What's New in OEM6 FW 6.600 (February 3, 2014)

- General Release (supports all 6 platforms)
- Support added for TerraStar-C correction data which enables better converged accuracy and faster re-convergence
- Steadyline now provides smooth transitions, between solution types in BESTPOS, when enabled
- Improvements in reported standard deviations when Steadyline is enabled
- RTK algorithm efficiency improvements result in more CPU idle time when more satellites are tracked
- Improvements in RTK performance through correction outages
- Fix for Ethernet issue with DHCP client on the ProPak-6
- Improvements to WiFi Access Point mode on PP6
- SPAN FSAS/KVH IMUs are now steered to the internal PPS to address timing issues
- SPAN Improvements to handle large GNSS updates and still provide smooth positioning
- SPAN Relative INS output frame has been modified to include ECEF, BODY, or the current LOCALLEVEL
- IMU raw data will now be output before GPS time is set by default. This can be deactivated via a new option in the INSCOMMAND command.
- SETINITAZIMUTH will now complete after we have accumulated at least 5 seconds of static data, if this static data is collected prior to command it will use previous accumulations and complete alignment instantly.
- Added support for ISA-100C IMU at 200Hz or 400Hz.

6.600 New Commands:

1. EXTERNALPVA

The EXTERNALPVA message can be used to input any external update supplying any of; position, velocity, and/or attitude. Sending this command before a GNSS solution is available will allow the SPAN system to align without GNSS.

6.600 Command Change:

1. INSCOMMAND

Added options START_NO_TIME (now the default) and START_FINE_TIME which restores the default of previous releases.

<u>What's New in OEM6 FW 6.510 (July 28, 2014)</u>

- General Release (supports all 6 platforms except GPStation6)
- FPGA version 4 update for all OEM638 models Customers updating OEM638 to 6.510 FW will also need to update the FPGA version on COM2.The Order of update does not matter.
- 617 HW Support
- PPP Support on Smart6
- PPP Latency Improvement: Previously PPP calculation latency limited the PPP position rate (below 20Hz) and caused variable calculation latency.

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- BDS Acquisition Improvement: Cold start improvement of 8 seconds
- 240 channels supported on OEM638/PP6

6.510 New Commands:

1. SETIMUPORPTOTOCOL

The SETIMUPORTPROTOCOL command is to force the IMU serial port to a particular protocol. This overrides the default setting configured upon the CONNECTIMU command.

2. RELINSAUTOMATION

Command sent to rover to enable SPAN Moving Baseline functionality between it and master.

Command Change:

1. LEVERARMCALIBRATE

Changes to LEVERARMCALIBRATE min/max time allowed for calibration to 300-1800 from 0-1000.

What's New in OEM6 FW 6.400 (April 1, 2014)

- The OEM060400RN0000 (6.400) firmware works across all OEM6 family receivers and their hardware variants. The 6.400 firmware works on the SMART6-L SMART antenna but does not currently support SMART6.
- NovAtel CORRECT Precise Point Positioning (PPP) functionality
- Support for TerrStar and Veripos subscriptions, signal tracking and decoding.
- Fully released BeiDou (BDS) tracking and positioning for in all position modes.
- SPAN models Relative INS model functionality
- SPAN models supporting KVH1750 IMU
- SPAN delayed heave filter support
- Steadyline positioning functionality

6.400 New Commands:

- 1. ASSIGNLBANDBEAM
- 2. BESTVELTYPE
- 3. PPPCONVERGEDCRITERIA
- 4. PPPDYNAMICS
- 5. PPPTIMEOUT
- 6. PPPSEED
- 7. STEADYLINE
- 8. UALCONTROL
- 9. PPSCONTROL2
- 10. ELEVATIONCUTOFF
- 11. PDPVELOCITYOUT
- 12. SOFTLOADSETUP
- 13. DHCPCONFIG

6.400 New Logs:

- 1. LBANDBEAMTABLE
- 2. LBANDTRACKSTAT
- 3. PPPDOP2
- 4. PPPPOS
- 5. PPPSATS
- 6. TERRASTARINFO
- 7. TERRASTARSTATUS
- 8. VERIPOSINFO
- 9. VERIPOSSTATUS



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What's New in OEM6 FW 6.220 (March 5, 2013)

- SPAN MEMS enclosure support including ENCLOSUREWHEELSENSOR and ENCLOSURECOMSELECT commands
- Added new status parameters DETERMINING_ORIENTATION and WAITING_INITIALPOS in the inertial solution status
- Added extended status bits in to indicate an INS verified solution in the following INS logs:
 - O INSPVAX
 - O INSATTX
 - O INSPOSX
 - O INSVELX

What's New in OEM6 FW 6.210 (September 13, 2012)

- SPAN functionality available on OEM6 family of receivers
- New INS logs added: NPOSX, INSVELX, INSATTX, INSPVAX, RAWIMUX
- Galileo tracking improvements
- API requires Green Hills Software Compiler

<u>What's New in OEM6 FW 6.200 (Contact support@novatel.com)</u>

- GL1DE Dual Frequency
- RTK Enhancements
- User Configurable Profiles
- New OmniSTAR libraries
- Signed 'hex' files and Signature Authcodes
- Position Mode Matching
- Handling for GLONASS slot-id greater than 24
- Handling for GLONASS Leap Second
- API requires Green Hills Software Compiler

What's New in OEM6 FW 6.101 (July 5, 2012)

• Fix for GLONASS leap second change

What's New in OEM6 FW 6.100 (July 13, 2011)

- ALIGN workflow improvements to remove requirement for raw measurement models at ALIGN master, plug-and-play configuration
- GL1DE improvements to optimize performance in multipath conditions
- QZSS tracking & Single Point Positioning
- EGNOS satellite tracking and positioning improvements

What's New in OEM6 FW 6.000 (October 26, 2010)

FW 6.000 represents the first release for the OEM6 GNSS boards

Note: FW 6.000 will not run on OEMV GPS boards; please continue to use release FW 3.XXX with your OEMV hardware.

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