



FEATURES

- Real-time continuous identification due to large detector and unique algorithm
- Reliable ID of shielded/mixed /masked complex scenarios
- Overpasses of a factor of 10 the ANSI N42-34 (2006) ID time or level requirements
- Fully automated self stabilization
- Continuous operation under severe environmental conditions such as extreme temperature shocks
- Rugged aluminum case
- Easy user interface, instant ID pop-up, sound or voice messaging
- GPS integrated, mapping companion software included
- External contamination probe

SpiR-ID Handheld Detection and Identification

The SpiR-ID is a rugged handheld device designed to efficiently search for radioactive materials and “on the fly” threat discrimination, such as illicit trafficking and Radiological Dispersal Devices (RDDs).

It quickly and reliably identifies and categorizes radio-nuclides even for demanding scenarios including heavily shielded or masked threat thanks to a large volume detector associated with the Identpro/SIA algorithm specifically designed for Homeland Security purpose.

Detection and Identification performance exceeds all ANSI N42-34 requirements.

Rugged construction and simple routine user mode are suited for field use in harsh environments.

The SpiR-ID can be used for mobile surveys or for portal alarm assessment.

It is ideally suited for all applications that require efficient detection, search and identification of radiological threats, including military, civil defense, border & customs.

VERSIONS

- SpiR-ID NaI
- SpiR-ID LaBr

health physics

A Mirion Technologies Division

Featuring:



NUCLEAR CHARACTERISTICS

- Detectors
 - SpiR-ID NaI: 3" x 1.5"
 - SpiR-ID LaBr: 1.5" x 1.5" LaBr
 - 2 moderated LiI(Eu) detectors
 - GM tube for high gamma dose rate
- Energy range
 - 25 keV to 3 MeV (gamma)
 - 0,025 eV to 15MeV (neutrons)
- Measurement range
 - <0.01 to 10 mSv/h (1 µR/hr to 1 R/hr)
- Identification
 - fast digital MCA 1024 channels
 - throughput >100 000 cps
 - range <0.01 to >25 µSv/h (137Cs)
 - detection and ID performance overpasses ANSI N42-34, IEC62327, IAEA NSS1 recommendations
- Continuous spectra acquisition and stabilization
 - no need of field calibration
- Continuous count rate analysis versus dynamic background
 - True dose rate calculation by spectra weighting
- Various spectra accumulation mode:
 - sliding / automated / manual

FUNCTIONAL FEATURES

- Large TFT 3.5" VGA (640 x 480) sun readable display
 - trend curve screen with level and ID
 - spectra and ID combined screen
 - event list screen with easy scroll
- Alarm indication
 - sound or voice alarm and chirp
 - vibrator in the handle

- colored LEDs
- progressive alarm based on identification and level
- easy acknowledgment
- safety alarm
- Routine mode / Expert mode
- Embedded GPS
- Data storage: SD card
- Data retrieve and remote operation
- USB link for PC host
- External alpha/beta probe connection

IDENTPRO/SIA IDENTIFICATION ALGORITHM

- Designed for reliable decision with short spectra
- Solves mixed isotopes (up to 8)
- Processes masking scenarios
- Tolerant to shielding
- Category, isotope, confidence level indication

Medical	18F, 51Cr, 67Ga, 99Mo, 103Pd, 111In, 123I, 125I, 131I, 133Xe, 153Sm, 201Tl
NORM	40K, 226Ra + daughters, 32Th + daughters
Industrial	22Na, 54Mn, 57Co, 60Co, 75Se, 106Ru, 133Ba, 134Cs, 137Cs, 152Eu, 154Eu, 166Ho, 207Bi, 241Am
SNM non-expert	U, Pu, 237Np
SNM expert	U, LEU, HEU, 233U, HBPu, MBPu, LBPu, 238Pu, 241Pu, 237Np
Other	Neutron, Bremsstrahlung (ie Beta), Unknown

ENVIRONMENTAL, ELECTRICAL, MECHANICAL CHARACTERISTICS

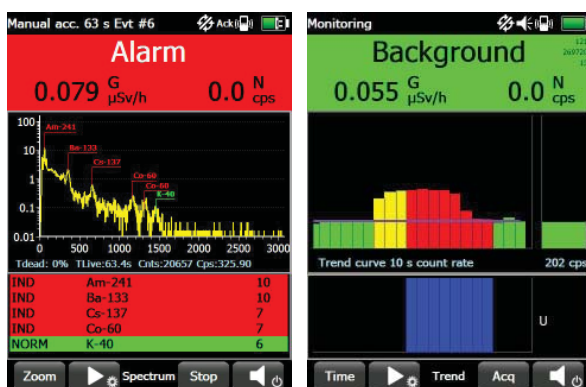
- Temperature range: -20°C to 50°C (-4°F to 122°F); -40°C on request
- Humidity: up to 100%
- Shock, vibration and drop resistant
- MIL461D EMI compliant
- Water and dust ingress IP65
- Electrical:
 - NiMH rechargeable, built-in charger
 - autonomy: typical 10 hours
 - accepts primary batteries for immediate availability
- Dimensions: 320 X 145 X 175 mm³ (12.59 x 5.70 x 6.88 cu in)
- Weight: NaI version 4.9 kg (10.8 lb), LaBr version 3.7 kg (8.15 lb)

ACCESSORIES

- Carrying case, carrying strap
- External main power supply
- SPIR-Companion software

OPTIONS

- Alpha – beta probe
- Embedded GSM / GPRS / Edge / 3G
- Desk and wall holder



SPIR Companion software

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