

Topcon GB-1000 - Receiver Board Firmware Version 3.3p6

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The linked file is Topcon GB-1000 [Firmware version 3.3 p6](#). This firmware has yet to be tested and accepted by UNAVCO.

The following release notes detail the incremental changes since version 3.3 p2.

User visible changes in the firmware version 3.3 p6 since version 3.3 p4.

Highlights.

1. Problem connected with GLONASS R09 satellite has been resolved.
2. Internal logic of RTK engine has been corrected (problem of frozen RTK float solutions).
3. The format of [NE] message has been corrected for GR-3 and Net-G3 boards.
4. Problem connected with temporary blockage of GLONASS data when working as a reference station has been resolved for Turbo boards.
5. New version of firmware (0x24) for GR-3 Power Board has been prepared.
6. Problem connected with rejecting of incoming TCP connections has been resolved for GR-3 receivers.
7. Problem connected with NTRIP server automatic reconnection after startup or link disconnection has been resolved.
8. Problem connected with link failures in PPP mode when working with CDMA Verizon modems has been resolved.
9. Direct IP rover-to-base functionality has been restored.
10. A problem connected with NTRIP functionality has been resolved.

User visible changes in the firmware version 3.3 p4 since version 3.3 p2

Highlights.

For G3-based boards only (GR-3, Net-G3):

- N.1 Internal logic for tracking satellites under conditions when there is a source of interference has been modified.
- N.2 Problem has been resolved in L2C tracking: it could lead to exceptions.
- N.3 Bug, associated with computing zero values of elevation/azimuth for satellites having valid almanac data, has been fixed.
- N.4 Corrections have been made for getting better performances when working with SBAS data.
- N.5 Internal logic that handles the receiver options connected with update rates for positioning and raw measurements generating has been corrected. Now this logic corresponds to one which is available for the rest of the boards.

For all boards (including GR-3 and Net-G3):

- A.1 Algorithms for tracking P2 signal in GLONASS-M satellites have been improved further.
- A.2 Problem connected with using the parameter /par/pos/glo/fcn in RTK mode has been resolved.
- A.3 Internal logic, which is connected with synchronization of GPS and GLONASS RTK data when RTCM 2 format is in use, has been improved.

A.4 Problem connected with almanac uploading via serial ports has been resolved.

A.5 NMEA UID message has been added.

A.6 Internal logic that handles the parameters /par/raw/curmsint and /par/pos/curmsint has been corrected.

0. Compatibility Notes

0.1 In the firmware versions 3.1 - 3.3 p3, parameters /par/raw/curmsint and /par/pos/curmsint may contain wrong values.

1. Messages

1.1 NMEA UID message

It contains two user-defined IDs.

Format Description

1. %S : User identification code 1
2. %S : User identification code 2
3. *%2XDA : Checksum

2. Parameters.

2.1 Set user identification codes for NMEA UID message

Name: /par/nmea/id1

Access: rw

Type: string[31]

Default: ""

Description: Defines user identification code 1 that will be broadcast in NMEA UID message.

Name: /par/nmea/id2

Access: rw

Type: string[31]

Default: ""

Description: Defines user identification code 2 that will be broadcast in NMEA UID message.

Posted by: [Freddy Blume](#) - Thu, Dec 31, 2009 at 6:32 PM. This article has been viewed 426312 times.

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