

Octans 3000



OCTANS 3000 is a subsea survey-grade gyrocompass and complete motion sensor for water depths up to 3,000 m. Based on iXBlue's FOG technology, it outputs heading, roll, pitch, heave, rate of turn, and acceleration. OCTANS 3000 can be easily upgraded to full INS mode (i.e., ROVINS).

Specifications

Product	Octans 3000
Country of origin	France
Manufacturer	Exail Technologies SA
Materials	Titanium

Benefits

- No spinning element, hence maintenance-free
- Lightweight, corrosion-free housing for water depth up to 3,000 m
- Easy to integrate and interface, saves valuable mobilization time
- Obtain INS-class system with simple software upgrade
- High-performance real-time outputs of true heading, roll, pitch, heave, surge, sway, acceleration, and rate of turn

Features

- Complete gyrocompass and motion sensor
- Smart Heave™
- Ethernet, Web-based Man-Machine Interface (MMI)
- Titanium made, small, portable plug and play system
- Optional full-featured Inertial Navigation System

Performance Heading

Resolution	0.01°
Accuracy^{1 2}	0.1° secant latitude
Full accuracy settling time (all conditions)	< 5 min

Heave Accuracy³

Heave Accuracy³	2.5 cm or 2.5% (whichever is greater)
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Operating range/Environment

Operating/storage temperature	-20 to +55 °C / -40 to +80 °C
Follow-up speed	Up to 750°/s
Acceleration dynamic range	±15 g
Heading / Roll / Pitch	0 to +360° / ±180° / ±90°
MTBF (computed/observed)	40,000 hours / 80,000 hours

No warm-up effects, insensitive to thermal shocks

Shock and vibration proof

Roll / Pitch

Dynamic accuracy²	0.01°
Resolution	0.001°

Applications

- ROV & offshore survey
- Multibeam and sonar motion reference
- Dredging
- Marine construction

Physical characteristics

Depth rating (m)	Material	Weight in air/water kg	Housing dimensions (Ø x H mm)	Connector	Mounting
3000	Titanium	15 / 6.2	213 x 375	5 x SEACON MI-CON	6 Ø 6.6 mm holes

Interfaces

Serial RS232/RS422 port	5 inputs / 5 outputs / 1 configuration port
Ethernet port⁵	UDP / TCP Client / TCP Server
Pulse port⁶	3 inputs / 2 outputs
Sensors supported	GPS, Speed log
Input/Output formats	Industry standards - NMEA0183, ASCII, BINARY
Baud rates	600 baud to 115.2 kbaud
Data output rate	0.1 Hz to 200 Hz
Power supply	24 VDC
Power consumption	< 20 W

Notes

- ¹ secant latitude = 1 / cosine latitude
 - ² RMS values
 - ³ Smart Heave™
 - ⁴ All input/output serial ports are available and can be duplicated on Ethernet ports
 - ⁵ Input of GPS PPS pulse for accurate time synchronization of OCTANS 3000
- Specifications subject to change without notice