

Octans

Fifth Generation Survey-Grade Surface Gyrocompass and Motion Sensor

The fifth generation Octans is an all-in-one product for diverse challenging applications. Octans raises the industry standard in measurement accuracy for roll, pitch, heave, IMO-HSC and certified. Octans is built on iXblue'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 (30sec period)
- State-of-the-art iXBlue FOG (no spinning elements)
- Ethernet, web-based GUI compatible with survey software suites
- IMO and IMO-HSC certification
- ITAR free (CJ) and O&G license eligibility

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

APPLICATIONS

- Vessel navigation
- Dredging
- Dynamic positioning

TECHNICAL SPECIFICATIONS

PERFORMANCE

Heading Accuracy ⁽¹⁾ ⁽²⁾	0.1° seclat (Autonomous) / 0.05° seclat (with GPS input)
Roll/Pitch Accuracy	0.01 deg RMS
Settling time (typical)	5min
Heave / Surge / Sway Accuracy	5 cm or 5% (whichever is greater)
Delayed Heave	2.5 cm or 2.5% (whichever is greater)

OPERATING RANGE / ENVIRONMENT

Rotation rate dynamic range	Up to 750 deg/s
Acceleration dynamic range	±15 g
MTBF	150,000 hours (System observed) 500,000 hours (FOG + Accelerometers)
Operating / storage temperature	-20 °C to +55 °C / -40 °C to +80 °C
Heading / roll / pitch	0 to +360 deg / ±180 deg / ±90 deg
Special conditions	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 & IPx7
Material	Aluminum

INTERFACES

User interface	Web based Graphical User interface
Serial RS232 / RS422 port	3 outputs / 2 inputs / 1 configuration port
Ethernet port ⁽³⁾	UDP / TCP client / TCP server
Pulse port	PPS input for < 100µs time synchronization
Input / Output formats	Industry standards: NMEA0183, ASCII, BINARY
Data output rate	0.1 Hz to 200 Hz real measurements
Power supply	24 VDC
Power consumption ⁽⁴⁾	18 W

(1) Secant latitude = 1 / cosine latitude

(2) RMS values

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

(4) Typical value @24 V and ambient temperature