

1. **Firmware Upgrade for BC-GPS2CAN_V2: Triple-GNSS capability**
2. **25Hz Multi-GNSS Receivers and CAN Modules**
3. **10Hz Multi-GNSS RTK Receiver**

1. - Firmware Upgrade - 10Hz Triple-GNSS Capability for GPS2CAN_V2 modules

Via a firmware update it is now possible for the GPS2CAN_V2 Modules (2019+) to use satellites from 3 GNSS Systems: GPS / Galileo / GLNOASS or GPS / Galileo / BeiDou

By accessing much more GNSS satellites (up to 16), the position accuracy of the GPS2CAN_V2 modules is highly increased, especially in difficult reception environments like cities or forests, etc.

To activate this feature is necessary to change the rate from 12.5Hz to 10 Hz.

2a. - 25Hz Multi-GNSS Receiver

The AC-GNSS_Mouse_25Hz-000 is capable of concurrently receiving four GNSS with SBAS and QZSS augmentation support (GPS, Galileo, GLONASS and BeiDou) with an update rate of 25Hz.

With a typical accuracy of CEP < 1m and its very good dynamical capabilities with improved signal processing, it is the successor of the 50Hz GPS Mouse (AC-GPS_Mouse50Hz-000)

→ A Firmware Update of the Logger must be performed to use the new receiver

2b. - 25Hz Multi-GNSS CAN(-FD) Module with Integrated 6 DoF IMU

The BC-GNSS2CAN_3A3G-000 has all GNSS features of the 25Hz Mouse and extends the capabilities with an CAN(-FD) interface and keeps the integrated 6 DoF IMU with a signal output of up to 1000Hz, first order IIR filter for individual filtering for all axes, built-in coordinate transformation and Calc-Channels from the GPS2CAN.



3. - 10Hz RTK GNSS Receiver

The AC-GNSS_RTK_Mouse_10Hz-000 is capable of concurrently receiving all four major GNSS constellations - GPS, Galileo, GLONASS and BeiDou with an update rate of 10Hz with SBAS and QZSS augmentation support and RTK (Real Time Kinematic) functionality.

By utilizing the RTK functionality, the accuracy of position data derived from GNSS is improved significantly. It uses measurements of the phase of the carrier wave of the signal in addition to the information content of the signal and relies on a single reference station to provide real-time corrections that offer accuracy of CEP < 0.02m.

→ 2D offers multiple options for RTK base stations and wireless links to complete your RTK GNSS System



Further Information

For further Information and a detailed selection guide which GNSS module/mouse is best suited for your application please refer to our "Revision of GNSS modules" document