

North Seeking GYRO

Description

The Octans 3000 is a high specification underwater gyrocompass with integrated motion sensor. The heading sensor consists of a solid state fibre-optic gyroscope (FOG) providing fast settling times and 0.1 degree accuracy in all sea conditions. The motion sensor provides speed and acceleration outputs for roll, pitch, surge and sway. Outputs include 4 analogue ports and one serial port as either RS232 or RS422 in a variety of industry standard string formats.

The provided Windows configuration software enables the user to apply bias settings to heading, pitch and roll readings and apply level arms for monitoring of remote points. The small size and reduced power requirements of the Octans lends itself to remote subsea operations.

- Integrated Motion Sensors
- 5 Minute settling Time
- 3000m Rated



Technical Specifications

Heading

Settling Point +/- 0.1 degrees sec. lat.
 Dynamic Accuracy +/- 0.2 degrees sec. lat.
 Resolution 0.01 degrees
 Settling Time Static < 1 minute
 Settling Time at Sea < 3 minutes
 Speed Compensation No limitation
 Latitude Range No limitation

Roll and Pitch

Dynamic Accuracy 0.01 degrees
 Range -180 to + 180 degrees
 Follow Up Speed Up to 500 degrees/s
 Heave, Surge and Sway
 Accuracy 5 cm or 5% (whichever is greater)
 Heave Motion Periods 0.03-1000s tunable

Environment

Vibrations 1g sine (5 to 50Hz)
 Shock Operating 30g 6ms
 Shock (survival) 50g 11ms
 MTBF 30000 hours
 Operating Temperature -40 to +60 degrees C

Electrical

Power Requirements 24V DC at 12W
 Inputs 1 x serial
 Outputs 1 x serial, RS232 or RS422. 4 x analogue (14bits, +/-10V)
 Output Format 880 to 115Kbaud, parity and stop bits programmable
 Output String Selectable from industry standard strings, library can be uploaded from file.
 Connector 16 Pin MCBH16M Subcon standard

Physical

Depth Rating 3000m
 Weight in Air 25Kg
 Weight in Water 17Kg
 Housing Dimensions 179 diam x 308 h mm
 Base Plate Dimensions 209 diam x 10 h mm

