

North Seeking Gyro (Rate)



Elite Directional Services utilizes the North Seeking Gyro (Rate) to directionally survey inside drill pipe or casing, orient whipstocks, and for kick-offs on multi-well pads. The compact surface electronics is comprised of a Surface Interface Box (SIB), a laptop, and printer.

This tool is 1.65" (42mm) in diameter, allowing surveys in drill pipe or tubing. Moreover, it can be operated on mono or multi conductor e-line for real-time surveys/orientations, or in battery memory mode on slick line where e-line is unavailable. A drop configuration is also available employing pontoons and parachutes.

The gyro measures the earth's rate of rotation to determine its position and does not rely on pre and post job orientations on a pre-surveyed foresight mark. Each survey station is independently measured so cumulative errors, such as gyro drift, are eliminated. Surveys can be taken from vertical to 75° inclination with an azimuth accuracy of +/- 1° (repeatability +/- 0.5°) and an inclination accuracy of +/- 0.1°.



When used to set a whipstock in vertical and deviated wells, the gyro provides real-time measurement of the whipstock orientation as it is rotated, resulting in significant time savings and accurate placement.

SPECIFICATIONS	
Tool size (OD)	1.65" (42mm)
Running gear size (OD)	1.75" (44.5mm)
Inclination	0 to 75° (accuracy +/- 0.1°)
Azimuth	0 to 75° (accuracy +/- 1.0°)
Tool face (gyroscopic)	+/- 1.0°
Power source	1 20v/240v AC single phase
Maximum operating temperature	100°/c
Maximum operating pressure	15,000 psi
Length gyro + telemetry	75 lbs
Total tool weight	7.41'
Wireline connection	1 3/8" 12 thread (type 'A')

Survey Services