TELEDYNE FLIR

IDENTIFINDER® R225

Spectroscopic Personal Radiation Detector









The identiFINDER® R225 is a rugged, pager-sized Spectroscopic Personal Radiation Detector (SPRD). The R225 features a single 18mm cubic CsI detector with SiPM (G/GN) providing exceptional sensitivity and identification capability. There is also an option for an LaBr(Ce) spectroscopic detector (LG/LGN) for ≤4% resolution. The device features the familiar three-button control common to all identiFINDER products. The R225 provides ANSI N42.48 SPRD compliance, as well as MIL STD 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 color to be visible in sunlight and through polarized 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.

FAST FRONTLINE DETECTION AND RESPONSE

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 <4% resolution.
- Field-proven and trusted template matching algorithms characteristic and present in the entire identiFINDER family of products.

WEAR WITH CONFIDENCE IN THE HARSHEST ENVIRONMENTS

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, stabilization, and no user maintenance required.

PROVIDE CRITICAL INFORMATION IN REAL TIME

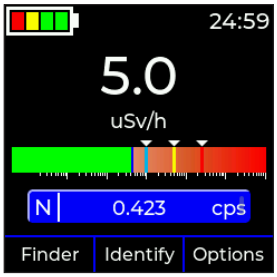
Low training burden for quick field adoption

- 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.

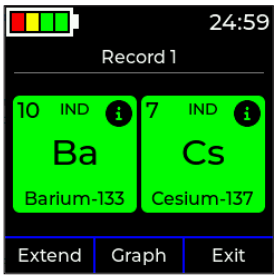
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SPECIFICATIONS

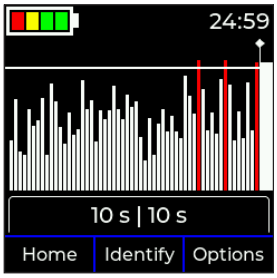
identiFINDER R225	
Technology	Spectroscopic personal radiation detector (SPRD)
Gamma Detector - CsI(Tl) (G & GN Models)	(18mm)^3 Cesium Iodide (CsI) with Silicon Photomultiplier (SiPM)
Gamma Detector - LaBr3(Ce) (LG & LGN Models)	(18mm)^3 Lanthanum Bromide (LaBr3(Ce)) with Silicon Photomultiplier (SiPM)
Neutron Detector - ZnS (GN & 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	≥ 7.5 cps/nv (GN & LGN models only)
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%
Stabilization	Sourceless gain stabilization
Linearization	Real time linearization of gamma energy
Typical Resolution	≤7.5 % FWHM at 662 keV (G&GN models) ≤4 % FWHM at 662 keV (LG&LGN models)
Sampling & 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 & Analysis	From a few seconds to minutes
System Interface	
Display & Alerts	Sunlight readable color display, LED alarm indicators, audible
Communication	USB-C , WiFi, Bluetooth (BLE 5.0)
Training Requirements	<10 mins for operator; 1 day 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 Specs 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 100%
Storage Temperature	14 to 122 °F (-10 to 50 °C)
Enclosure & Protection	Plastic injection with rubber overmold; protection rating IP67 according to IEC 60529 ; MIL STD 810G (Salt Fog) compliant
Physical Features	
Dimensions (L x W x H)	5.7 x 2.2 x 1.9 in (14.5 x 5.6 x 4.9 cm)
Weight	≤0.89 lb (406 g)
Weight	≤0.89 lb (406 g)



Dose Rate Mode



Radioisotope Identification



Neutron Detection

Specifications are subject to change without notice.
For the most up-to-date specs, go to www.teledyneflir.com

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Revised on 01/24/25
identiFINDER R225_Datasheet-LTR 24-0516