Tersus BX316 Firmware Version (FW0082) Release

Nov 16, 2018

Overview

Tersus GNSS Inc. ("Tersus") is glad to release the firmware to BX316 OEM board. Firmware version (FW0082) is available for download at www.tersus-gnss.com/pages/software and support documents are available at www.tersus-gnss.com/pages/documents.

Features

➢ The firmware tracks three constellations: GPS (L1/L2), GLONASS (R1/R2) and BeiDou (B1/B2).

➢ This firmware provides centimeter-level accurate positioning to meet the wide range of precision positioning applications.

➢ The 4 GB onboard data storage makes it possible to store raw measurements for post-processing application.

➢ The maximum update rate is 20Hz for RTK and 20Hz for raw measurements.

➢ With a number of configurations, the firmware matches the needs for post-processing workflows, and for the use as a base/rover station or rover.

Change from Previous Versions

Issue	Type	FW
The RTCM date will be broadcast only when the coordinates are fixed.	Bug fix	FW0082
Changed the RTCM1230 encoding and RTCM1033 decoding.	Bug fix	

AP added more checks for response.	Enhancement	
Make file downloads more robust.	Enhancement	
Fixed the bug of Galileo and BeiDou sig mask and GPS and GLONASS sig mask.	Bug fix	
Add DAC control clock drift range protection to +/- 0.6 ppm	Enhancement	
Consider clock drift error at recover clock drift stage.	Enhancement	
Expand clock drift recover range to 15Hz and expand clock drift tuning range to 40Hz.	Enhancement	
The RTK engine is updated to version 3.0 which is more stable re reliable.	Enhancement	
The maximum update rate is 20Hz for RTK.	Enhancement	
Add RTCMv3 messages, including GPS ephemeris (MT1019), GLONASS ephemeris (MT1020), BDS ephemeris (MT1042), GLONASS bias information (MT1230).	Enhancement	
Optimizing the upgrade program. Even if the OEM board is unable to boot, the upgrade program may be enforced.	Enhancement	FW0041
The logic of firmware update has been optimized.	Enhancement	
The USB feature of firmware has been optimized.	Enhancement	
Fixed the bug when the updating is not successful.	Bug fix	
Changed the naming method of storage files. The time when the file was created is taken as the file name.	Enhancement	

Added a new feature of [base network]. (refer to < User Manual For BX Series GNSS Receiver >, 2.6.1)	Enhancement	