

# Octans 9



Sixth generation survey-grade surface gyrocompass and motion sensor The Octans 9 is an all-in-one product for diverse challenging applications. Octans 9 raises the industry standard in measurement accuracy for roll, pitch, and heave. IMO-HSC and certified, Octans 9 is built on Exail's trusted and unique ultimate performance Fiber-Optic Gyroscope (FOG) technology with thousands of units manufactured.

## Specifications

|                          |                       |
|--------------------------|-----------------------|
| <b>Product</b>           | Octans 9              |
| <b>Country of origin</b> | France                |
| <b>Manufacturer</b>      | Exail Technologies SA |

## Features

- Improved heading, Smart HeaveTM and real-time heave
- State-of-the-art Exail FOG (no spinning elements)
- Resilient to GNSS outages thanks to FOG technology
- Ethernet, web-based GUI compatible
- IMO and IMO-HSC certification
- Export free from France
- Free of ITAR components
- NTP synchro capability
- Virtual zero latency
- Embedded datalogger for easy data recording
- Static and dynamic alignment
- Embedded advanced filtering features for platform stabilization

## Benefits

- Highly accurate real-time output even in no GPS/GNSS environment
- Industry's best performance-value backed by 5 year warranty
- Ease-of-use and integration
- Robust heading performance for high-speed vessel with high rate-of-turn
- Ease of export thanks to export free and ITAR free
- High reliability and maintenance free
- 24/7 worldwide technical assistance

## Applications

- Vessel navigation
- Dredging
- Dynamic positioning
- High-end offshore platform stabilization
- Multi-Beam Echo Sounder
- Riser monitoring

## Performance

|                                  |   |
|----------------------------------|---|
| <b>Heading accuracy(1) (2)</b>   | 0.1° seclat (no aiding sensor) / 0.05° seclat (with GNSS input during navigation) |
| <b>Roll/pitch accuracy</b>       | 0.01 deg RMS  |
| <b>Settling time (typical)</b>   | 5 min   |
| <b>Heave/Surge/Sway accuracy</b> | 5 cm or 5% (whichever is greater)   |
| <b>Delayed heave</b>             | 2 cm or 2% (whichever is greater)   |

## Aiding sensors

|               |          |
|---------------|----------|
| <b>GNSS</b>   | 2 inputs |
| <b>EM Log</b> | 2 inputs |

## Operating range/Environment

|                                      |                                    |
|--------------------------------------|------------------------------------|
| <b>Rotation rate dynamic range</b>   | Up to 490 deg/s                    |
| <b>Acceleration dynamic range</b>    | ±15 g                              |
| <b>Operating/storage temperature</b> | -20°C to +55°C / -46°C to +85°C    |
| <b>Heading / Roll / Pitch</b>        | 0 to +360 deg / ±180 deg / ±90 deg |
| <b>Shocks</b>                        | 27g / 15 ms damper shocks          |
| <b>Waterproof</b>                    | IP66 & IPX7                        |

## Physical Characteristics

|                               |                        |
|-------------------------------|------------------------|
| <b>Dimensions (L x W x H)</b> | 222.3 x 136 x 138.5 mm |
| <b>Weight in air</b>          | 4.6 kg                 |
| <b>Material</b>               | Aluminum               |

## Interfaces

|                                  |  |
|----------------------------------|--|
| <b>User interface</b>            | Web based Graphical User Interface   |
| <b>Serial RS232 / RS422 port</b> | 6 inputs and 6 outputs including a configuration port  |
| <b>Ethernet</b>                  | 1 physical 100Mbit/1Gbit Mbit - 6 ports - UDP / TCP server / TCP client / web server (GUI) / NTP synchro |
| <b>Pulse port</b>                | 4 input and 4 output pulses including PPS input time synchronization                                     |
| <b>Input/output formats</b>      | Industry standards: NMEA0183, ASCII, BINARY  |
| <b>Data output rate</b>          | 0.1 Hz to 200 Hz real measurements   |
| <b>Power supply/consumption</b>  | 24 VDC (9-36 VDC absolute maximum ratings) / < 12 W typ. @24V at ambient temperature                     |