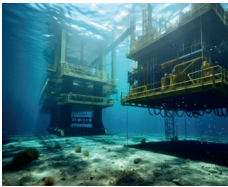
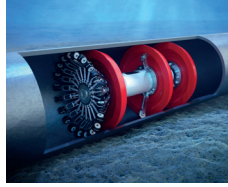


LCI-200 FOG Inertial Measurement Unit



- FOG performances for limited space conditions
- High robustness
- Independent of magnetic fields
- Data interface configurable

Additional product versions available:

- Non-EU export controlled (LCI-200C)
- Gyro compassing North Finder (LCI-200N)

PRODUCT DESCRIPTION

The LCI-200 is a navigation-grade inertial measurement unit (IMU) based on three fiber optic gyroscopes and three micro-electromechanical accelerometer sensors. It provides angular increments (delta-angles) and velocity increments (delta-velocities) with respect to all three axis upon an external or internal synchronisation signal.

TYPICAL APPLICATIONS

- Real Time Navigation and Positioning
- Rail Track Geometry Survey
- Photogrammetry
- Mobile Mapping
- Platform Stabilization
- Pipeline Inspection
- Subsea & Underground Orientation

Technical Data LCI-200

FOG Inertial Measurement Unit

PRELIMINARY PERFORMANCE PARAMETER	LCI-200
RATE SENSOR PARAMETERS	
	max.
Measurement Range	± 610 °/s
Bias Instability ¹⁾	0.05 °/h
Bias over temperature range (RMS)	0.25 °/h
Angular Random Walk	0.012 °/√h
Scale Factor Error over temperature range (RMS)	300 ppm
Axis Misalignment (RMS)	0.5 mrad
ACCELEROMETER SENSOR PARAMETERS	
Measurement Range	± 20 g
Bias Instability ¹⁾	30 µg
Bias over temperature range (RMS)	300 µg
Velocity Random Walk	50 µg /√Hz
Scale Factor Error over temperature range (RMS)	300 ppm
Axis Misalignment (RMS)	0.5 mrad
SYSTEM PARAMETERS	
Mass	1.8 kg
Dimensions	95 mm x 104 mm x 157 mm 3.7 inch x 4.1 inch x 6.2 inch
Volume	1.6 liters / 95 inch ³
Supply Voltage	18 VDC ... 32 VDC
Power Consumption	8 Watt
Interface	Serial interface with RS-422 levels, UART or HDLC protocol
Data Update Rate	50 Hz ... 2048 Hz
Built in Test (BIT)	Power Up BIT, Continuous BIT
Random vibration level - operational - non-operational	4.12 grms 5.8 grms
Shock, operational	6 g; 20 ms
Temperature range - operating - storage	-40° ... +71° C -51° ... +85° C

1) Implying Allan Variance under constant room temperature conditions and cluster time 24 h.

FOR MORE INFORMATION,
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