

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.



FEATURES

- Improved heading, Smart Heave™ 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
- ITAR free (CJ)
- NTP synchro capability
- Virtual zero latency
- Embedded advanced filtering features for platform stabilization
- Embedded datalogger for easy data recording
- Static and dynamic alignment

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

TECHNICAL SPECIFICATIONS

Performance

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

Aiding sensors

GNSS	2 inputs
EM Log	2 inputs

Operating range/Environment

Rotation rate dynamic range	Up to 490 deg/s
Acceleration dynamic range	±15 g
Operating/storage temperature	-20°C to +55°C / -46°C to +85°C
Heading/roll/pitch	0 to +360 deg / ±180 deg / ±90 deg
Shocks	27g / 15 ms damper shocks
Waterproof	IP66 & IPX7
MTBF	150,000 h

Physical Characteristics

Dimensions (L x W x H)	222.3 x 136 x 138.5 mm
Weight in air	4.6 kg
Material	Aluminum

Interfaces

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

(1) Secant latitude = $1/\cos(\text{latitude})$

(2) RMS values

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