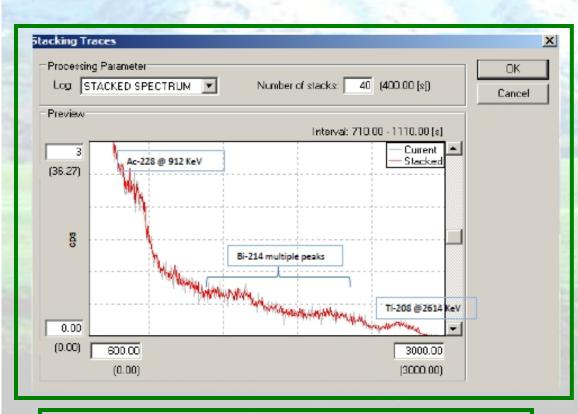


# 2LSA-1000, 1024 Channel Spectral Gamma, SP, SPR

The 2LSA-1000 spectral gamma probe is a versatile tool that can be used in a wide variety of logging applications, recording natural gamma spectra (to 3000 KeV), user-specified, energy-windowed gamma (5 windows) logs, single point resistance, and spontaneous potential. The larger crystal allows better counting statistics resulting in improved quantitative analysis in uranium applications, isotope ratios, and clay typing. Users can select from three operational modes (256, 512, or 1024 channel) based on their survey needs.

The 2LSA-1000 provides real time temperature compensation not typically offered by others. Response from conventional tools drifts as temperature changes. The 2LSA-1000 has been calibrated at the factory using several different sources and a swept temperature bath. Calibration coefficients resulting from these tests are stored inside the tool so that real time temperature compensation can be performed.



WellCAD processing window showing stacked spectra from Grand Junction, Colorado thorium model. Gamma energy along X-axis in KeV units vs. CPS on Y-axis. Spectra shows gamma-emitting isotopes from thorium decay.















# 2LSA-1000, 1024 Channel Spectral Gamma, SP, SPR

### **Specifications**

Length: 185 cm (72.8")

Diameter: 44 mm (1.75") with neoprene cover

Weight: 7 Kg (15.4 lbs)
Pressure Rating: 200 Bar (3000 PSI)

Temp. Rating: 70 °C

Gamma Sensor (s): 26.16 mm dia. x 193.04 mm long Na(Th)I Scintillation Crystal & PMT

Measurement Range: 0 - 100,000 CPS
Accuracy: 1% full scale
Resolution: 0.1 CPS
Maximum pressure 3000 PSI

Operation temperature range 0 to 60 degrees C Storage temperature -40 to 70 degrees C

Natural gamma energy range 0 - 3 MeV Natural gamma energy accuracy 2% of full scale

Natural gamma energy resolution 10% full width half max.

Single point resistance range 0-1000 ohms
Single point resistance accuracy 1% of full scale
Single point resistance resolution 0.5 ohm

Sensor location (from bottom of probe) 3.93 inches (10 cm)

Spontaneous potential range -2000-2000 mV
Spontaneous potential accuracy 1% of full scale
Spontaneous potential resolution 0.5 mV

Sensor location (from bottom of probe) 3.93 inches (10 cm)

#### **Features**

The Gamma probes are versatile, ubiquitous probe functions with a wide range of applications. Calibrations from 2LSA-1000 probes can be used to generate near real-time KUT concentration logs, U3O8 eq. weight percent logs, & user-specified windowed gamma logs.

### **Advantages**

Gamma probes with other scintillation materials, including halides of lanthanum, and sizes can be custom made for your application.

## **Recommended Spares**

Th232 calibration check disc, 912 and 2612 KeV peaks Probe O'rings Bull nose











