

HPRID

HIGH PERFORMANCE RADIOISOTOPE IDENTIFIER



Feature Highlights

- **Designed to rugged military Ground Mobile guidelines**
- **Advanced spectrum processing for superior radioisotope detection and identification**
- **Simplified user interface for spectral interpretation**
- **Compact size and lightweight**
- **Wireless capability**
- **Self-stabilizing**

The HPRID is a hand-held, portable, rugged and highly accurate radioisotope detector and identifier utilizing Symetrica's Discovery™ technology, licensed exclusively to Smiths Detection. Discovery technology features advanced spectrum processing and identification algorithms which transform a highly sensitive 2" x 2" Sodium Iodide [NaI(Tl)] detector into a high resolution spectrometer capable of identifying challenging isotopes. With these advanced algorithms, effective resolution is increased at 662 keV from 7% to 2% FWHM.

The identification performance exceeds all ANSI N42.34

requirements for bare, shielded and multiple isotopes. The on-board library comes standard with 39 radioisotopes classified and can be easily expanded.

The HPRID is easy to use while supplying the operator with simple, specific information for threat assessment. Applications include Customs inspection, border protection, radiological facilities/personnel monitoring, and emergency response.

HPRID

Cargo Inspection

The HPRID can be used in 'survey' mode to detect radioactive sources and then clearly identify whether the energy signature corresponds to harmless naturally occurring radiation or a more dangerous source, such as special nuclear materials or those consistent with a "dirty bomb". For each source identified the HPRID

provides the identification, confidence level of the identification made, and a risk assessment describing the source as innocent, suspicious or a threat.

Emergency Response

In an emergency situation, radiological response teams can quickly and accurately determine whether or not

a source is present and the threat level in order to take appropriate actions. The wireless capability can provide those in a remote Command Center access to information such as the threat identified, source spectra and location.

Technical Data

General Specifications

Radiation Detection Technologies	2" x 2" Sodium Iodide (gamma spectrometer) Moderated He ³ tube (neutron) Geiger-Mueller (high dose-rate gamma) 25 keV – 3 MeV (gamma) NaI: 6 nSv/h – 60 uSv/h GM: 60 uSv/h – 3000 mSv/h
Sensitivity	On-board library comes standard with 39 radioisotopes classified according to ANSI N42.34; easily expandable.
Dose Rate Range	Enhanced NaI detector performance, increasing effective resolution at 662 keV from 7% to 2% FWHM.
Library	Operating Temperature: -4°F to 122°F (-20°C to +50°C); Shock and Vibration: ANSI N42.34; Drop: 3 ft.. (0.91 m) onto bare concrete; % Relative Humidity: 95%;
Performance	Safety UL 61010-1; EMC: ANSI N42.34, CSA 610610.1, CE
Environmental & Safety	Wireless 802.11g USB 2.0 Ethernet 802.3
Connectivity/Data Output	Automatic energy stabilization and calibration, eliminating the need for field calibration 3.7" color TFT transfective LCD
Calibration	Audio Visual (discrete ultra-bright LEDs for alarm indication) Vibratory
Display	Fresh water resistant, splash proof, IP65 (ANSI/IEC 60529) rating
Alarm Indications	2GB internal memory for spectral storage External AC adapter 120/240V 50/60Hz, 12VDC (10-22Volts) adapter
Protection	4 hours under normal operating conditions. Battery is rechargeable in- and outside of unit.
Data Storage	13" x 6" x 9" (33 x 15,24 x 22,7 cm)
Power	7.9 lbs. (3,6 kg)
Battery	English, French, German and Spanish Cushioned sling with strap (carrying case)
Dimensions	Additional battery pack AC adapter/battery charger
Weight	USB cables
Languages	Alkaline battery pack
Accessories Included	
Options	

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