G2183

Reliable Position Accuracy
The G2183 is a high-accuracy, WAAS/EGNOS, GPS antenna. It is one of the first true 10 Hz GPS antennas available. It scores high in superior sensitivity for quick signal acquisition, reliable position accuracy, and accurate speed and course-over-ground readings. The G2183 can connect to either NMEA 0183 or NMEA 2000 networks or both simultaneously. It features a compact size that is easy to flush-mount, pole-mount, or rail-mount. The G2183 is designed for all marine environments, as the IPX6 waterproof housing can withstand virtually any condition Mother Nature can give.

10 Hz GPS Sensor

Features
- WAAS/EGNOS GPS with 3 m (10') accuracy
- Up to 10 Hz rapid position update rate
  —User selectable from 1 Hz to 10 Hz
- Provides:
  —Latitude and Longitude
  —Course Over Ground (COG)
  —Speed Over Ground (SOG)
  —Time and Date
  —Magnetic Variation
- Outputs NMEA 0183 and NMEA 2000 data simultaneously
- IPX6 waterproof enclosure
- Available as a combination GPS/Heading Sensor (GH2183)
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### SPECIFICATIONS

- **Supply Voltage**: 9 VDC to 40 VDC
- **Supply Current**: <90 mA
- **Power**: 800 mW
- **Operating Temperature Range**: -30°C to 55°C (-22°F to 131°F)
- **Storage Temperature Range**: -30°C to 70°C (-22°F to 158°F)
- **GPS Satellites Tracked**: 14-channel (maximum)
- **GPS Satellites Acquired**: 51-channel (maximum)
- **WAAS/EGNOS Satellites Tracked**: Any available channel
- **GPS Position Accuracy**: 3 m (10') with WAAS (95% of the time, SA off)
- **GPS-Fix Update Rate**: Up to 10 times per second (user selectable)
- **Cold Start Acquisition**: 60 seconds
- **NMEA 2000® Load Equivalency Number (LEN)**: 2
- **Certifications and Standards**: CE, IPX6, RoHS, IEC60945 (Pending)

### DATA OUTPUT PROTOCOL

**NMEA 0183 RS422 Sentence Structure**

- `$GPGGA` ....... GPS Fix Data
- `$GPGLL` ....... Geographic Position—Latitude and Longitude
- `$GPGSA` ....... GNSS DOP and Active Satellites
- `$GSGSV` ....... GNSS Satellites in View
- `$GPRMC` ....... Recommended Minimum Specific GNSS Data
- `$GPVTG` ....... Course Over Ground and Ground Speed
- `$GPZDA` ....... Time and Date

**NMEA 2000® Supported PGNs**

- 127258....... Magnetic Variation
- 129025....... Position and Rapid Update
- 129026....... COG and SOG, Rapid Update
- 129029....... GPS Position Data
- 129033....... Time and Date
- 129538....... GNSS Control Status
- 129539....... GNSS DOPs
- 129540....... GNSS Sats in View

### DIMENSIONS

- **Pole/Rail-Mount**
  - Ø 99.1 mm (3.90”)
  - 87.2 mm (3.43”)
  - 34.9 mm (1.38”)
  - 31 mm (1.22”)
  - Ø 69.9 mm (2.75”)

- **Flush-Mount**
  - Ø 30.9 mm (1.22”)
  - 2X M5 thumb nuts
  - 1/14” threads