



HIGHLY SENSITIVE, SOURCELESS HANDHELD RIID

FLIR identiFINDER® R440

The FLIR identiFINDER® R440 is a lightweight, sourceless radioisotope identification device (RIID) that delivers sensitive detection and fast results for routine survey or secondary screening response missions. The 2x2 NaI (sodium iodide) detector responds to radiological threats from farther away, behind heavier shielding, and with better resolution than similarly-sized RIIDs. The extended energy range provides neutron indication. Its light weight makes single-handed operation easy on extended operations, while the IP67-rated enclosure is built to survive. The bold, easy-to-read interface with 360° EasyFinder™ mode expedites decision-making to keep personnel and the community safe

www.flir.com/r440



SMALLEST, LIGHTEST RIID WITH 2X2 NAI DETECTOR

Accurate identification and faster time to alarm

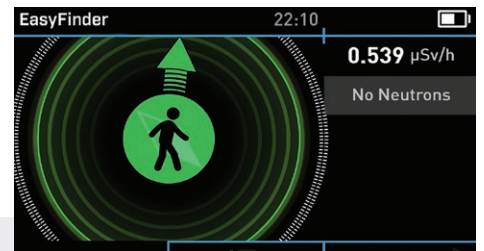
- 3.5 times more sensitive with 10% better resolution than comparatively sized RIIDs
- High dose rate range provides stability and accuracy even in high dose rate environments
- Two models: gamma only (with neutron indication); gamma and neutron detection and measurement
- Sourceless stabilization improves data collection, reducing false positives



RUGGED, IP67-RATED ENCLOSURE

Built to survive fast-paced, rigorous missions

- Protected from total dust ingress and water immersion (rain, splashing and accidental submersion) up to 1 meter in depth for up to 30 minutes
- ANSI N42.42 and ANSI N42.34 compliant
- Drop-tested up to 1 meter
- Completely enclosed crystal provides enhanced ruggedization



STATE-OF-THE-ART USER FEATURES

Clear results and enhanced communications keep responders and the community safe

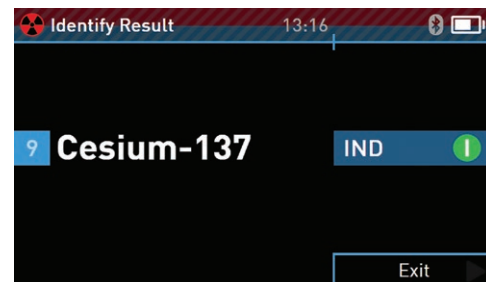
- 360° EasyFinder mode collects and interprets data and then pinpoints the exact location of source for user
- Built-in wireless communications
- Built for interagency standardization - common user interface provides familiarity for users of any identiFINDER product

SPECIFICATIONS

General		idf R440
Technology		Radioisotope identification device (RIID)
Gamma - NaI(Tl)		2.0 x 2.0 in (51 x 51 mm)
Gamma / Neutron - NaI (optional)		2.0 x 2.0 in (51 x 51 mm)
Energy Range (Gamma)		10 keV to 10 MeV
Gamma Sensitivity (Cs-137, NaI)		1850 cps/μSv/h
Gamma Spectrum Length		1024 channels
Dose Rate Range (Cs-137, NaI)		10nSv/h - 10mSv/h (1μrem/h - 1rem/h) / ±30 %
Dose Rate Range ID Mode (Cs-137, NaI)		10nSv/h - 250μSv/h (1μrem/h - 25mrem/h)
Overload Dose Rate Range (Cs-137, NaI)		10mSv/h - 500mSv/h (1rem/h - 50rem/h)
Stabilization		Sourceless gain stabilization (patents pending)
Linearization		Real-time linearization of gamma energy
Typical Resolution		≤ 7% FWHM at 662 keV with NaI detector at 20 °C
Service Interval		1 year factory maintenance suggested, not required
Sampling & Analysis		
Sample Introduction		Absorption of EM gamma (NaI) or gamma and neutron emissions (NaI)
Threats		Detects neutron or gamma radiation emitted from natural occurrences in the environment, special nuclear material, industrial, or medical material
Nuclide Identification		According to ANSI N42.34
Library Categories		SNM, IND, MED, NORM
Time to Alarm		From a few seconds to minutes
System Interface		
Display & Alerts		Transflective color LCD / 3" (2.72" x 1.61") Color TFT Display, Resolution: 800 x 480 pixels
Communication		USB 2.0, USB OTG; Bluetooth® Class 2.0 ≤10m range (removable); WiFi 802.11 g/n
Data Storage		32GB internal memory
Training Requirements		<10 mins for operator; 1 day for advanced user
GPS (removable)		12-channel SiRF III receiver
Software		On-board webserver software

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

Power	
Input Voltage	100-240V AC (wall adapter and USB cable supplied)
Battery Specs	Supplied: 2x rechargeable Li-Ion smartpacks and 1x 4x AA pack; ≤6h runtime with one Li-Ion smartpack, ≤12h with both Li-Ion; runtime of ≤4h with AA battery pack (Li-Ion); Optional rechargeable NiMH ion smartpack with ≤5h runtime; recharge ≤4h when using AC; recharge >4h when using USB; run times specified are obtained with a mix of Dose Rate, Finder, and ID operating mode
Cold Start Time	<2 mins from cold start
Environmental	
Operating Temp (ambient)	-4 to 122 °F (-20 to 50 °C)
Operating Humidity	10 to 80%
Storage Temp	14 to 95 °F (-10 to 35 °C)
Physical Features	
Dimensions (W x L x H)	≤ 4 x 10.6 x 3.7 in (10.2 x 26.9 x 9.4 cm) - with battery
Weight	≤3.2 lbs (≤1.5 kg)
Enclosure & Protection	Aluminum housing; protection rating IP67 according to IEC 60529



Common user interface with clear results

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