



## SPECTRAL GAMMA RAY

The Spectral Gamma Ray probe measures total gamma radiation in counts per second (cps), while simultaneously capturing the full energy spectrum of naturally emitted gamma rays from subsurface formations. Through real-time Full Spectrum Analysis (FSA), the tool determines the concentrations of three key natural radioisotopes—Potassium-40, Thorium-232, and Uranium-238—providing detailed insight into the mineralogical composition of the geological formations being investigated.

The Spectral Gamma probe uses a Bismuth Germanate (BGO) scintillation crystal, which emits light when exposed to gamma radiation. This light is amplified and converted into electrical pulses, which are sorted into 256 energy channels for detailed spectral analysis. Corrections can be applied for borehole conditions, helping to ensure accurate and reliable results across a variety of downhole environments.

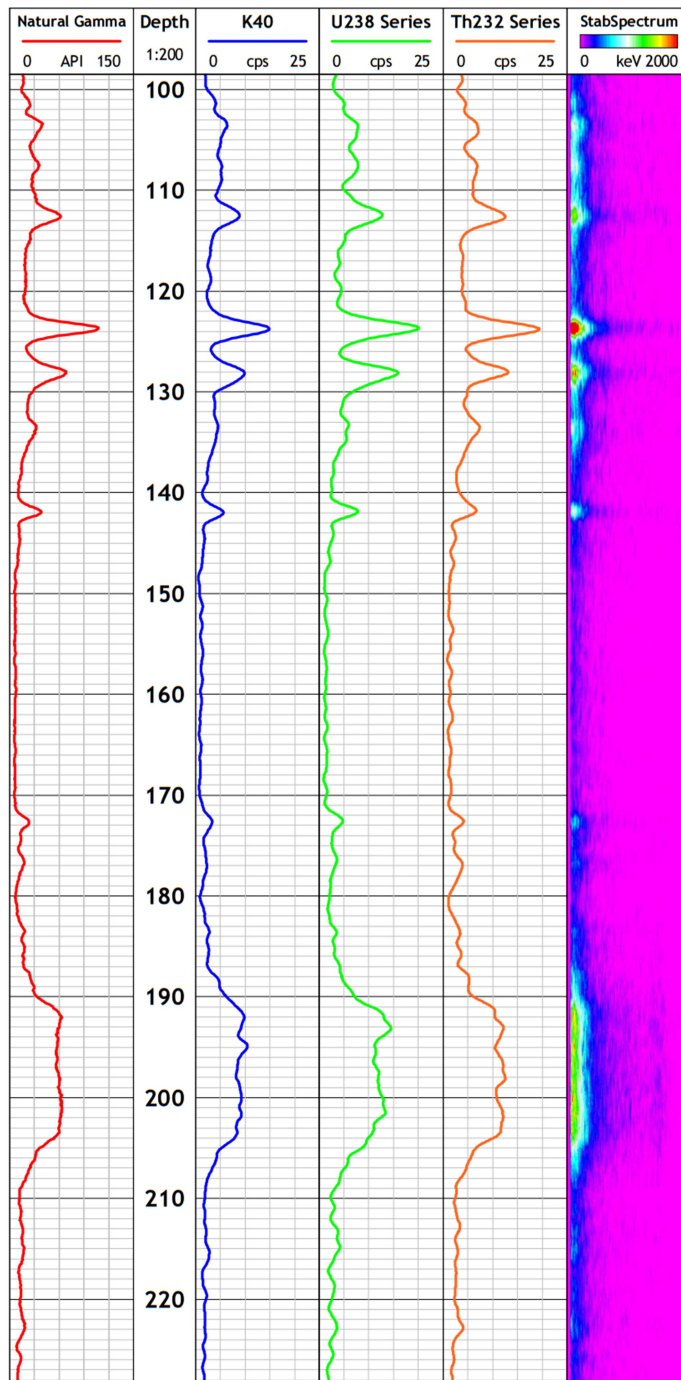
Available in the Quick Link product line, the Spectral Gamma probe can be stacked with other logging tools, or operated as a standalone probe.

### APPLICATIONS:

- + Radioactive Material Identification
- + Lithology Characterization
- + Contamination Investigations
- + Facies and Depositional Environment Characterization

### PROBE SPECIFICATIONS:

|                          |                             |
|--------------------------|-----------------------------|
| Diameter:                | 40 mm (1.6 in.)             |
| Length:                  | 93 cm (3.05 ft.)            |
| Max Temperature Rating:  | 70°C (158°F)                |
| Max Pressure Rating:     | 200 bar (2900 psi)          |
| Parameters Measured:     | Radioisotope Concentrations |
| Gamma Detector:          | BGO Crystal                 |
| Borehole Diameter Range: | 51 – 406 mm (2.0 – 16 in.)  |



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