

# PRODUCT SPEC SHEET

## SCI - GAIN™ API NATURAL GAMMA RAY AND INCLINATION

Scientific Drilling's Sci-GAIN is an API calibrated sensor that provides radial gamma ray and precision inclination measurements. On the Bottom Hole Assembly (BHA), Sci-GAIN is extended and positioned directly above the mud motor - giving gamma and inclination measurements that are closer to the bit than standard MWD measurements.

The precision inclination measurement can be used by the Directional Driller during the build section for early monitoring of the mud motor output; there by optimizing the drilling process. While rotating, in the lateral, continuous inclination measurements can be used to monitor and maintain the wellbore trajectory. Sci-GAIN can be run with any of SDI's MWD and LWD systems in all configurations.

### DELIVERING THE ULTIMATE VALUE

- Provides API gamma ray and precision inclination measurements that are 20 to 25 ft (6 to 8m) closer than standard MWD measurements
- Works seamlessly with both MP and EM MWD systems to send real-time measurements to surface
- Same probe is compatible with all BHA sizes



### TARGET APPLICATIONS

- Correlating with offset logs from nearby wells
- Early monitoring of the mud motor output
- Selection of casing points
- Early detection of coring points
- Lithology identification
- Maintaining tight control of wellbore trajectory

TECHNICAL SPECIFICATIONS		
GENERAL SPECIFICATIONS		
Collar OD	3.125 in (79.4 mm)	
	3.5 in (88.9 mm)	
	4.75 in (120.7 mm)	
	6.5 in (165.1 mm)	
	6.75 in (171.5 mm)	
	8.0 in (203.2 mm)	
Probe OD	1.75 in (44.5 mm) diameter	
Probe Length	38.5 in (97.79 cm) long	
Max. Dog Leg (Degree per 100 ft O.D)	Sliding	Rotating
	12° (9.5 in)	5° (9.5 in)
	12° (8 in)	7° (8 in)
	19° (6.75 in)	8° (6.75 in)
	20° (6.5 in)	10° (6.5 in)
	28° (4.75 in)	12° (4.75 in)
	60° (3.5 in)	20° (3.5 in)
65° (3.125 in)	20° (3.125 in)	
Max. Operating Temperature	302°F (150°C)	
Max. Operating Pressure	20,000 psi (137,900 kPa) (30,000 psi available)	
Range of Flow Rates per Tool Size	Tool OD	Gallons/Minute
	3.125 – 3.875 in	50 – 200
	4.750 – 6.500 in	100 – 400
	6.250 – 6.500 in	200 – 600
	5 – 8 in	250 – 1,000
9.5 in	300 – 1,500	
MEASUREMENT SPECIFICATIONS		
Detector Type	NaI Scintillation Crystal	
Inclination Accuracy	Inclination: ± 0.15° all angles	
Gamma Range	0 - 1,000 AAPi	

\*\* Specifications are subject to change without notice.

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