ComNav®

067

G2 & G2B GPS Satellite Compass

Professional High Accuracy and Position Solutions

• Precise 2D heading and positioning data

ComNav

- Heading accuracy of better than 0.3 degrees
- Rate of turn tracking rates up to 90°/sec
- Provides Heave, Pitch & Roll information
- Pitch and roll accuracy of better than 1 degree
- Fully compatible with Autopilot, Radar, AIS, PC, Sonar, ECDIS
- Position accuracy better than 60cm 95% of the time using SBAS (EGNOS, MSAS & WAAS)
- G2B can also use terrestrial DGPS Radio beacon signals
- Integrated Gyro & Tilt sensors provide heading during momentary loss of satellite signals and speed up GPS signal reacquisition
- Heading Position Updates up to 20 Hz
- Multiple BAUD rate selections: 4800/9600/19200/38400
- G2 and G2B support both NMEA 0183 and NMEA 2000[®] Interface
- Pre-programmed default settings for Heading, Rate of Turn Course over Ground, Lat/Long Geographic position, Time & Date
- Two mounting options
- Heading solution for steel vessels
- Waterproof commercial grade IP69 standards
- CE certified for EMI and RFI immunity
- Optional 15m or 30m cable
- IMO compliant Wheelmark approved
- Optional color display
- 1 year warranty
- Worldwide service



G2 and G2B

SPECIFICATIONS

Receiver Type: Channels:

Update Rate:

Heading Accuracy:

Heave Accuracy:

Rate of Turn:

Heading Fix:

Start-up Time:

Timing Output:

12-channel parallel tracking (10 channel when tracking SBAS / 2 for SBAS) Standard 10 Hz, optional up to 20 Hz (position and heading) < 0.6 m (DGPS)* < 2.5 m (autonomous, no SA)** **Horizontal Accuracy:** < 0.3° RMS < 1º RMS Pitch / Roll Accuracy: < 30 cm RMS 90° / sec max < 60 sec typical < 10 sec 1pps accuracy CMOS : 5ons

L1, C/A code, with carrier phase smoothing

BEACON RECEIVER SPECIFICATIONS (G2B)

Channels: **Frequency Range: Operating Modes: Compliance:**

2-channel, parallel tracking 283.5 to 325 kHz Automatic (signal strength or range) and manual IEC 61108-4 beacon standard

1 full-duplex RS-232 and 1 full-duplex RS-422,

Open relay system indicates invalid heading

IPPS CMOS, active low, 10KΩ, 10p F load

1 half-duplex RS-422 (TX only)

NMEA 0183 / NMEA 2000®

4800 - 38400

COMMUNICATIONS

Serial Ports:

Baud Rates: Correction I/O Protocol: RTCM v2.3 (DGPS), RTCM SC-104 Data I/O Protocol: Heading Warning I/O: NMEA Heading Messages: \$GPHDT, \$GPROT, \$PSAT, \$GPHDM, \$GPHDG **Timing Output:**

ENVIRONMENTAL

Operating Temperature: -30°C to +70°C (-22°F to + 158°F) Storage Temperature: **Humidity:**

POWER

Input Voltage: **Power Consumption: Current Consumption: Isolation:**

Reverse Polarity Protect:

MECHANICAL

Weight: Power/Data Connection: 18-pin, Environmentally sealed 15m or 30m cable (options)

AIDING DEVICES Gyro:

Provides smooth heading, fast heading reacquision and reliable < 1° heading for periods up to 3 minutes when loss of GPS has occured (static conditions)

TILT SENSOR:

- Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services), and ionospheric activity.
- Depends on multipath environment, number of satellites in view, and satellite geometry.

Assists in fast start up of heading solutions

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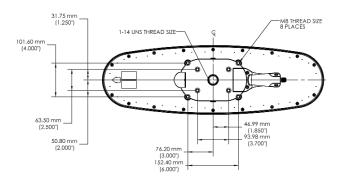
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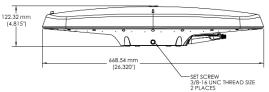
Worldwide Service

Printed in Canada



DIMENSIONS







Represented by:

SYSTEM CONFIGURATION & OPTIONS

Specifications subject to change without notice

-40°C to +85°C (-40°F to + 185°F) 95% non-condensing

10 to 36 VDC < 3.3 W

< 360 mA @ 12 VDC Power supply isolated from serial ports Yes

G2: 2.1 kg (4.6 lb) / G2B: 2.4 kg (5.4 lb)