

NovAtel Service Bulletin

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OEMV Firmware Release 3.620

Summary:

09-005

This service bulletin summarizes the changes in OEMV Firmware Release 3.620.

There is a new release of CDU (version 3.6.0.1).

Products Affected:

OEMV products.

Region Affected:

Worldwide.

Details:

The changes in Firmware Release 3.620 are:

- Corrected issue related to GLONASS operating frequency change. See NovAtel Service Bulletin 09-007, "GLONASS Frequency Change", for more information.
- After a reset, the previous almanac log is now immediately available. The only way to clear the almanac log is to use the FRESET command. This resolves an issue with Firmware Version 3.500, in which the almanac did not survive a reset.
- In previous firmware versions, the RTK solution might choose a satellite with high elevation and bad L2 as a reference. The RTK algorithm would assess the particular L2 signal as bad then it would exclude all L2 signals. The problem was more evident when PRN 46 was used as a reference satellite, since PRN 46 is known to have a malfunctioning L2 signal.
- OmniSTAR tracking has been improved to allow OEMV-1 products to track previously unavailable signals.
- Enhancements to NovAtel's GL1DE™ technology for users wanting decimetre-level pass-to-pass accuracy. GLONASS measurements are now integrated with the solution to provide increased availability. These enhancements are discussed in white paper "NovAtel's GL1DE Technology", available on the NovAtel web site.
- Support for NMEA 2000 Parameter Group Messages, listed in NMEA 2000 Messages on page 2.
- New heading models, listed in New Heading Models on page 2.

GL1DE Enhancements

The following improvements have been made to the **GL1DE** technology:

- GLONASS signal has been added to PDP/RPDP to improve availability.
- Addition of PDPSTAT log message, providing PDP status information.
- PDP pass-to-pass improvements.

For further detail, refer to APN-038 "Application Note on Pseudorange/Delta-Phase (PDP) and **GL1DE** Filters", available on the NovAtel web site.

NMEA 2000 Messages

The CAN module is activated when the SETCANNAME command is entered. After SAVECONFIG is entered, the CAN module is activated immediately on subsequent start-ups. The CAN module supports the following NMEA 2000 Parameter Group Messages:

- PGN 129025 GNSSPositionRapidUpdate
- PGN 129026 COGandSOGRapidUpdate
- PGN 129029 GNSSPositionData

This support was previously introduced for SMART-AG products. Refer to NovAtel application note APN-050 "SMART-AG Firmware Release Application Note for CAN System Integrators" for further information.

New Heading Models

The following heading models, which output heading and GPHDT logs, have been added:

- DL-V3-L1-G-Z
- DL-V3-SBAS-Z
- DL-V3-G-Z
- FLEXPAK-V1G-L1-G-Z
- FLEXPAK-V1G-PVT-G-Z
- FLEXPAK-V1G-G-Z
- FLEXPAK-V2-L1-G-Z
- FLEXPAK-V2-SBAS-Z
- FLEXPAK-V2-G-Z
- OEMV-1G-L1-G-Z
- OEMV-1G-PVT-G-Z
- OEMV-1G-RA-L1-G-Z
- OEMV-1G-RA-PVT-G-Z
- OEMV-1G-RA-G-Z
- OEMV-1G-G-Z

- OEMV-2-L1-G-Z
- OEMV-2-SBAS-Z
- OEMV-2-G-Z
- OEMV-3-L1-G-Z
- OEMV-3-SBAS-Z
- OEMV-3-G-Z
- PROPAK-V3-424-L1-G-Z
- PROPAK-V3-424-G-Z
- PROPAK-V3-L1-G-Z
- PROPAK-V3-SBAS-Z
- PROPAK-V3-G-Z
- SMART-V1G-2US-L1-G-Z
- SMART-V1G-2US-PVT-G-Z
- SMART-V1G-2US-G-Z

Application Notes:

- APN-038 Application Note on Pseudorange/Delta-Phase (PDP) and GL1DE Filters
- APN-050 SMART-AG Firmware Release Application Note for CAN System Integrators

White Papers:

NovAtel's GL1DE Technology. **This paper has been updated.**

Download Update:

Download OEMV Firmware Release 3.620 directly from the NovAtel web site, at http://www.novatel.com/support/fwswupdates.htm.

For more information please contact support@novatel.com.