



identiFINDER[®] R500

Highly Sensitive Handheld Spectroscopic Detection & Identification

The FLIR identiFINDER R500 is the most sensitive radio-isotope identification device (RIID) available and is capable of rapidly locating and identifying radioactive material in difficult monitoring scenarios. Like other identiFINDER R-series products, the R500 contains on-board Bluetooth®, web server, and GPS technologies. It produces rapid alerts that expedite response measures and enable field operators to make a next step determination. The common operating interface and template matching technology provides immediate comfort and confidence when using the device. The additional detector volume allows the R500 to identify radioactive material where other instruments cannot. When large areas need to be screened rapidly or truck and cargo scanned for shielded sources, the identiFINDER R500 provides superior sensitivity and performance.



CUSTOM APPLICATIONS

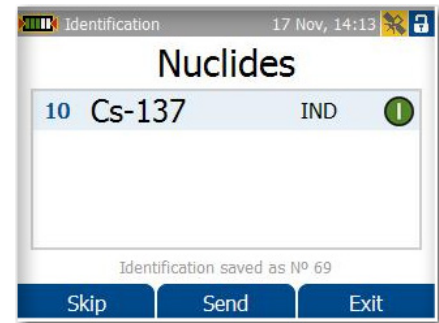
- Truck and cargo checks
- Large area scanning
- Locate and identify shielded sources
- Critical infrastructure security

FEATURES & BENEFITS

- Detects radiation source within a few seconds
- Gamma and neutron detection
- Identifies ANSI N42.34 library
- Rugged (1.0-m drop tested)
- High resolution and low false alarms
- Rapid visible, audible, and tactile alerts
- Fast, two-minute start up
- 5 year factory maintenance

Specifications

| idf R500 | |
|--------------------------------|---|
| TECHNOLOGY | |
| Technology | Radioisotope identification device (RIID) |
| Product Variants | ULCS-NG ¹ , ULCS-NGH ² , UL-LGH ³ , UL-LG ⁴ |
| Gamma (NaI) ^{1,2} | 4.0 x 0.7 in (102 x 19 mm) |
| Gamma (LaBr3) ^{3,4} | 1.5 x 1.5 in (38 x 38 mm) |
| Neutrons (He-3) ^{2,3} | 0.7 x 4.2 in (19 x 106 mm) |
| Gamma (High Dose Rate) | Geiger-Müller |
| Energy Range (Gamma) | 20 keV – 3 MeV |
| Corrections | Real-time linearization of gamma spectrum |
| Gamma Spectrum | 1024 channels; 3 MeV |
| Dose Rate / Accuracy (Cs-137) | 0.000 nSv/h – 1.00 mSv/h (0 nrem/h – 100 mrem/h) / ±30 % |
| Scintillator Dose Rate Range | 0 nSv/h - 50 µSv/h (0 nrem/h - 5.0 mrem/h) |
| Geiger-Müller Dose Rate Range | 10 µSv/h - 1.0 mSv/h (1.0 mrem/h - 100 mrem/h) |
| Dose Range | 0 µSv - 1 Sv (0 µrem - 100 rem) |
| Overload Dose Rate Range | 1 mSv/h - 10 mSv/h (100 mrem/h - 1.0 rem/h) |
| Neutron Sensitivity | Variants ^{2,3} : 9 cps/nv; ±15 % |
| Stabilization | Calibration source; LED |
| Typical Resolution | Variants ^{1,2} : ≤8 % FWHM; Variants ^{3,4} : 3.5% FWHM at 662 keV |
| Service Interval | 5 year factory maintenance |
| SAMPLING & ANALYSIS | |
| Sample Introduction | Absorption of EM gamma or neutron emissions |
| 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 |
| Sampling & Analysis | From a few seconds to minutes |
| SYSTEM INTERFACE | |
| Display & Alerts | Transflective color LCD |
| Communication | USB 2.0; mini-B socket; Bluetooth® Class 2.0, ≤10m range (removable) |
| Data Storage | 2GB internal memory; up to 600,000 spectra |
| Training Requirements | <10 mins for operator; 1 day for advanced user |
| GPS (removable) | 12-channel SiRF III receiver |
| Software | On-board webserver software |
| POWER | |
| Input Voltage | 100-240 VAC (wall and car adapters and USB cable supplied) |
| Battery Specs | FLIR powerPACK ultra 2 (LSD NiMH, rechargeable): ≥8h operational battery life; recharge ≤4h when using AC; recharge >4h when using USB |
| Cold Start Time | <2 mins from cold start |
| ENVIRONMENTAL | |
| Operating Temp | -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 (L x W x H) | 8.3 x 5.1 x 12.7 in (21.1 x 12.9 x 32.3 cm) - with battery |
| Weight | ≤6.4 lbs (≤2.9 kg) |
| Enclosure & Protection | Aluminum housing; protection rating IP54 according to IEC 60529 |



HEADQUARTERS
FLIR Systems, Inc.
27700 SW Parkway Ave
Wilsonville, OR 97070

DETECTION SALES, AMERICAS
FLIR Detection, Inc.
2800 Crystal Drive, #330
Arlington, VA 22202
Phone: +1-877-692-2120
detection@flir.com

DETECTION SALES, APAC
FLIR Detection, Inc.
3 Pickering Street #03-49
Nankin Row
Singapore - 048660
Phone: +65-6822-1596
detection@flir.com

DETECTION SALES, EMEA
FLIR Detection, Inc.
Luxemburgstraat 2
2321 Meer
Belgium
Phone: +32 (0) 3665 5106
detection@flir.com

Vertrieb Deutschland



Siegrist GmbH
An der Tagweide 6
76139 Karlsruhe
Fon +49 721 6252650
E-Mail info@siegrist.de

www.flir.com
NASDAQ: FLIR

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2015 FLIR Systems, Inc. All rights reserved. (Updated 09/15)