

### **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<sup>®</sup> 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<sup>®</sup> data simultaneously
- IPX6 waterproof enclosure
- Available as a combination GPS/Heading Sensor (GH2183)







## **Technical Information**

### 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<sup>®</sup> 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<sup>®</sup> 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         |







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