



OCTANS 3000

SUBSEA GYROCOMPASS AND MOTION SENSOR

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

FEATURES

- Complete gyrocompass and motion sensor
- Fiber Optic Gyroscope (FOG), unique strap-down technology
- 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 mobilisation time
- Obtain INS-class system with simple software upgrade



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



OCTANS 3000

TECHNICAL SPECIFICATIONS

PERFORMANCE

Heading

Accuracy ⁽¹⁾⁽²⁾	0.1 deg secant latitude
Resolution	0.01 deg
Full accuracy settling time (all conditions)	< 5 min
Heave accuracy	5 cm or 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 AND INTERFACES

Depth rating (m)	Material	Weight in air/water [kg]	Housing dimensions (Ø x H mm)	Connector	Mounting
3000	Titanium	14,63 / 5,86	213 x 374	3 x 12 pin 1 x 19 pin 1 x 26 pin SEACON MINI-CON	6 Ø 6,6 holes

Serial RS232/RS422 port

Pulse port ⁽⁴⁾

Sensors supported
Input/Output formats
Baud rates
Power supply
Power consumption

Ethernet port ⁽³⁾

Data output rate

(1) secant latitude = 1 / cosine latitude

(2) RMS values

(3) All input/output serial ports are available and can be duplicated on Ethernet ports

(4) Input of GPS PPS pulse for accurate time synchronization of OCTANS 3000

Specifications subject to change without notice