

ComNav[®]



Vector G1 GPS Satellite Compass

Accurate Heading, Position, and Rate of Turn

- Small compact all-in-one maintenance free unit
- Fully compatible with NMEA 2000 or 0183 equipment: Autopilots, Radar, AIS, Plotters, etc.
- Accurate 2D heading and positioning data
- Better than 0.60 degree Heading accuracy
- 90° Rate of Turn tracking (ROT)
- Provides Heave, Pitch and Roll information
- DGPS provides sub-meter positioning accuracy
- Differential Correction source SBAS (WAAS, EGNOS and MSAS) and RTCM SC-104 data (External Source)
- COAST™ technology maintains differentially-corrected position for 40 minutes or more with loss of differential signal
- Integrated Gyro & Tilt sensors provide fast start up times and Heading updates during temporary loss of GPS
- 20 Hz position and Heading update rates (10Hz standard)
- Multiple BAUD rate selections
- CE certified for EMI and RFI immunity
- Pre-programmed default settings for Heading, Rate of Turn, Course over Ground, Lat/Long Geographic position, Time & Date
- Optional color display
- 2 year warranty
- World wide service

VECTOR G1

SYSTEM CONFIGURATION & OPTIONS

SPECIFICATIONS:

Receiver Type:	L1, C/A code, with carrier phase smoothing
Channels:	Two 12-channel parallel tracking (Two 10 channel when tracking SBAS)
SBAS Tracking:	2- channel parallel tracking
Update Rate:	Standard 10Hz, optional 20 Hz (position and heading)
Horizontal Accuracy:	< 1.0m (DGPS)* < 4.0m (autonomous, no SBAS)**
Heading Accuracy:	≈ 0.6°
Pitch / Roll Accuracy:	≈ 1.4°
Heave Accuracy:	< 30cm
Rate of Turn:	90° / sec max
Start-up Time:	< 60 sec typical
Heading Fix:	< 10 sec
Satellite Reacquisition:	< 1 sec

COMMUNICATIONS

Serial Ports:	2 full duplex RS-232
Baud Rates:	4800 - 115200
Correction I/O Protocol:	RTCM SC-104
Data I/O Protocol:	NMEA 0183, NMEA 2000
NMEA Heading Messages:	\$GPHDT, \$SHEHDT, \$HEHDM, \$GPROT, \$GHEROT, \$GPGGA, \$GPGSV, \$GPVTG, \$GPRMC, \$GPZDA, \$PASHR

ENVIRONMENTAL

Operating Temperature:	-30°C to +70°C (-22°F to + 158°F)
Storage Temperature:	-40°C to +85°C (-40°F to + 185°F)
Humidity:	95% non-condensing
EMC:	FCC Part 1.5, Subpart B, Class B, CISPR22, CE

POWER

Input Voltage:	10 to 36 VDC
Power Consumption:	< 3 W nominal
Current Consumption:	< 250 mA @ 12 VDC
Power Isolation:	Isolated to enclosure
Reverse Polarity Protection:	Yes
Power/Data Connection:	12-pin, Female, R/A, IP67

AIDING DEVICES

Gyro:	Provides reliable < 1° Heading for up to 3 minutes when loss of GPS has occurred
Tilt Sensor:	Assists in fast start-up of heading solution

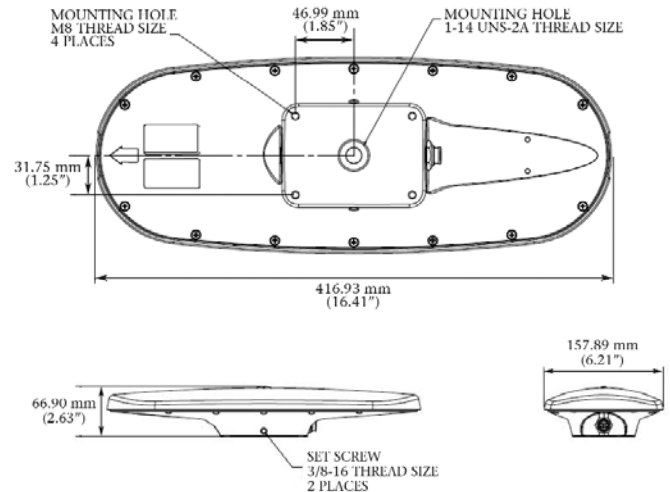
* Depends on multipath environment, antenna selection, number of satellites in view, satellite geometry, baseline length (for local services), and ionospheric activity

** Depends on multipath environment, number of satellites in view, and satellite geometry



DIMENSIONS: 417mm x 67mm x 158mm / 16.4" x 2.7" x 6.2" L x H x W

WEIGHT: 1.5 kg (3.3 lb)



ADDITIONAL OPTIONS:

- 15m NMEA 0183 Serial Data Cable
- 6m NMEA 2000 Cable
- Color LCD Sunlight NX3 Instrument Display

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Specifications subject to change without notice