



RS-230 Super GAMMA RAY SPECTROMETER with Memory

Providing Search, Scan, and Assay Modes of Operation

RS-230 BGO – Ideal for Field Exploration

The RS-230 BGO Gamma-Ray Spectrometer/ Scintillometer is the state-of-the art in portable hand-held radiation survey search devices for the geophysical industry. It offers an integrated design with a large detector, direct Assay data, data storage, full weather protection, ease of use and highest sensitivity in the market segment. In addition, it has Bluetooth (BT) connectivity providing for wireless connection to a Bluetooth equipped external GPS receiver, earphone or computer.

The spectrometer is auto-stabilizing on the naturally occurring (K, U, & Th) radioactivity and does not require any test sources.



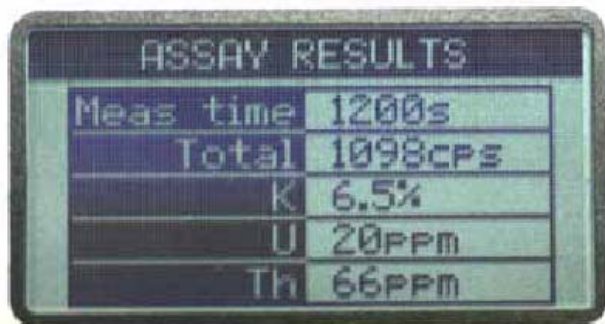
The Spectrometer is auto-stabilizing on the naturally occurring (K, U, & Th) radioactivity and does not require any test sources.

Features Include:

- Large BGO (Bismuth Germanate Oxide) Detector, 6.3 in³ (103 cm³)
- Extreme sensitivity (more than 2.5 times greater than NaI crystal of the same volume)
- Lightweight 4.5 lb (2.04 kg) including batteries
- Easy to use, single button – survey, scan, and assay modes of operation
- Assay mode readout in %K, ppm of U & Th



- Auto-Stabilizing on naturally occurring radio elements
- 5-digit LCD display with high count rate – 65,535 cps scrolling histogram graph display of last 100 readings
- Fast audio output with adjustable audio threshold set point
- BT earphone audio support for noisy area surveying Bluetooth and USB equipped with external GPS integrated into data stream via Bluetooth
- Special rugged design to withstand typical field usage, full IP67 weatherproofing, short term water immersion, and fully dust protected
- Low Power (4 x AA Batteries) – Typical 8 – 12 hour battery life at 200 C
- No radioactive sources required for proper operation



Bismuth Germanate (BGO)

The performance of the 6.3 in³ (103 cm³) higher density Bismuth Germanate (BGO) is an equivalent of a 21 in³ (390 cm³) Sodium Iodide (NaI) commonly used with larger portable units and approximately **more** than 3 times the same size NaI crystal.

Survey and Scan Modes

Total Count readout at a 1x / sec. rate in the Survey Mode or variable (1 – 20 sec.) in the Scan Mode. When used with a GPS receiver, data can be stored and profiles produced. Ideal for both area survey and drill core scanning.

Standard Accessories

- RS-230 BGO Spectrometer with carrying handle
- Removable protective boot with shoulder strap
- Battery cartridge with 4 x AA rechargeable batteries & charger
- Spare battery holder cartridge
- RS-Analyst utility software
- USB cable
- User guide
- Delivered in hard case with foam insert



Specifications

Temperature Range

- -20C to +50C

Control

- Single one button, thumb activated

Alarm

- Audio via miniature speaker
- Variable audio threshold set point
- Audio proportional to count rate

Weight:

- 4.4 lb (2 kg) including batteries

Size & Package Style:

- 10.2" x 3.2" x 3.8" (259mm x 81 mm x 96 mm)
- 1mm thick outer case
- In a flashlight configuration with detachable handle

Memory

- 2 MB
- Memory can be partitioned for desired storage

Example:

- Scan Total Count only – 94,000 readings
- Scan + Assay – more than 1000 readings
- Assay only – more than 400 readings (plus full spectrum)

Data Input/Output

(Using supplied RS-Analyst Software)

- USB
- Bluetooth
- GPS link via BT

Display:

- 128 x 64 pixels, 1 1/8 x 2 3/8"
- Graphic LCD display with white backlight and automatic dimming

Readout

- Search Mode: Counts in CPS from 0 to 65,535 and Histogram chart
- Assay Mode: Display in %K, ppm of U & Th (ROIs per IAEA)

Energy Response:

- 30 keV 3000 keV

Internal Sampling:

- 20 / second



Batteries:

- Internal battery pack module (4xAA) easily replaceable
- Rechargeable or Alkaline
- Life: 8+ hours at 20C



Specifications subject to change without notice # 09.08