

MiNS™ – Technology Specifications

The Miniature Northseeking instrument (MiNS™) represents the world's first sub 1" high accuracy true north-seeking gyro survey tool. With increased levels of infill drilling activity and the associated resurvey requirements, the MiNS is intended for use in production well survey applications where small diameter tubing restrictions are often encountered.

Instrument Performance	<ul style="list-style-type: none"> ■ Accuracy: Dependant on wellbore profile ■ Typ Azimuth Accuracy: 0.5° SPE WPTS (ISCWSA) error model available on request
Operating Features	<ul style="list-style-type: none"> ■ Instrument OD: 0.9" (22.9mm) ■ Instrument Length: 18" (457mm) ■ Pressure Cased OD: 1.2" (with thermal shield) ■ Pressure case length: 40" min ■ Pressure Rating: 18,000psi ■ Operating modes: Drop – Multishot Northseeking ■ Wireline Telemetry: Digital, Mono or multi conductor to 30,000 ft ■ Depth Measurement: Auto continuous depth measurement available
Electrical Power	<ul style="list-style-type: none"> ■ Wireline Supply: 50mA Constants current at 8v ■ Max Power Consumption: 0.5 Watts
Sensors	<p>State-of-the-art MEMS twin axis gyroscopes High accuracy MEMS tri-axial accelerometers</p>
Environmental	<ul style="list-style-type: none"> ■ Temperature: 32-400°F (200°C)with thermal shield for up to 40 hours 40-200°F (without thermal shield) ■ Shock: 1000g, 1/2 sine 1mS ■ Vibration: 20g rms, 20-1,000Hz random
Surface Equipment	<ul style="list-style-type: none"> ■ Wireline Power Supply: 110/240v AC in, 200w Out with protection ■ Rig Floor Display: 256 x 128 Transflective LCD with backlight Sealed to IP65 ■ Software: Windows based NAVIGATOR™ service software