



## OCTANS

### SURFACE GYROCOMPASS AND MOTION SENSOR

OCTANS, with Ethernet output, is an IMO certified survey grade gyrocompass and complete motion sensor. It is based on IXSEA's FOG technology, which outputs true heading, roll, pitch, surge, sway, heave, speed, acceleration and rate of turn.

#### FEATURES

- Complete gyrocompass and motion sensor
- Fiber Optic Gyroscope (FOG), unique strap-down technology
- Ethernet, Bluetooth, Wi-Fi
- IMO Certification
- Small, portable plug and play system

#### BENEFITS

- High-performance real-time outputs of true heading, roll, pitch SAFE HEAVE™, surge, sway as well as acceleration and rate of turn
- No spinning element hence maintenance free
- Wireless network ready
- Pre-approved international quality and safety standard
- Saves valuable time



Courtesy of Boskalis



**APPLICATIONS** • Multibeam hydrographic survey • AUV • DP vessels • Dredging • Emergency gyro for submarines • Main AHRS for navigation and dynamic monitoring

# OCTANS

## TECHNICAL SPECIFICATIONS



IMO Certified  
N° 09807/B0 EC

### PERFORMANCE

<b>Heading</b>	
<b>Accuracy</b>	0.1 deg secant latitude <sup>(1)</sup> <sup>(2)</sup>
<b>Resolution</b>	0.01 deg
<b>Settling time (static conditions)</b>	< 1 min
<b>Full accuracy settling time (all conditions)</b>	< 5 min
<b>Heave / Surge / Sway</b>	
<b>Accuracy</b>	5 cm or 5% (whichever is highest) Set-up free (SAFE-HEAVE™)
<b>Roll / Pitch</b>	
<b>Dynamic accuracy</b>	0.01 deg (for ±90 deg amplitude) <sup>(2)</sup>
<b>Range</b>	No limitation [-180 deg to 180 deg]
<b>Resolution</b>	0.001 deg

### OPERATING RANGE / ENVIRONMENT

<b>Vibrations</b>	1 g sine (5 to 50 Hz)
<b>Follow-up speed</b>	Up to 750 deg/s
<b>Shocks Operating / Survival</b>	30 g 6 ms / 50 g 11 ms
<b>MTBF</b>	30,000 hours
<b>Operating / Storage Temperature</b>	-40 °C to +60 °C / +80 °C
<b>No warm-up effects</b>	
<b>No latitude or speed limitation</b>	

### PHYSICAL CHARACTERISTICS

<b>Dimensions (L x W x H)</b>	280 x 136 x 150 mm
<b>Weight in air</b>	4.6 Kg
<b>Water proof</b>	IP66
<b>Material</b>	Aluminium
<b>Mounting / Connectors</b>	3 off M6 Holes / Souriau military
<b>Inputs</b>	Ethernet / 2 serial / 4 pulses
<b>Outputs</b>	Ethernet / 3 serial / 2 pulses Wi-Fi / Bluetooth

### INTERFACES

<b>Output protocols</b>	Industry standards: NMEA 0183, binary
<b>Serial I/O</b>	RS232 or RS422 (user specific)
<b>Baud rates</b>	600 bauds to 115 kbauds
<b>Output frequency</b>	0.1 Hz to 200 Hz
<b>Ethernet</b>	UDP / TCP Client / TCP server
<b>Data time stamping accuracy</b>	< 100 microseconds
<b>Power supply / consumption</b>	24 VDC / 18 W

(1) Secant latitude = 1 / cosine latitude

(2) RMS value

Specifications subject to change without notice