GR-213USB GPS Receiver

■ Features:

- SiRFstarIII chipset with embedded ARM7TDMI CPU available for customized applications in firmware
- High performance receiver tracks up to 20 satellites while providing first fast fix and low power consumption.
- Compact design ideal for applications with minimal space.
- A rechargeable battery sustains internal clock and memory. The battery is recharged during normal operation.
- Users can adjust power-saving percentage (20%~80%), which achieves the best power efficiency.
- User initialization is not required.
- LED display status: The LED provides users visible positioning status. LED “ON” when power connected and “BLINKING” when GR-213U got positioned.
- Water proof design for industry standard.

■ Specifications

- Tracks up to 20 satellites.
- Receiver: L1, C/A code
- Max update rate: 1 HZ.
- Acquisition time

  Reacquisition 0.1sec.averaged

  Hot start 8 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
- LED function:

  Power On/Off and Navigation

  Update Indication
- Operating temperature:

  -40 ℃to +80 ℃
- Storage temperature:

  -45 ℃to +100 ℃
- 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:

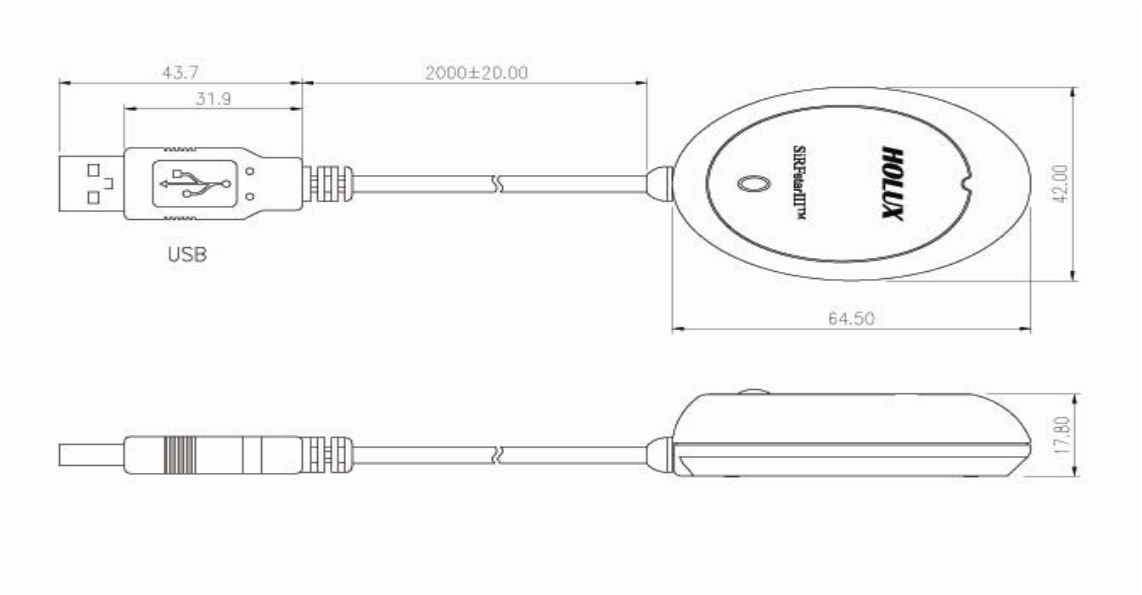
  Baud rate: 9600,19200,38400

  Format: GLL,VTG, ZDA, SiRF binary

  ◆ Interface:

  USB interface

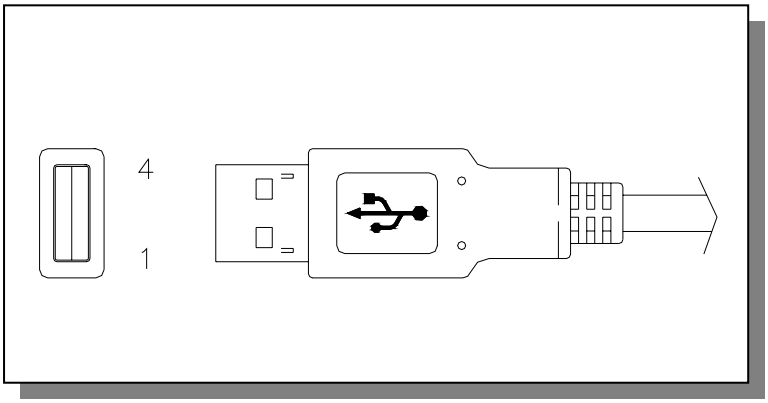
■ Physical Dimension：



■ Output terminal and definition

Output terminal: USB connector

Pin definition:



Pin	Signal Name
1	+5V
2	D +
3	D -
4	Ground