

# FLIR identiFINDER R425

## Next Generation Radionuclide Identification Device



The **FLIR identiFINDER R425** is the next generation of the most deployed radionuclide identification device (RID), offering 360-degree coverage so you can locate and measure radioactive sources with confidence. It builds on FLIR's trusted algorithms with advanced heuristics and hybrid identification techniques. With the familiar identiFINDER user interface and 3-button control, you can operate the R425 quickly, communicate results, and take command of any situation, in any environment, remotely. When other systems fail in extremely high gamma fields, the FLIR identiFINDER R425 provides pinpoint accuracy and remains fully operational. The identiFINDER R425 goes the distance with balanced ergonomic design, unparalleled ruggedness, flexible power management, and usability. The R425 provides an ideal balance of size, weight, and performance for various missions including surveying, emergency response, and environmental monitoring.



### BETTER DETECTION IN ALL DIRECTIONS

With over 25,000 deployed RIDs, the R425 builds on a solid legacy of performance in every way

- New cubic detector design allows for high performance in all directions
- 3x more sensitive gamma detection (G)
- 2x more sensitive neutron detection (GN)
- Advanced heuristics and hybrid identification techniques
- Sourceless stabilization
- 15% lighter weight than previous generation



### POWER THROUGH YOUR MISSION

Unparalleled ruggedness, flexible power management, and usability to go the distance

- Internal battery lasts up to 12 hrs; additional power options include disposable or rechargeable batteries that are hot swappable and user-replaceable
- Ready in  $\leq 20$  seconds from cold start
- Fully enclosed solid-state detector
- IP67-rated
- Balanced, ergonomic design
- Sunlight readable screen; visible through polarized glasses



### SITUATIONAL AWARENESS AND SUPPORT

R425 makes it easier than ever to quickly communicate results, no matter the method

- Established FLIR GUI and 3-button control
- Remote data viewing, operation, and reach back
- Dual USB-C ports and FLIR's trusted web interface
- FLIR RAD Mobile App
- Universal API enables integration with user deployed networks (Mobile Field Kit, ATAC, Sigma Edge, Safe Environment Gateway, etc.)
- Built-in Bluetooth and GPS

# identiFINDER R425

## SPECIFICATIONS

<b>Model Number</b>	<b>FLIR R425</b>
Technology	Radionuclide identification device (RID)
Gamma Detector - NaI (TI)	1.77 x 1.77 x 1.77 in (45 x 45 x 45 mm) cubic detector with silicon photomultiplier (SiPM)
Neutron Detector - ZnS (GN model only)	27 x 58 x 5 mm moderated panels (2 each)
Energy Range (Gamma)	25 keV - 3 MeV
Gamma Sensitivity (Cs-137)	1610 cps/µSv/h
Neutron Sensitivity	> 4 cps/nv
Gamma Spectrum Length	1024 channels
Dose Rate Range (Cs-137)	10 uR/Hr – 100 R/Hr (100 nSv/h – 1 Sv/h) ± 10 % (Cs137)
Dose Rate Range ID Mode (Cs-137)	0 uR/Hr – 5 uR/Hr (0 nSv/h - 50 uSv/h)
Overload Dose Rate Range	5 mR/Hr – 1 R/Hr (50 uSv/h - 10 mSv/h)
Stabilization	Sourceless gain stabilization
Linearization	Real time linearization of gamma energy
Typical Resolution	≤ 7% FWHM at 662 keV (20°C)
Service Interval	5-year factory maintenance

### 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 Identification	From a few seconds to a few minutes

### System Interface

Display & Alerts	2.7" diagonal (400x240 pixels) screen; sunlight readable; visible through polarized glasses
Communication	USB-C (2x), Bluetooth (BLE 5.0)
Data Storage	8 GB internal memory
Training Requirements	<10 mins for operator; 1 hour for advanced user
Software	On-board webserver software
Data File Format	According to ANSI N42.42

### Power

Input Voltage	100-240V AC (wall adapter and USB C cable supplied)
Battery Specifications	Internal Li-ion cells; additional user-selectable external battery (1 each 16650 Li-ion or 2 each CR123) ; hot-swappable
Cold Start Time	≤ 20 seconds from cold start

### Environmental

Operating Temp (ambient)	-22 to 140°F (-30 to 60°C)
Operating Humidity	10 to 93%, non-condensing
Storage Temp	14 to 95 °F (-10 to 35°C)

### Physical Features

Dimensions (L x W x H)	9.3 x 3.9 x 3.7 in (235 x 100 x 95 mm)
Weight	≤2.6 lbs (≤1.2 kg)
Enclosure & Protection	Injection molded housing with overmold; rating IP67 according to IEC 60529

