# OCTANS

## HIGH-PERFORMANCE SURFACE GYROCOMPASS AND MOTION SENSOR

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

## FEATURES

- Complete gyrocompass and motion sensor
- Smart Heave™
- Fiber-optic gyroscope (FOG), unique strap-down technology
- Ethernet, web-based man-machine interface (MMI)
- IMO certification
- Small, portable plug and play system

## BENEFITS

- High-performance real-time outputs of true heading, roll, pitch heave, surge, sway as well as acceleration and rate of turn
- No spinning element hence maintenance free
- Network ready intuitive user interface through any web browser terminal
- Pre-approved international quality and safety standard
- Saves valuable time

## APPLICATIONS

• Navigation • Survey • Dynamic positioning • Motion monitoring • Sensor stabilization

Courtesy of Boskalis

iXBLUE
DEEP INSIGHT. SHARPER SENSES.

# OCTANS
TECHNICAL SPECIFICATIONS

Ethernet

IMO Certified
N° 09807

## PERFORMANCE

| | |
|---|---|
| **Heading** | |
| Accuracy [1][2][6] | 0.1 deg secant latitude |
| Settling time (static conditions) | < 1mn |
| Full accuracy settling time (all conditions) | < 5 min |
| Resolution | 0.01 deg |
| **Heave / Surge / Sway** | |
| Accuracy [3] | 2.5 cm or 2.5% (whichever is greater) |
| **Roll / Pitch / Yaw** | |
| Dynamic accuracy [2] | 0.01 deg |
| Resolution | 0.001 deg |

## OPERATING RANGE / ENVIRONMENT

| | |
|---|---|
| Rotation rate dynamic range | Up to 750 deg/s |
| Acceleration dynamic range | ±15 g |
| MTBF (computed/observed) | 40 000 / 80 000 hours |
| Operating / storage temperature | -20 °C to +55 °C / -40 °C to +80 °C |
| Heading / roll / pitch | 0 to +360 deg / ±180 deg / ±90 deg |
| No warm-up effects | |
| Shock and vibration proof | |

## PHYSICAL CHARACTERISTICS

| | |
|---|---|
| Dimensions (L x W x H) | 275 x 136 x 150 mm |
| Weight in air | 4.5 Kg |
| Water proof | IP66 |
| Material | Aluminium |

## INTERFACES

| | |
|---|---|
| Serial RS232 / RS422 port | 2 inputs / 3 outputs / 1 configuration port |
| Ethernet port [4] | UDP / TCP client / TCP server |
| Pulse port [5] | 4 inputs and 2 outputs |
| Input / 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) Use GPS PPS pulse input for accurate time synchronization of OCTANS
(6) Maximum error = 3 or RMS error

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www.ixblue.com • EMEA: +33 1 30 08 88 88 • AMERICAS: +1 888 600 7573 • APAC: +65 6747 4912

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