# GLE/RGU/GXX/001 Ruggedized Multi Constellation GNSS Receiver

#### Available Features (\*)

- Compact and rugged construction
- Designed to meet MIL-STD specifications
- GPS L1/L2/L2C/L5 + GLONASS L1/L2 + Galileo E1/E5A
  + BeiDou + QZSS + IRNSS + WASS/EGNOS/GAGAN (SBAS)
- Receiver Autonomous Integrity Monitoring (RAIM)
- Advanced Multi-path Reduction
- In-band interference rejection
- Update rate up to 100Hz
- RTK rate up to 100Hz
- Heading determination
- Code Differential Rover
- Code Differential Base
- External frequency I/O
- High speed RS 232 / RS 422 bi-directional ports
- RS 232 telemetry data port
- Ethernet, CAN bus interfaces and/or USB 2.0
- IRIG-B 1kHz modulated time code output
- PPS output synchronized to GPS, GLONASS or UTC
- Event Marker input
- CF internal data recorder for CompactFlash cards
- GLONASS .2mm Dynamic Calibration
- Spectrum Data Output
- PTP IEEE 1588: Precision Clock Synchronization Protocol
- Upgradeability in the field for most of the optional functions

(\*) Available features are depending on specific model and by selected options.

## Benefits

- Tracking of multiple constellations provides better availability of GNSS signals.
- Tracking of L1/L2/L2C and L5 signals provides better accuracy.
- Multiple I/O interfaces provide great flexibility

# Applications

Onboard instrumentation for testing in harsh environments: armoured and heavy-duty military and civil vehicles testing, flight-testing and certification of manned and unmanned aerial platforms, ship and vessel trials ...

## Overview

GLE/RGU/GXX/001 is a flexible, customizable, compact and rugged GNSS receiver designed for on board instrumentation and testing. It is based on well-proven, extremely powerful GNSS-receiver series with 216 universal receiving channels. In a small, EMI shielded and rugged enclosure, it features single or multiple frequency: GPS, Galileo, GLONASS, BeiDou, QZSS, IRNSS and SBAS.

It works in an extended temperature range, under severe mechanical and environmental conditions and is equipped with a wide DC voltage range power supply, designed to meet MIL-STD specs.

Control and data communication are supported by a variety of interfaces: RS 232, RS 422, Ethernet, USB 2.0 and/or CAN bus. Main functions may be controlled by front panel or by a remote contact port.

It incorporates an ASCII NMEA-0183 to binary format converter that generates a simplified RS 232 protocol, easy to be acquired and transmitted over a Telemetry/PCM stream.

Besides, to the possibility of a large internal data storage capacity, it

includes a CompactFlash data recorder, with a CF slot accessible from the front panel. Raw data are stored in efficient binary JPS format that can be directly processed or converted to RINEX by means of a supplied software tool. As an option, can be supplied, a specific software package for data processing, including RTK correction. GLE/RGU/GXX/001 receiver units have been successfully used and are currently used for flight-testing and certification, on-board to various platforms, including Helicopters, Jet, and Turbo-fan Aircrafts.

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Due to continuous developments, specifications are subject to change without prior notice. System features and performances are depending by installed options. This product is not intended for applications whose its failure to perform can be expected to cause damages to properties and/or persons and/or injury to human life.

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