

GR-213U GPS Receiver



■ Features:

- Builds on SiRFstarIII chipset with embedded ARM7TDMI CPU available for customized applications in firmware.
- 20 parallel satellite-tracking channels for fast acquisition and reacquisition.
- 200,000 effective correlators for fast TTFF (Time-To-Fast-Fix), and Extremely fast TTFF's at low signal level.
- Built-in hardware Tracking Loop Processor WAAS/EGNOS Demodulator support.
- Built-in repeatable and rechargeable Lithium-ion battery for Time- to- First-Fix (TTFF).
- Support NMEA 0183 v2.2 data protocol.
- Enhanced algorithms provide superior navigation performance in urban, canyon and foliage environments.
- For Car Navigation, Marine Navigation ,Fleet Management ,AVL and Location-Based Services , Auto Pilot ,Personal Navigation or touring devices ,Tracking devices/systems and Mapping devices application.

■ Specifications

- Tracks up to 20 satellites.
 - Receiver: L1, C/A code
 - Max update rate: 1 HZ.
 - Acquisition time
 - Reacquisition 0.1sec.averaged
 - Hot start 1 sec., averaged
 - Warm start 38 sec., averaged
 - Cold start 42 sec., averaged
 - Position accuracy :
 - ◆ Non DGPS (Differential GPS)
 - Position 5-25 m CEP without SA
 - Velocity 0.1 m/sec, without SA
 - Time 1 usec sync GPS Time
 - ◆ EGNOS/WAAS :
 - Position
 - < 2.2 m, horizontal 95% of time
 - < 5 m, vertical 95% of time
 - Dynamic Conditions:
 - Altitude 18,000 meters
(60,000 feet) max
 - Velocity 515 meters / second
(700 knots) max
 - Acceleration 4 G, max
 - Jerk 20 meters/second, max
 - Antenna Type: Built in Patch Antenna
 - Minimum signal tracked: -159dBm
-
- Dimension: 2.54 × 1.65 × 0.7 Inch
 - Weight : < 84g
 - Waterproof: IPX7
 - LED function:
 - Power On/Off and Navigation
 - Update Indication
 - Operating temperature:
 - 40 °C to +80 °C
 - Storage temperature:
 - 45 °C to +100 °C
 - Operating humidity:
 - 5% to 95% No condensing.
 - Power consumption
 - < 80mA at 4.5- 5.5V input
 - Protocol and interface:
 - ◆ NMEA output protocol: V.2.2
 - Standard:
 - Baud rate: 4800 bps
 - Data bit: 8
 - Parity: N
 - Stop bit: 1
 - Format: GGA,GSA,GSV, RMC.
 - Optional:
 - Baud rate: 9600,19200,38400
 - Format: GLL,VTG, ZDA, SiRF binary
 - ◆ Interface:
 - RS232 + CMOS TTL Level, or
 - RS-232 + DGPS