> in AT+GTBID was set to 0.
24	Fixed an issue where the device would abnormally trigger output after message +RESP:GTSOS was reported.
25	Fixed an issue where the IMEI and <Report Type> reported in +RESP:GTUDT might be incorrect.

3.8 GV355CEUR01A03V19M128

3.8.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A03V19M128** supports @Track air interface protocol version 3.03. For detailed information about the protocol, please refer to the document **GV355CEU @Track Air Interface Protocol V3.03**.

3.8.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A02V14M128**.

Item	Brief Description
1	Supported one wire accessory DR200 in the command AT+GTACD.
2	Added mode 2 to the parameter <Report Mode> in the command AT+GTTTR for diagnostic downloads.
3	Added type 13/14 to the parameter <Accessory Type> in the command AT+GTBAS.
4	Added model 4 to parameter <Beacon ID Model> in the command AT+GTBID.
5	Added commands AT+GTMSI and AT+GTMSF.
6	Added <Extended Debug Information>, <Standard Debug Information> and <Hardware Information> to parameter <CAN Information Mask> in the command AT+GTRTO.
7	Added Bit3 and Bit4 to the parameter <Additional Event Mask> in the command AT+GTCAN.
8	Added mode 2 to the parameter <ODO Enable> in the command AT+GTCFG.
9	Added <Tachograph Information Expand> to parameter <CAN Report Expansion Mask> in the command AT+GTCAN.
10	Added message +RESP:GTEUC in HEX format.
11	Modified the default value of parameter <Mode> from 0 to 1, and modified the length of parameter <Bluetooth Name> from 25 to 18 in the command AT+GTBTS.
12	Added operations of rebooting the device after upgrading the configuration over the air.
13	Modified the default value of parameter <Bluetooth Name> in AT+GTBTS from GV355CEU_BT to GV355CEU%IMEI.

3.8.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A02V14M128**.

Item	Brief Description
1	Fixed an issue where some parameters could be lost after upgrading the device firmware.
2	Fixed an issue where the device could not obtain cell information when network type was error.
3	Fixed an issue where the first +RESP:GTFRI report type was wrong when configuring AT+GTFRI multi-point reporting and triggering AT+GTFFC function.
4	Fixed an issue where the value of parameter <CAN Service Distance> in message +RESP:GTCAN was incorrect.
5	Fixed an issue where Bit 2 of the parameter <Position Append Mask> in the command AT+GTCFG did not work as expected.
6	Fixed an issue where the device would abnormally report +RESP:GTDIS after reboot.
7	Fixed an issue where the value of parameter <CAN Data> in the message +RESP:GTPDP was incorrect in HEX format.
8	Optimized the SMS reporting process.
9	Fixed an issue where the value of parameter <RFID> in the HEX format messages +RESP:GTIDF/ +RESP:GTAIS were not cleared when the device lost authorization.
10	Fixed an issue where the message +RESP:GTHBE was not reported when AT+GTHBM mode was set to 5.
11	Fixed an issue where the function AT+GTTMA worked abnormally.
12	Fixed an issue where the message +RESP:GTGTIN/+RESP:GTOUT was not reported when the parameter <State Mode> was set to 1 in the command AT+GTGEO.
13	Fixed an issue where the message +RESP:GTCRD was repeatedly reported when protocol format was set to HEX format.
14	Fixed an issue where the value of parameter <Duration of Ignition Off> in the HEX format messages +RESP:GTIGN/+RESP:GTVGN was incorrect for the first ignition event after upgrading firmware.
15	Fixed an issue where the value of parameter <Area Mask> in the first message +RESP:GTGIN was incorrect when the parameter <State Mode> was set to 1 in the command AT+GTGEO.
16	Fixed an issue where the device would report unexpected +RESP:GTDIS after disconnecting the EIO100 power supply.
17	Fixed an issue where the device could not upgrade BLE firmware through QMS server.
18	Fixed an issue where the device would abnormally report message +RESP:GTCRD when AT+GTCRA was triggered.
19	Fixed an issue where the google link SMS was not reported when the parameter <location request mask> was set to 23 in the command AT+GTCFG.
20	Fixed an issue where the value of parameter <RFID>/<RFID Length> in the HEX format messages were empty when the parameter <RFID Report Mode> was set to 1 in the command AT+GTIDA.

