



## APPLICATIONS



## FEATURES

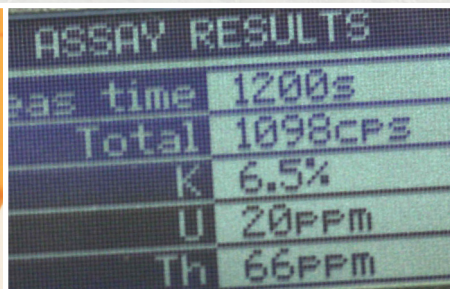
- Large BGO (Bismuth Germanate Oxide) detector, 6.3 in<sup>3</sup> (103 cm<sup>3</sup>)
- Extreme sensitivity (3x greater than NaI crystal of the same volume)
- Survey and Assay modes of operation
- Assay mode readout in %K, ppm of U & Th
- Auto-stabilizing on naturally occurring radio elements
- Easy-to-use, single button operation
- 5-digit LCD display with scrolling histogram graph of last 100 readings
- Fast audio output with adjustable audio threshold set point
- BT earphone audio support for surveying in noisy environments
- Bluetooth and USB equipped with external GPS integrated into data stream via BT
- Special rugged design to withstand field usage, weatherproofing, water and dust protection
- Lightweight 5.6 lb (2.55 kg) including batteries
- Typical 8-12 hour battery life at 20°C (4 x AA batteries)
- No radioactive sources required for proper operation



### Providing Search, Assay, and Scan Modes of Operation

#### RS-230 BGO Ideal For Field Exploration

The RS-230 BGO Spectrometer is the industry standard in portable handheld gamma ray survey devices for geophysical applications. It offers an integrated design with a large detector, direct Assay data, data storage, full weather protection, ease of use and the highest sensitivity in the market. As well Bluetooth (BT) Connectivity provides wireless connection to a Bluetooth enabled external GPS receiver, earphone or computer.



# RS-230 BGO Super-SPEC

## Handheld Gamma-Ray Spectrometer



### Bismuth Germanate (BGO)

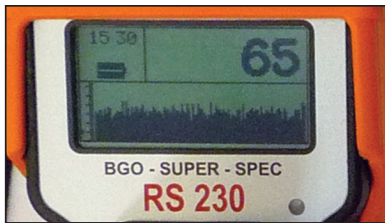
The performance of the 6.3 in<sup>3</sup> (103 cm<sup>3</sup>) higher density Bismuth Germanate (BGO) is approximately 80% of a 21 in<sup>3</sup> (390 cm<sup>3</sup>) Sodium Iodide (NaI) commonly used with larger portable units and approximately 3x more than the same size NaI crystal.

### Survey Mode

The total count readout is typically set at 1x / sec rate and the range is variable from 1 - 20 sec. integration. When used with a GPS receiver, data can be stored and profiles produced. Ideal for both area and drill core scanning.

### Assay Mode

The Assay mode provides the concentrations of K, U and Th. The user can select the desired sample time from 30 to 1800 seconds.



### RS-Analyst Software

The RS-230 comes complete with utility software to download the data that is stored in the memory. All data in the memory is output via Bluetooth or USB to the RS-Analyst program on a PC. This may take the form of 1024 channel spectra, data or scan data + GPS. The program also gives graphical and numeric views of the data. The data can also be re-exported as a text file for further processing.

### Radiation Solutions Inc

Radiation Solutions Inc. (RSI) is specialized in nuclear instrumentation for the detection, measurement and analysis of low-level ionizing radiation from both naturally occurring and man-made sources.

RSI's cutting edge radiation detection technology incorporates a fully digital system design, spectral analysis and advanced data processing. RSI deploys this technology in fixed installed, airborne and mobile systems, portable and handheld spectrometers providing a level of quality previously only attainable in laboratory equipment.

RSI is committed to working as closely as possible with customers in all aspects of the product life cycle including product requirement, application, training, support and product enhancement. Our comprehensive approach results in hardware components and industry leading software techniques that produce outstanding results above expectations.

### Large 2" x 2" BGO crystal, 6.3 in<sup>3</sup> (103 cm<sup>3</sup>)

- 1024 channel spectrometer
- Energy Range 30 keV – 3000 keV

**Assay and survey modes** with automatic recording of data

### On-the-fly Assay

**Auto-stabilizing** on naturally occurring radio elements

### Readout

- Survey mode: counts in CPS from 0 to 65,535 and histogram chart
- Assay mode: display in %K, ppm of U & Th (ROIs per IAEA)

**Audio** via miniature speaker

- Variable audio threshold set point
- Audio proportional to count rate, internal sampling 20/second

### Single button control

**Graphic LCD display** 1 1/8" x 2 2/3" with white backlight and automatic dimming

### Memory:

- 4MB, memory can be partitioned for desired storage.
- More than 250,000 readings or 70 hours of readings.

### Data Input / Output

- Via USB or Bluetooth (BT) (using supplied RS-Analyst software)

**Temperature Range** -20°C to +50°C

### RS-230 Size and Weight

- 10.2" x 3.2" x 3.8" (259 mm x 81 mm x 96 mm)
- Removable protective boot with shoulder strap for additional protection and easy carrying
- 5.6 lb (2.55 kg) including batteries

### Internal detachable battery pack

- Typical Life 8+ hours at 20°C
- 4 x AA type rechargeable or alkaline

### Standard RS-230 BGO Package

- 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



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