

Product Datasheet

identiFINDER R225

Spectroscopic Personal Radiation Detector

The identiFINDER® R225 is a rugged, pager-sized Spectroscopic Personal Radiation Detector (SPRD).

Featuring a single 18mm cubic CsI detector with SiPM (G/GN) providing exceptional sensitivity and identification capability. The R225 also has an option for an LaBr(Ce) spectroscopic detector (LG/LGN) for $\leq 3.5\%$ resolution.

The device features the familiar three-button control common to all identiFINDER products. The R225 also complies with ANSI N42.48 SPRD, as well as MSLTD 810g Salt/Fog compliance.

The R225 comes with key features built on feedback of its predecessor the identiFINDER R200 including operating in multiple languages. The screen has been upgraded for increased brightness and added colour to be visible in sunlight and through polarised sunglasses. The holster has been modified to provide quick access to the device and for the screen to be completely visible while holstered. The battery can operate for over thirty hours with hot-swappable backups and built-in Bluetooth, Wi-Fi, and GPS ensure remote data viewing.



Outstanding spectral ability to enable fast front-line detection and response

- Belt-worn gamma and neutron detection and gamma identification.
- Technologically advanced SiPM with CsI to provide $< 7.5\%$ resolution or SiPM with LaBr to provide $< 3.5\%$ resolution.
- Field-proven and trusted template matching algorithms characteristic and present in the entire identiFINDER family of products.

Survives tough missions so you can wear with confidence

- IP67 rated for use in harsh environments or temporary submersion during decontamination.
- MIL-STD 810G (salt/fog) compliant.
- Automatic calibration, stabilisation, and no user maintenance required.

Low training burden for quick field adoption

- Ability to monitor and control remotely using the mobile app (iOS & Android).
- Built in communications and a robust API enable integration with user deployed networks. ANSI N42.42 data output is standard.
- Integration with SIGMA Edge with ATAK coming soon.



Specifications

Technology	
Technology	Spectroscopic personal radiation detector (SPRD)
Gamma Detector – NaI(Tl) (G & GN Models)	(18 mm) ³ Cesium Iodide (CsI) with Silicon Photomultiplier (SiPM)
Gamma Detector – LaBr3(Ce) (LG & LGN Models)	(18mm) ³ Lanthanum Bromide (LaBr3(Ce)) with Silicon Photomultiplier (SiPM)
Neutron Detector – ZnS (G & LGN Models only)	27 mm x 62 mm x 5 mm
Energy Range (Gamma)	25 keV - 3 MeV
Gamma Spectrum	1024 channels; 3 MeV
Gamma Sensitivity (Cs-137)	2.1 cps/urem/h (G & GN models) 1.94 cps/urem/h (LG & LGN models)
Neutron Sensitivity	≥ 2.6 cps/nv (GN & LGN models only)
Gamma Spectrum Length	1024 channels
Dose Rate Range ID Mode (Cs-137)	0.1 µrem/h - 25 mrem/h 1 nSv/h - 250 µSv/h
Dose Rate/Accuracy (Cs-137)	≥ 10 µrem/h – 1 rem/h ± 20%, ≤100 nSv/h – 10 mSv/h ± 20%
Overload Dose Rate Range	25 µrem - 1 R/h 250 µSv/h - 10 mSv/h
Stabilisation	Sourceless gain stabilisation
Linearisation	Real time linearisation of gamma energy
Typical Resolution	≤7.5 % FWHM at 662 keV (G & GN models) ≤3.5 % FWHM at 662 keV (LG & LGN models)
Service Interval	Recommended five-year factory maintenance interval; annual dose rate calibration interval

Sampling and Analysis	
Sample Introduction	Absorption of EM gamma and neutron emissions
Threats	Detects gamma and neutron radiation emitted from natural occurrences in the environment, special nuclear material, industrial, or medical material
Standards Compliance	ANSI N42.32 PRD standard fully compliant ANSI N42.48 SPRD standard fully compliant, including nuclide identification ANSI N42.42 data format standard fully compliant

Sampling and Analysis From a few seconds to minutes

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A LabLogic Group Company

System Interface	
Display and Alerts	Sunlight readable color display, LED alarm indicators, audible
Communication	USB-C, WiFi, Bluetooth (BLE 5.0)
Training Requirements	<10 mins for operator; 1 hour for advanced user
Connectivity	Online mobile app available (Android, iPhone)
Software	On-board webserver software

Power	
Input Voltage	100-240 VAC (wall and car adapters and USB cable supplied)
Battery Specification	Internal single cell Li-ion; operational battery life ≥24h; replaceable back-up CR-123A; operational battery life ≥12h;
Startup Time	≤1 minute from cold start

Environmental	
Operating Temperature	-22 to 122 °F (-30 to 50 °C)
Operating Humidity	0 to 93% RH@35 °C, non-condensing
Storage Temperature	14 to 95 °F (-10 to 35 °C)
Enclosure and Protection	Plastic injection with rubber overmould; protection rating IP67 according to IEC 60529 ; MIL STD 810G (Salt Fog) compliant

Physical Features	
Dimensions (L x W x H)	145 x 56 x 49 mm
Weight	≤406 g

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



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