

IXSEA OCTANS 3000M FIBRE OPTIC GYRO & MOTION SENSOR



GENERAL DESCRIPTION

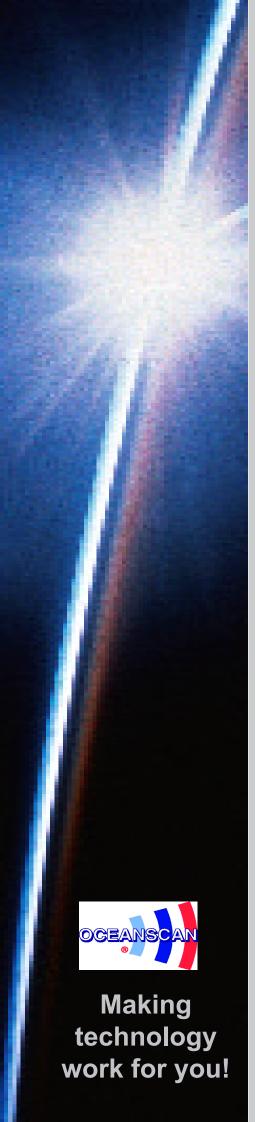
The technological heart of OCTANS is the Fibre-Optic Gyroscope (FOG), the only truly-solidstate answer to rotation sensing. Over 15 years, IXSEA has brought this technology to the highest industry standards through a large number of projects and applications.

- No Limitations
 With no spinning devices, the system has no service limitation on roll and pitch.
- Maintenance Free OCTANS has no gimbals and because it experiences no mechanical fatigue or breakdown, no maintenance is needed.
- Versatile
 OCTANS is an IMO-certified survey-grade gyrocompass and also a
 complete motion sensor that outputs Roll, Pitch, Surge, Sway, Heave,
 Speeds, Accelerations in addition to True Heading.
- High Performing OCTANS is the 2nd generation of gyro-compass developed by Photonetics and features improved performances in all sea-conditions:
 - 1-minute settling time
 - 0.1° Heading accuracy
 - 0.01° on Roll and Pitch

OCEANSCAN LIMITED
DENMORE ROAD, BRIDGE OF DON, ABERDEEN,
SCOTLAND, U.K., AB23 8JW
TEL; +44(0)1224 707000, FAX: +44(0)1224 707001

Email: rental@oceanscan.co.uk, Website: www.oceanscan.co.uk

Accredited to BS EN ISO 9001:2000



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TECHNICAL SPECIFICATIONS

GYROCOMPASS Heading

Dynamic accuracy +/- 0.2° Secant latitude
Settle point error +/- 0.1° Secant latitude
Repeatability +/- 0.025° Secant latitude

Resolution 0.01°

Settling time static conditions < 1 minute (full accuracy)
Settling time (at sea) < 3 minutes (full accuracy)

Speed compensation No limitation Latitude range No limitation

Roll and Pitch

Dynamic accuracy 0.01°

Range No limitation (-180° to 180°)

Follow-up speed Up to 500°/s

MOTION SENSOR Heave/Surge/Sway

Accuracy 5 cm or 5% (whichever is highest)

Heave motion periods 0.03 to 1000 s (tunable)

Roll and Pitch

Dynamic accuracy 0.01°

Range No limitation (-180° to 180°)

Follow-up speed Up to 500°/s

INERTIAL MOTION UNIT

Accelerometers Fibre-optic gyroscopes a-room bias stability (rms) 20 ug 0.005°/h

In-room bias stability (rms)

20 ug

0.005°/h

Bias stability over temperature range

+/-500 ug

+/-0.05°/h

Resolution

10 ug

0.02 Arc second

ENVIRONMENT (FOG unit only)

Vibration 1 g sine (5 to 50 Hz)

Shocks operating 30 g 6 ms
Shocks (survival) 50 g 11 ms
MTBF 30,000 hours
Operating temperature -40 °C to 60 °C

Operating temperature -40 °C to 60 °C Storage temperature -40 °C to 80 °C

SUBSEA HOUSING

MaterialDuplex SteelDepth rating3000 metresDimensions (Ø x H)179 x 308 mmWeight (in air)25 Kgs.Weight (in water)17 Kgs.

Mounting/Connector 6 off M6 Holes/16 Pin MCBH16M Subconn

Input 1 seria

Output 1 serial / 4 analog (14 bits / +/- 10 V)

Power Supply / Consumption 24V DC / 12W

Modified for Serial B Option

	Marketed By

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