



# GNSS Firmware v5.5.1

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## Release Notes

**March 2023**

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## Supported Products

### *Systems*

- Topcon NET-G5, HiPer HR, HiPer VR, MR-2, GR-5<sup>1</sup>, AGM-1, AGS-2<sup>2</sup>, GR-i3<sup>3</sup>
- Sokkia GNR5, GRX3, GCX3

### *OEM*

- Topcon B111, B111A, B125, B210

## Accompanying Topcon Software and Firmware

- To access all new features and improved functionality available in GNSS Firmware 5.5 or later the following Topcon software versions (or later) are recommended:
  - TRU v3.6.1
  - MAGNET v7.3.1
- BLE Firmware v1.8 (HiPer VR, GRX3)

## Features and Changes

### General

- Ability to set and report Bluetooth transmit power output limit (HiPer VR, HiPer HR, GCX3)
- Supported ability to update BT module firmware in the field (GCX3)
- Added ability to format external media less than or equal to 1 GB in size (NET-G5, GNR5)

### Networking

- Improved cell network registration when APN is incorrectly set
- Fixed reconnection issue related to DHCP lease renewal
- Extended persistent receiver settings to include TCP server ports and password configuration

### Satellite Tracking & Positioning

- General performance improvements for HD2 heading and inclination and during solution type transitions
- Added setting to enable and disable QZSS satellites in RTK positioning; enabled by default
- Corrected GPS satellite clock offset calculation
- Improved tracking of GALILEO E5a and E5ab signals
- Fixed output of Galileo ephemeris (LE) message on set schedule
- Improved handling of corrupt data in CMR message input
- Fixed SBAS almanac processing

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<sup>1</sup> GR-5 with Vanguard Technology.

<sup>2</sup> Features available through AGS-2 firmware bundle release only; distributed with Horizon software updates

<sup>3</sup> Includes all GR-i3 receiver variants

- Reduced unsmoothed position solutions while in DION Smooth mode
- Extended implementation of ionospheric detection and reporting
- Improved AMP mode performance after base change and fixed reporting of solution type
- Removed 20 minutes limitation for Skybridge Pro subscriptions
- Improve Madoca service performance