



# RS-125 Super GAMMA-RAY SPECTROMETER with Memory

Providing Search, Scan, and Assay Modes of Operation

## RS-125 – Ideal For Field Exploration

The RS-125 Gamma-Ray Spectrometer/Scintillometer is the state-of-the-art in a portable hand-held radiation survey search device for the geophysical industry. It offers an integrated design with a large detector, for survey or search, direct Assay, readout, a Scan mode, and data storage. It offers full weather protection with ease of use. 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.

### Features Include:

- High Sensitivity with large 2.0 x 2.0 NaI crystal 103 cm<sup>3</sup> (6.3 in<sup>3</sup>)
- Lightweight & rugged 4.4 lb (2 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 BT 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 20 °C
- No radioactive sources required for proper operation

The RS-125 allows the user to produce profiles of the total count data from either the Search, Scan, or Assay modes. The data can be from a drill core scan or from a survey with GPS positioning data.



## 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

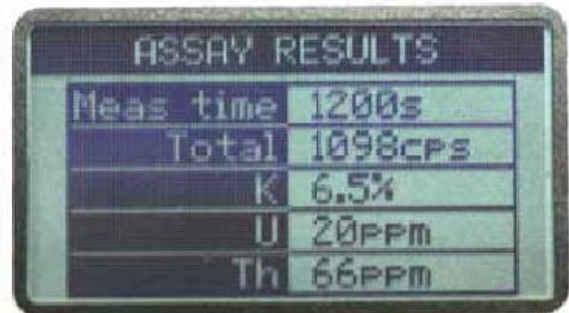
- RS-125 Spectrometer with carrying handle
- Removable protective boot with shoulder strap
- Battery cartridge with 4 x AA rechargeable batteries & charger
- Spare battery holder cartridge
- RS-Analyst utility software
- USB cable
- User guide
- Delivered in hard case with foam insert

### Assay Mode

The assay mode provides the concentrations of K, U and Th as shown in the display. The user can select the desired sample time.

### RS-Analyst Software

The RS-125 is provided with utility software to download the data that is stored in memory. All data in memory can be transmitted via Bluetooth or USB to the RS-Analyst program on a PC. This may take the form 1024 channel spectra, field 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.



## 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*