



# GLOBAL EXPERTS GROUP IDENT

# RS-220 Super-

Handheld Isotope Identifier

# **APPLICATIONS**













# **FEATURES**

- High sensitivity with large 2.0 x 2.0 Nal crystal, 6.3 in<sup>3</sup> (103 cm<sup>3</sup>)
- Integrated GM tube for extended dose rate range
- Optional Helium tube for good Neutron performance
- Easy to use, single button operation
- Auto-stabilizing on naturally occurring radioelements - no radioactive sources needed
- Lightweight & rugged 4.6 lb (2.2 kg) including batteries
- Search and nuclide ID modes with automatic recording of data
- RS-Analyst software to manage data
- Fast audio output with adjustable audio threshold set point
- Bluetooth connectivity for add-on accessories such as as earphone or GPS
- · Special rugged design to withstand field usage, weatherproofing, water and dust protection
- Supplied in hard case with molded insert for shipping & storage
- Typical 8-12 hour battery life at 20°C (4 x AA batteries)



# Hi-Sensitivity Search and Nuclide ID Capability

The RS-220 handheld isotope identifier with optional Neutron detector is a robust portable radiation search and identification device. It offers an integrated design with a large Nal detector for search, direct nuclide identification readout, sensitive dose rate and data storage. The spectrometer is auto-stabilized on the naturally occurring local background and does not require any test sources for proper operation. With full weather protection and a rugged design the unit offers high sensitivity and good survivability in the challenging operations and locations often encountered. The simple onebutton operation makes the unit easy to use and simplifies operator training. Bluetooth connectivity provides wireless data output and add-on accessories such as GPS.







## **SPECIFICATIONS**

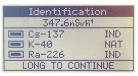
# **RS-220 Super-IDENT**

# Handheld Isotope Identifier

#### **Search Mode**

The large Nal detector gives the user an extremely high level of system sensitivity. The large, easy-to-read 5 digit front panel display updates at a 1/sec rate, providing a scrolling histogram graph with the last 100 readings simplifying the source localization. The integrated audio scans at a 20/sec data rate for fast, easy and eyes-free searching. In noisy areas or for covert operation users can utilize a Bluetooth linked audio headset.







Survey

Identification

Spectrum

## **Nuclide Identification Mode**

The Nuclide Identification mode provides direct identification of radioactive material present in a relatively short period (typically 60 seconds). The large Nal detector gives higher levels of performance and faster ID.

# **Recording Data**

The unit has a large internal memory for recording data as well as the location when an external GPS is connected via Bluetooth. This capability enables the users to move through a large area with the unit recording data at typically 1/sec rate. Compatible software then creates a map giving the user the capability of mapping their facility on a regular basis to check for anomalies.

# **RS-Analyst Software**

The RS-220 comes complete with RS-Analyst software allowing a PC user the ability to download data that is stored in the RS-220. Parameter set up or diagnostics can then be performed easily via Bluetooth or USB with the user's PC and downloaded data. The data may take the form of 1024 channel spectra, Nuclide ID data, GM data and GPS data. The program also presents graphical and numeric views of the data or the data can be 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-

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" Nal crystal, 6.3 in3 (103 cm3)

- 1024 channel spectrometer
- Energy Range 30 keV 3000 keV
- Max dose rate 80 uGy/h (Energy compensated)

## Energy compensated GM tube, 1.1" L x 0.31" D

Max dose rate 10mGy/h

Optional He3 Neutron Detector, 2.5" L x 0.45" D

Search and Nuclide ID modes with automatic recording of data

Auto-stabilizing on naturally occurring radio elements

# **Nuclide ID Library**

- SNM: U-233, U-235, Pu-239
- Med: Ga-67, I-131, TI-201, Tc-99, In-111, Kr-85, Cr-51
- Ind: Ra-226, Th-232, Cs-137, Co-60, Ba-133, Co-57, Am-241, Ir-192, Na-22, Cd-109

# Alarms Neutron, Dose Rate and Count Rate

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

# Single button control

Graphic LCD display 1.125" x 2.66" with white backlight and automatic dimming

Memory 4MB, can be partitioned for desired storage, typically:

- Recording Total Count only 94,000 readings
- Nuclide Identification only 1000 spectra

Data Input / Output (using supplied RS-Analyst software) via USB or Bluetooth

Temperature Range -20°C to +50°C

# **RS-220 Size and Weight:**

- 10.2" x 3.2" x 3.8" (259 mm x 81 mm x 96 mm)
- Slip on carry harness for additional protection and easy carrying
- 4.6 lb (2.2 kg) including batteries

# Internal detachable battery pack

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

# **Ordering Information**

- RS-220G Standard model, incl. GM-tube
- RS-220GN includes GM and Neutron

