Octans Nano

Octans Nano is the smallest and most adept state-of-the-art 6,000 m depth rated Attitude and Heading Reference System (AHRS). It is built on Exail's renowned Fiber-Optic Gyroscope (FOG) technology and off-shore instrumentation expertise. Octans Nano offers an outstanding price/performance solution, with rugged titanium housing, meeting the most challenging requirements of subsea applications.

Features and benefits

- Leading FOG strap-down technology
- Smallest all-in-one subsea gyrocompass and attitude sensor
- Ethernet and serial interfaces with sensor input rebroadcast capability
- Free of ITAR components
- High-performance sensors with real-time computation of true heading, roll, pitch and rates of turn, in a compact six-liter housing
- Free of ITAR components
- Reduced cabling for advanced architectures and maintaining flexibility for older designs

Specifications

Product	Octans Nano
Country of origin	France
Manufacturer	Exail Technologies SA
Materials	Titanium

Performance

Heading accuracy	
With GNSS and/or speed	0.5 deg secant latitude RMS
Roll and pitch dynamic accuracy (no aiding)	0.1 deg RMS

Operating range/Environment

Operating/storage temperature	-20 to 55°C / -40 to 80°C
Rotation rate dynamic range	Up to 250° /Sec
Acceleration dynamic range	±5 g
Heading/roll/pitch ranges	0 to +360 deg / ±180 deg / ±90 deg
MTBF	100,000 hours (System observed) 500,000 hours (FOG + Accelerometers)
Robust to harsh environment, shock and vibration proof	Robust to harsh environment, shock and vibration proof
Depth rating	6,000 m

Physical Characteristics

Material	Titanium
Weight in air/water	11.33 kg / 6.6 kg
Mounting (Ø in mm)	8 Ø 6.5 holes
Dimensions (Ø x H in mm)	Ø178 x 266 mm
Connector	1 x 26 pins SEACON

Interfaces

Sensors	GNSS, Speed sensor (NMEA)
Serial	2 ports : RS422 or RS232
Ethernet	10/100 Mbits, UDP/TCP (client / server) / web server (GUI)
Pulse	1 input for PPS
Input/output	Configurable 4i / 5o Industry standards: NMEA, ASCII, EXAIL STD BIN etc. more than 130 output protocols
Baud rate	Up to 460 kbaud
Data output rate	0.1 Hz to 200 Hz
Power supply/consumption	24 VDC (20 - 32 V) / < 14 W