

MICON NSG
North seeking Gyro



MICON  **DRILLING**

MICON nsG

Advantages and features

- ◇ Fully automatic True North Seeking system through measuring the real earth rotation
- ◇ Independent from any magnetic influences, no magnetic declination
- ◇ High accuracy of $<0,5^\circ$ in azimuth * and inclination & GTF of $<0,05^\circ$
- ◇ The accuracy is replicating through a high performance fiber optic gyroscope and MEMS accelerometers
- ◇ Very low drift of $<0,3^\circ$ per hour
- ◇ No moving parts inside the system
- ◇ No restrictions on the measuring range in inclination ($0^\circ - 360^\circ$)
- ◇ Fully automatic initialization (alignment) within less than 2 minutes **
- ◇ Initialization can be done at any angle and also downhole or underground ***
- ◇ Through a realignment directly at any measuring point the drift can be completely eliminated ***
- ◇ Simple and self-explaining display and calculation software

* depending on latitude

** Tool needs to be steady (without any movement)

*** not while in logging mode



Technical Specification Sheet

North seeking Gyro	
Dimensions	
Pressure case OD	75 mm
Length	1100 mm
Weight	15 kg
Connection	Eastman Pin x Pin
Accuracy	
Inclination	+/- 0.2°
Toolface	+/- 0.2°
Azimuth (true north)	+/- 0.2° depending on latitude ranges: near 50th latitude +/-0.3° near 60th latitude +/-0.4° near 70th latitude +/-0.6° near 80th latitude +/-1° no inclination range limitation
North seeking alignment time	2 minutes
Sensors and Electronics Assembly	
Sensors	3 axis accelerometer
	3 axis fiber optic gyroscope
	Temperature
Power source	Lithium Battery (rechargeable)
Shot interval	1 second
Operating time	5 hours (Battery runtime 6 hours)
Enviromental	
Temperature Range	from -20°C up to +60°C
Pressure Resistance	120 bar
Vibration longitunal	6 Grms, 10 to 500 Hz
Vibration lateral	4 Grms, 10 to 500 Hz
Shock (operational)	20 g half sine pulse for 6 ms





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