

Quadrans

IMO GRADE SURFACE GYROCOMPASS
& ATTITUDE REFERENCE SYSTEM



Quadrans, is a fully strapdown Fiber-optic Gyrocompass and attitude reference system. IMO and IMO-HSC certified, it provides at a fast rate and with precise time-stamping all the necessary data for demanding navigation and control applications. Thanks to its low weight and small size, its low power consumption and its Ethernet/Serial connectivity it can be integrated very easily on any platform.

Based on state-of-the-art fiber-optic gyroscope technology, Quadrans provides all navigation needs, without any compromise on performance and without requiring any maintenance during its service life.

Applications

Container ship – Cargo – Bulk – Cruise ships – Ferries – Yachts
Drilling ships – Fishing – Research vessels – Survey vessels – Scientific
Seismic – Marine construction – Workboats – Tugs – Ro-Ro
Fast Patrol boats – DP operating vessels

Features

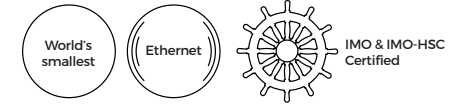
- Small compact and plug & play system
- Complete gyrocompass
- Unique strap-down technology, fiber-optic gyroscope (FOG),
- Ethernet, Web-based Man-Machine Interface (MMI)
- IMO Certification

Benefits

- Plug and play
- Fast-setting time
- Maintenance-free
- Easy integration
- High-reliability

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Technical specifications



Performance

Heading accuracy ⁽¹⁾ ⁽²⁾ ⁽³⁾	0.23 deg sécant latitude
Roll/Pitch accuracy ⁽¹⁾ ⁽³⁾	0.1 deg
Setting time	< 30mn (all conditions)

Operating range/environement

Operating/Storage Temperature	-20°C to 55°C /-40°C to 80°C
Heading/Roll/Pitch	0 to +360 deg/±180 deg/±90 deg

Physical characteristics

Weight	2.8kg
Calibration interval	Non required
MTBF	150.000 hours
Dimensions (LxWxH)	160 x 160 x 113mm

Interfaces

Serial RS232/RS422 port	2 inputs/2 ouputs/ 1 configuration port
Ethernet port ⁽⁴⁾	UDP/TCP client/TCP server
Pulse port	4 inputs and 2 outputs, 5V (TTL Level)
Sensors supported	All navigation sensors
Web MMI	Embadded
Input/Output formats	Industry standards: NMEA 0183, ASCII, BINARY
Data output rate	0,1 Hz to 200 Hz
Data input	up to 100 Hz
Power supply	24 VDC (15 to 36VDC)
Power consumption	10 W

(1) RMS values

(2) Secant latitude -1/cosine latitude

(3) Maximum error = 3xRMS error

(4) All input/output serial ports are available and can be duplicated on Ethernet ports