Item	Brief Description
21	Fixed an issue where the device reported Tachograph working state and identification not in time.
22	Fixed an issue where the function AT+GTUDT/AT+GTDAT did not work when resetting configuration of AT+GTBTS by command AT+GTRTO.
23	Fixed an issue where the value of parameter <GNSS UTC Time>/<Send Time> in all message was default value.
24	Fixed an issue where the device did not detect stationary state when AT+GTGAM was disabled and the device got GNSS information from GNSS recorder.
25	Fixed an issue where the OUTPUT ID was switched and the previous OUTPUT was extinguished after the TOW alarm was triggered.
26	Fixed an issue where the range of the parameter <Data> in the command AT+GTDAT was inconsistent with @Track Protocol.
27	Fixed an issue where the data could be lost when outputting HEX data to serial port by configuring the AT+GTRTO command.
28	Fixed an issue where the value of parameter <Current Frame Index> in the last message +RESP:GTTRD was incorrect.

3.9 GV355CEUR01A02V14M128

3.9.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A02V14M128** supports @Track air interface protocol version 2.02. For detailed information about the protocol, please refer to the document **GV355CEU @Track Air Interface Protocol V2.02**.

3.9.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A02V10M128**.

Item	Brief Description
1	Modified the range of parameters <Start Index> and <End Index> from 1-300/N to 1-300 in the command AT+GTBID, and deleted the parameter <Index> from the message +RESP:GTBID.

3.9.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A02V10M128**.

Item	Brief Description
1	N/A

3.10 GV355CEUR01A02V10M128

3.10.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A02V10M128** supports @Track air interface protocol version 2.01. For detailed information about the protocol, please refer to the document **GV355CEU @Track Air Interface Protocol V2.01**.

3.10.2 New Features

The following table lists new features compared with the preceding firmware release, version **GV355CEUR01A01V22M128**.

Item	Brief Description
1	Modified the parameter <Additional Event> in the command AT+GTCAN to <Additional Event Mask> to support other CAN event messages.
2	Added parameter <Segment Mask> to the command AT+GTTTR.
3	Added parameters <Scan Interval> and <Scan Window> to the command AT+GTBTS.

3.10.3 Improved Features

The following table lists features or parameters that have been changed or improved compared with preceding firmware release, version **GV355CEUR01A03V19M128**.

Item	Brief Description
1	Fixed an issue where the <Firmware Update Time> in +RESP:GTDMR was inconsistent with the actual upgrade time of the device.
2	Fixed an issue where sometimes +ACK:GTUPD was reported after the message +RESP:GTUPD.
3	Optimized the system time update logic.

Item	Brief Description
4	Fixed an issue where the value of parameter <IP Address> in the +RESP:GTAIF message was incorrect when the network mode was switched after the device reboot.
5	Fixed an issue where the message +RESP:GTDIS was reported when the digital input id4 was triggered if the AT+GTDIS function was disabled.
6	Fixed an issue where the message +RESP:GTFLA was not reported when the difference between the current fuel level after ignition off and the last measured fuel level was greater than the parameter <Ex Fuel Loss Alarm IGF> of the AT+GTEFS command.
7	Fixed an issue where the parameters <RFID> and <RFID Length> in the HEX format messages +RESP:GTIDA, +RESP:GTIGF, +RESP:GTIGN, +RESP:GTVGF and +RESP:GTVGN were cleared after the device reboot.
8	Fixed an issue where the CAN firmware version 3.0.8 could not download DDD files.
9	Fixed an issue where the parameter <ERI mask> in +RESP:GTERI message was inconsistent with the data actually reported.
10	Fixed an issue where the device would not trigger output1 when it went from motion to rest and the <Motion Sensor> in AT+GTJBS command was set to 1.
11	Optimized the device reboot logic after the CAN firmware upgrade.
12	Optimized crash detection logic.
13	Fixed an issue where the device could stop reporting after upgrading BLE firmware over the air several times.
14	Optimized power consumption performance.
15	Fixed an issue where the Car Model ID could still be queried through AT+GTRTO-2F command after the AT+GTRTO-22-3 command was sent to clear the car model.
16	Fixed an issue where the hardware version might be incorrect sometimes.

3.11 GV355CEUR01A01V22M128

3.11.1 @Track Protocol Support

GV355CEU firmware **GV355CEUR01A01V22M128** supports @Track air interface protocol version 1.00. For detailed information about the protocol, please refer to the document **GV355CEU @Track Air Interface Protocol V1.00**.

This is the initial firmware release of GV355CEU.