GYRO PATH® NSG (North Seeking Gyro)

The most robust precision north seeking technology on the market.

The Gyro Path® NSG uses the latest in solid state nanotechnology for impressive results in the most extreme drilling conditions. The rugged design of the Gyro Path® NSG from Icefield Tools delivers consistent performance, and the longevity that customers expect after 25 years of making the world's most robust survey instruments.



FEATURES

- > SOLID-STATE NORTH SEEKING GYROSCOPIC TECHNOLOGY
- ➤ PRECISION ACCURACY IN UNDER 1 MINUTE
- ➤ UNAFFECTED BY MAGNETIC INTERFERENCE
- > RUGGED DESIGN RELIABLE IN EXTREME DRILLING ENVIRONMENTS
- > SMALL SIZE ALLOWS FOR USE WITH MEDIUM AND SMALLER SIZED RIGS
- ➤ USER FRIENDLY SOFTWARE
- MAY BE OPERATED BY IN-HOUSE OR CONTRACTED GUIDANCE PERSONNEL
- ➤ NO SURFACE COIL NEEDED

APPLICATIONS

- ➤ GYRO STEERING & ORIENTATIONS
- ➤ RIVER CROSSINGS
- ➤ HIGHWAY CROSSINGS
- > SWAMP / WETLANDS CROSSINGS
- ➤ SHORE APPROACHES
- ➤ RAILROAD CROSSINGS
- ➤ URBAN AREA CROSSINGS
- VERIFICATION SURVEYS
- ➤ MEMORY SURVEYS

PERFORMANCE

- ➤ AZIMUTH ACCURACY = +/- 0.1 DEGREES
- ➤ GYRO TOOL-FACE ACCURACY = +/- 0.1 DEGREES
- ► INCLINATION ACCURACY = +/- 0.1 DEGREES
- ➤ GRAVITY TOOL-FACE ACCURACY = +/- 0.1 DEGREES
- ► BATTERY LIFE = GREATER THAN 30 HOURS
- MEASUREMENT TIMES AS FAST AS 5 SECONDS





THE PATH TO PRECISE BOREHOLE SURVEY SOLUTIONS

TECHNICAL	SPECIFICATIONS:			
SENSOR TYPE: INCLI	NATION			
TYPE:	TRIAXIAL			
RANGE:	0-180° (APPLICATION DEPENDANT			
ACCURACY:	± 0.1°			
SHOCK:	6000G			
SENSOR TYPE: GYRO	SCOPE			
TYPE:	SOLID STATE			
ACCURACY:	± 0.1°			
SHOCK:	2000G			
BARE INSTRUMENT S	SIZE			
DIAMETER:	30 mm (1.18")			
LENGTH (MEM):	1.54 m (60.67")			
LENGTH (WIRE):	1.29 m (50.8")			
WEIGHT:	4.05 kg (8.9 lbs)			
IN STANDARD PRESS	URE BARREL			
DIAMETER:	38.1 mm (1.5")			
LENGTH:	2.20 m (87")			
WEIGHT:	12.55 kg (27.6 lbs)			
PRESSURE (MAX):	6000 psi			
OPERATING TEMP:	-30° C TO +85° C (-22°F TO +185°F)			
IN HIGH PRESSURE E	BARREL			
DIAMETER:	44.45 mm (1.75")			
LENGTH:	1.95 m (77")			
PRESSURE (MAX):	18000psi			
OPERATING TEMP:	-30° C TO +85° C (-22°F TO +185°F)			
IN THERMAL HOUSIN	G			
DIAMETER:	46 mm (1.81")			
LENGTH:	2.27 m (89.67")			
PRESSURE (MAX):	18000 psi			
RATED FOR 6 HOURS	AT 175° C (350°F)			

Gyro Path® NSG Software Options

	GYR	GYRO PATH® NSG SOFTWARE LICENSES					
GYRO PATH LICENSE FEATURES	Horizontal Basic	Horizontal 2.0	Horizontal 3.0	Horizontal 4.0	Full		
Vertical Applications: (0-60° from vertical)	X	X	X	X	✓		
Horizontal Applications: (60-120° from vertical	/	✓	✓	✓	✓		
MEASUREMENT TIMES / ACCURACY							
5 secs = +/- 3°	✓	✓	✓	✓	✓		
15 secs = +/- 1.5°	✓	✓	✓	1	✓		
30 secs = +/- 1°	1	✓	✓	1	✓		
1 min = +/- 0.75°	1	✓	✓	1	✓		
1.5 min = +/- 0.6°	✓	✓	✓	1	✓		
2 min = +/- 0.5°	1	✓	✓	1	✓		
3 min = +/- 0.35°	✓	✓	✓	1	1		
4 min = +/- 0.3°	✓	✓	✓	1	✓		
8 min = +/- 0.1°	X	X	✓	✓	✓		
Steering Data While Drilling	✓	✓	✓	✓	✓		
MEASURED DEPTH RANGE (MEASURED LENGTH O	F BORE)						
0 - 1000 ft (0 - 305m)	✓	✓	✓	✓	✓		
0 - 2000 ft (0 - 610m)	X	1	✓	✓	1		
0 - 3000 ft (0 - 915m)	X	X	✓	✓	1		
Unlimited Measured Depth	X	X	x	✓	1		
SOFTWARE LICENSE TYPES AVAILABLE							
Permanent License	1	✓	1	1	1		
EMPORARY LICENSES - EXPIRING (PAY AS NEEDE	ED)						
Annual License (1 Year)	✓	✓	✓	✓	✓		
Quarterly License (90 Day)	1	✓	✓	✓	1		
Monthly License (30 Day)	✓	✓	✓	1	1		