



The GyroFinder uses the latest fibre optic gyroscope (FOG) senses to measure the earth's rotation rate to gyrocompass, which combined with angular data from accelerometers can provide highly accurate wellbore directional surveys in a range of operating conditions.

Most conventional systems are sensitive mechanical devices that can be compromised by shock and vibration, which means they must be recalibrated after every single run. The GyroFinder features a unique sensor that incorporates Fiber-Optic gyro technology. A fibre optic gyroscope (FOG) senses changes in orientation using the Sagnac effect its principle of operation is instead based on the interference of light which has passed through a coil of optical fibre , thus performing the function of a mechanical gyroscope. Not only can FOG technology withstand challenging downhole conditions, including severe shock and vibration, it means the sensor can be rerun without recalibrating the tool.

The GyroFinder is also one of the smallest diameter tools available on the market, enabling it to be supplied in a high pressure 1.89" thermal shield configuration, enabling it to be used in any wellbore survey application and at any temperature, and making it the most flexible tool on the market today.

High speed, high accuracy survey capability: 40S gyrocompass shot time (higher accuracy modes available).

North Seeking Fiber Optic Gyro

Features and benefits

- Adoption of full solid-state FOG
- True North Finding, No field calibration
- Singleshot, Multishot & Orientation
- 40s gyrocompass shot time
- Very accurate and reliable
- Easy Operation

Technical Specifications

Inclination	0°~90°	±0.1°
Azimuth	0°~360°	±1.0° (1 σ , 3°<INC<60°, Lat<60°)
Gyro/Roll Tool Face	0°~360°	±0.5°
Surveying Time	40s (Normal)	
Operating Modes	Singleshot, Multishot & Orientation	
Memory Capacity	3,000 shots in multishot	
Battery Life	Up to 20 hours	
Range Temperature	0° C to +70° C (32° F to +158° F) 0° C to +200° C (32° F to +392° F) with thermal shield	
Pressure Rating	80MPa(11,600psi)	
Diameter	42mm(1.65") 48mm(1.89") with thermal shield	
Length	970mm(38.2")	
Weight	10kg	

Surface Control Box

Input Voltage	90 V AC to 240 V AC, 50 to 60 Hz
Ouput Voltage	72 V DC 200mA
Wireline Telemetry:	Max. 200 Ω
Dimensions	165 mm x 220 mm x 85 mm
Weight	5kg