Octans 3000
High-performance subsea gyrocompass and motion sensor

OCTANS 3000 is a subsea survey-grade gyrocompass and complete motion sensor for water depths up to 3,000m. 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).

FEATURES

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

BENEFITS

- High-performance real-time outputs of true heading, roll, pitch, heave, surge, sway, acceleration and rate of turn
- 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

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

Courtesy of Van oord

Courtesy of Ifremer

Courtesy of Stolt Offshore

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DEEP INSIGHT. SHARPER SENSES.

OCTANS 3000
TECHNICAL SPECIFICATIONS

Ethernet

PERFORMANCE

Heading

Accuracy [1][2]	0.1 deg secant latitude
Resolution	0.01 deg
Full accuracy settling time (all conditions)	< 5 min

Heave accuracy [3]   2,5 cm or 2,5% (whichever is greater)

Roll / Pitch

Dynamic accuracy [2]	0.01 deg
Resolution	0.001 deg

OPERATING RANGE / ENVIRONMENT

Operating / Storage Temperature	-20 to +55°C/ -40 to +80 °C
Follow-up speed	Up to 750 deg/s
Acceleration dynamic range	±15 g
Heading / Roll / Pitch	0 to +360 deg / ±180 deg / ±90 deg
MTBF (computed/observed)	40,000 hours / 80,000 hours
No warm-up effects, insensitive to thermal shocks	
Shock and vibration proof	

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 holes

INTERFACES

Serial RS232/RS422 port	5 inputs / 5 outputs / 1 configuration port
Ethernet port [5]	UDP / TCP Client / TCP server
Pulse port [6]	3 inputs / 2 outputs
Sensors supported	GPS, Speed log
Intput/Output formats	Industry standards: NMEA0183, ASCII, BINARY
Baud rates	600 bauds to 115.2 kbaud
Data output rate	0.1 Hz to 200 Hz
Power supply	24 VDC
Power consumption	< 20 W

(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
(6) Maximum error = 3 or RMS error
Specifications subject to change without notice

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