

# 3 5/8" Spectral Gamma Ray Tool (High Temperature)



Product Reference: 050-G0000-4000

The open hole Spectral Gamma Ray Tool utilizes a large, ruggedized scintillation detector coupled to a high resolution, matched Photomultiplier Tube assembled into a shock mounted detector package.

This detector package is designed to maximize the energy spectra sensitivity over the entire range of energy levels and logging speeds encountered in the logging environment.

The total gamma spectrum is resolved into 256 channels internally in the electronics and can be configured to transmit data to the surface computer in raw spectral form or programmed to resolve the three most common components of naturally occurring radiation in sands and shale's. (I.E. Potassium, Uranium and Thorium components) These data are used to distinguish important features of the clay or sand around the wellbore.

The tool may also be programmed to resolve any specific radioisotope energy level or levels and transmit that resolved data to the surface using any number of channels up to a maximum of 256 over a energy level range of 0 to 3Mev. (1.17Kev. per channel).

The tool uses an automatic internal stabilization circuit to internally stabilize the detector and electronics for temperature drift errors over the entire operating temperature range. The Detector and all electronics are mounted in a flask assembly to shield it from high temperature exposure.

The tool is supplied with GO style 10 pin top and bottom connections. The top sub has an integral diameter turned for use with an open-hole make up plate.



## SPECIFICATIONS - 3 5/8" SPECTRAL GAMMA RAY TOOL (HIGH TEMPERATURE)

Diameter	3 5/8"	7.6 cm	<b>Mechanical:</b>	
Length	72"	1.8 m	<b>Top Connection</b>	1 3/16" 12 pin GO
Weight	137 lb.	62 kg		
Operating Voltage	100 VDC			
Operating Current	35 mADC			

### Limitations:

#### Maximum counting rate:

Gamma	3,000 cps	4,000 API
Neutron	3,000 cps	
Maximum Pressure	20,000psi	137.8 MPa
Maximum Temperature	350°F for 4 hrs	177°C
	400°F for 6hrs	204°F
	350°F for 8hrs	176°F

## RELATED PRODUCTS

- 035-G0000-1000 Spectral Gamma Ray Calibration Fixture
- 035-A500-0021 Open-hole makeup plate

At Probe, we design, manufacture and service specialized modular downhole tools and systems. Our tools are used in formation evaluation, well integrity assessment and well productivity determination across the global energy industry.

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