

RS-125 Super GAMMA-RAY SPECTROMETER with Memory

Providing Search, Assay and Scan 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 RS-125 Gamma-Ray Spectrometers are used for a wide range of applications. They include Uranium and Rare Earth Element (REE) Exploration through their Uranium and Thorium Assay Modes respectively.



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

Features:

- High sensitivity with large 2.0 x 2.0 NaI crystal 103cm³ (6.3 in³)
- Lightweight & rugged 4.4 lb (2kg) including batteries
- Easy to use, single button operation
 - **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 IP66 weatherproofing with protection against streaming water 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 the Search, Scan or Assay modes. The data can be from a continuous drill core or from a survey with GPS positioning data.



Survey Mode (Total Count)

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.

Assay Mode

The assay mode provides the concentrations of K, U and Th as shown in the display beside. 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 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.

Standard Accessories

- RS-125 Scintillometer 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 Link
- USB cable
- User guide
- Delivered in hard case with foam insert



Specifications



Temperature Range

- -20°C to +50°C

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 side support strap, wrist strap and optional detachable handle

Memory

- 4 MB
- Memory can be partitioned for desired storage
Example:
Scan Total Count only – 345,000 readings
Scan + Assay – more than 4000 readings
Assay only – more than 500 readings
(plus full spectrum)

Data Input/Output

- (Using supplied RS-Analyst Software)
- USB
- Bluetooth (BT)
- GPS link via BT

Display:

- 128 x 64 pixels, 1 1/8 x 2 3/8"
- Graphic LCD display with white black light 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 20°C



Specifications subject to change without notice # 04/12