

Product Datasheet

SAM 950

Ruggedised Isotope Identifier

The SAM 950 Ruggedised Isotope Identifier is the only RIID available with an internal, hardened 3" x 3" NaI detector option.

The higher sensitivity associated with the large volume NaI detector ensures rapid screening of low activity threats, detection of masked or shielded isotopes, and quick spectroscopic analysis.

The SAM 950 also offers users a smaller light-weight optional NaI detector as well as an optional solid-state neutron detector.

The user interface follows touch movements common to smart phones. You can expand on peaks in a spectrum to take a closer look at the energy peaks, or swipe sideways to additional alarm and event details. Once a report is generated, quickly append the report with photos, voice memos and video.

Reach-Back is greatly simplified with the latest release of PeakAbout, the BNC app that runs the suite of new SAM III products. With a single button, you can send to a predefined list of email addresses, a copy of the incident report, a known isotope measurement and a background report. Situational details such as photos and video can be included in the auto-reporting function, or set for on-request only.



Features

- LED Flashlight for night-time operations or analysis indoors in poorly lit areas (warehouse, duct systems, storage containers, etc).
- Shoulder mount clips balance the weight equally for the end user when operating for long periods.
- An added GM-Tube offers alarm indication and high count rate measurements in the event that the NaI detector is saturated. Follow the on-screen directional arrows (Move Back, etc) to obtain accurate Isotope Identification and Spectroscopy.
- A convenient Tri-Pod mount is included on the underside of the instrument, enabling fixed geometry spectroscopy or monitoring packages and personnel.
- Rich PDA-Based Feature Set.
- Immediate Reach-Back Emailing.
- Behind the Scene Auto-Calibration.
- Water and Shock Proof.
- High Resolution Gamma and Neutron.
- Multimedia Training and Support.

Applications

- Secondary Radiation Screening.
- Medical / Industrial Nuclear Controls.
- Event Management.
- Health Physics / Hazmat Support.
- Port and Border Law Enforcement.

Rad-Responder, STC and FBI Integration

With simple menu settings, management can determine the appropriate protocols to be enacted and the destination locations for the data to be sent. End users can use commercial satellites or government supplied hotspots to transmit data. Encryption is available as well.

For user groups with larger programs, PeakGo offers integration into user defined command center applications. The data, complete with spectroscopic analysis and first responder commentary, travels seamlessly using WiFi or 4G to the user receiving destination.



Specifications

Application	Secondary Screening, Isotope Confirmation, Spectral Analysis, Dose Rate Meter, Data Logging, Source Locator
Modes	Finder (source hunt), Identification, Analysis, Reporting
Interface	Keypad and Touchscreen, One Hand / Gloved Operation
Energy Range (Gamma)	20 keV – 3.0 MeV
Energy Resolution	NaI Detectors <7% @ 662 keV LaBr ₃ Detectors <3% @ 662 keV CeBr ₃ Detectors <4% @ 662 keV
MCA Electronics	10-bit, 1024 channels, proprietary electronics design
Dose Rate Range	0 - 10 mR/hr (NaI), 10 mR/hr - 10 R/hr (GM Tube)
Stabilisation	Automatic Real Time Stabilisation, No External Source Required
Isotope Identification	Typical 2 - 10 seconds, ANSI compliant Library, Isotope/Category/ Confidence Level
Battery	>8 Hours continuous use, Lithium Ion w/Low Battery Indicator Standard AA Alkaline Battery Adapter (optional)
Alarms	Audible (Waterproof Speaker on Rear) Visual (On Screen Indicator)
Alarm Types	Gamma Dose Rate, Gamma Count, Neutron Count, CPS Secondary Health Alarm – Danger Indication
Detector Types	NaI(Tl): 1.5" x 1.5", 2.0" x 2.0", 3.0" x 3.0" LaBr ₃ / CeBr ₃ : 1.5" x 1.5", 2.0" x 2.0" GM Tube: Gain Compensated Geiger-Muller Detector Solid State Neutron: 4 cm ² active area, 20% thermal N eff., γ rej. 1:107

Library	ANSI, ANSI+ 2015, Medical, Industrial, User Defined
Reach-Back Tool	ANSI N42.42-2012 or CSV Event Data via Email Distribution List or WiFi (Rad Responder)
Application	Android Based Application (PeakAbout) for Smartphones, Tablets. Windows Based application for Command Center integration.
Dimensions (W x D x H)	192 mm x 356 mm x 214 mm
Weight	Standard (NaI, CeBr /LaBr): 6.3 lbs (2.9 kg) High Sensitivity (NaI Only): 9.5 lbs (4.3 kg)
Operating Temperature	-4°F to 122°F
Relative Humidity	10% to 90%, non-condensing
Water/Dust Protection	IP65 Rated, Sprayable for Decontamination
Connectivity	MicroUSB 2.0, WiFi, Bluetooth 4.1 (ANSI N42.42-2012)
PDA Features	Camera: CMOS, 13.0 MP Display: 5" Touch Screen / AMOLED GPS: Built-In with LAT/LONG logging
Speaker	84 dB (1 W / 0.5 m), Waterproof
Package Contents	Power Charger (12 V, 3 A), Vehicle Charging Adapter, Shoulder Strap, Pelican Hard Case, Calibration Certificate (NIST Traceable)

Specifications are subject to change without notice.
For the most up-to-date specifications, please visit www.flir.com

Southern Scientific Limited
Scientific House, The Henfield Business Park
Shoreham Road, Henfield, BN5 9SL, UK
E-mail: info@southernscientific.co.uk
Tel: +44 (0)1273 497600
www.southernscientific.co.uk

