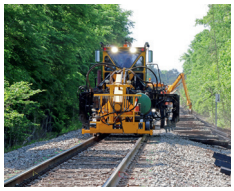
LITEF
Leading Inertial Technology

LCI-100N

Fiber Optic Northfinder






- Absolute orientation in realtime
- Independent of magnetic fields
- Drift minization through Auto-alignment and Auto-levelling
- Short alignment time
- Also available as handheld device (LiPAD®-100) for maximum flexibility

PRODUCT DESCRIPTION

The LCI-100N is a nav-grade gyro compass IMU based on three orthogonally mounted fiber optic gyroscopes and micro-electromechanical accelerometers. The analytical software platform calculates roll, pitch and true North direction by measurement of gravity and earth rotation.

TYPICAL APPLICATIONS

- Real Time Navigation
- Autonomous Vehicles
- Rail Track Geometry Survey
- Vessel Stabilisation
- Underground Heading Reference

TECHNICAL DATA LCI-100N

Fiber Optic Northfinder

		LCI-100N
GYROCOMPASSING PERFORMANCE	Typ.[1]	max.
True Heading Accuracy (1 σ) [2] (alignment time 5 minutes)	0.25 ° secant latitude	0.35 ° secant latitude
Pitch & Roll Accuracy (1 σ)	0.02 °/h	0.05 °/h
Heading, Pitch and Roll Drift (1 σ)	0.025 °/h	0.1 °/h
SYSTEM PARAMETERS		
Mass		2.5 kg / 5.5 lb
Dimensions (excluding mounting flanges and connector)		100 x 130 x 160 mm³ 3.9 x 5.1 x 6.3 inch³
Volume		2.6 liters / 159 inch³
Supply Voltage		18 VDC ... 32 VDC
Power Consumption	10 W	18 W
Interface		serial interface with RS-422 levels, either synchronous with HDLC protocol + SYNC-Pulse or asynchronous (UART) + SYNC-Pulse
Data Update Rate		10 Hz, 20 Hz, 50 Hz, 100 Hz and 200 Hz (default)
Built in Test (BIT)		Power Up BIT, Continuous BIT
Temperature range for specified Performance - full performance - operating		 - 20 °C ... + 71 °C - 40 °C ... + 71 °C
Shock - operational - non operating		 6 g half-sine pulse for 20 ms single handling shock 20 g for 20 ms
Random Vibration - operational - non operating		 4.1 grms (DO-160, section 8, CAT SC) 5.8 grms (DO-160, section 8, CAT RCI)
Electro Magnetic Compatibility		Fulfills IEC 61000-4 (2-8) and CISPR 22 requirements

1) Typical Mean Values are subject to statistical fluctuations.
2) Secant latitude = 1 / cosine latitude

FOR MORE INFORMATION,
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