

Sondex



DESCRIPTION

This scintillation detector tool measures gamma radiation. It outputs counts scaled to be approximately one count per API unit. Both Memory and Surface Readout models are available.

A variety of tool types ranging from 1 3/8" to 1 11/16" diameter are available to measure gamma radiation from the formation surrounding the wellbore or for particular applications. All models are compact, rugged and combine excellent sensitivity with high resolution for cased hole production logging applications.

Tools can be combined for tracer work and, with the addition of a gamma source, used for gravel pack investigations.

OPERATING PRINCIPLE

Gamma rays are detected by a high temperature sodium iodide crystal and amplified using a 10 stage photo-multiplier to a measurable level. The detected energy level is electronically stabilised. The resultant pulse output is transmitted to the surface or stored downhole. Calibration is effected by a wrap-around Sondex Calibrator with a distributed thorium source of very low radioactive content. The difference between background and calibrator levels provides a ratio between tool count rate and API units. Using the calibrator also monitors tool performance.

APPLICATIONS

- Lithology Identification
- Depth Correlation
- Identification of Radio Active Scale.
- Tracer Monitoring
- Gravel Pack Monitoring (with addition of a gamma source)

INTERFACING & TOOL COMBINATIONS

- Simultaneous Operation with other Tools
- 1 3/16" UN 12 tpi Sondex GO Heads

OPTIONS

- Special Heads To Customer Specification

SPECIFICATION

	Memory	Wireline
Supply Voltage	+12v DC	+60v DC
Current	9mA	19mA
Max output	4000API	500API
Max. Pressure	15k psi (12k psi 11/2")	
Max. Temperature	350 degrees F (177C)	
Detector	Scintillation	
Resolution	1 API Unit	
Accuracy	+/- 10 APU Units	
Length (1 11/16")	18.5" 470mm)	
Measure Point	6" (152mm) from bottom of tool	
Diameters available	1 11/16" (43mm); 1 1/2" (38mm); 1 3/8" (35mm)	
Weight (1 11/16")	9.3lb (4.2kg)	
Materials	Corrosion Resistant Throughout	

Max output refers to standard telemetry only