

radHUNTER[®]

Enhanced Hand-Held Radionuclide Identification Device

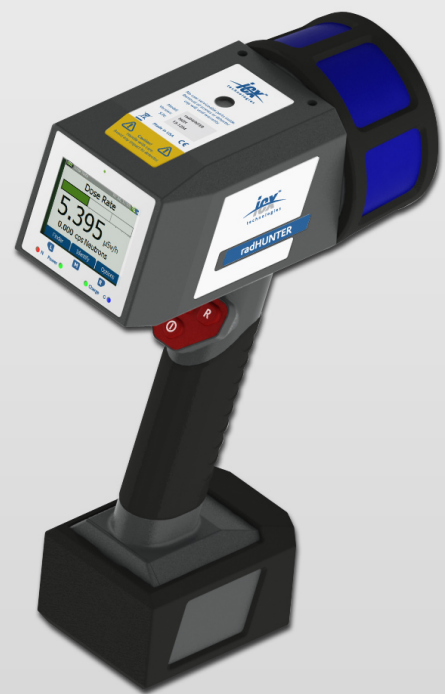
The radHUNTER is an extremely sensitive and accurate digital hand-held gamma radionuclide identification device (RID). It is the culmination of over eight years of development of micro-miniature, digital signal processing electronics; operating power conservation; and advancements in the scintillation detector, radionuclide template matching identification algorithm. The radHUNTER development was supported in part by the U.S. Government.

Fast Detection and Identification

The radHUNTER is able to quickly detect, rapidly locate, accurately measure and precisely identify sources of contamination from their gamma radiation signature. The radHUNTER uses a 0.75" thick by 4" diameter NaI(Tl) detector. This large cross section provides an excellent source to background ratio which rapidly locates gamma contamination. It comes with a GM tube for high gamma dose rate measurements and an optional sealed ³He detector with moderator for neutron detection. Each instrument is supplied in a carrying case with belt holster, wrist strap, battery pack and recharging unit.

Reliable and Accurate

The radHUNTER operating system and user interface is based on the proven identiFINDER 2 technology. The radHUNTER has been developed to correct for environmental conditions and other influences during field operation. The instrument performs an automatic calibration verification while powered up using intrinsic radiation and it is continuous stabilized during operation.



FEATURES

- Rapidly determine the primary location of the radiation
- Fast nuclide identification
- Alarms on dose rate changes above background
- Continually stabilizes for temperature and other conditional changes
- 12 channel, SiRF III GPS
- Reach-back via Bluetooth[®] connected to DUN capable cell phone
- ANSI N42.42 output format
- Web Interface for monitoring and configuring instrument
- Transflective color display
- Visible, audible and tactile alarm annunciators
- Embedded Windows CE operating system
- User interface based on identiFINDER 2
- Expert Mode and Easy Mode

SPECIFICATIONS

INPUT/OUTPUT

USB	micro USB connector, USB 2.0
Bluetooth	Class 2.0; ≤10 m (32'9.7") range
GPS	Built-in GPS, 12 channels. SiRF III receiver

PHYSICAL

Dimensions (W × D × H)	123 mm (4.843") × 194 mm (7.638") × 308 mm (12.126")
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Mass	2.9 kg (6.28 lb)
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Housing Material	Aluminium
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ENVIRONMENTAL

Operating Temperature	-20 °C – +50 °C (-4 °F – 122 °F)
Relative Humidity	10 % – 80 %; Non Condensing
Rapid Temperature Change	Sudden temperature change must not exceed 30 °C in order to avoid damage to the detector crystal
Shock	According to ANSI N42.34

PERFORMANCE

Energy Range (Gamma)	20 keV – 3 MeV
Corrections	Online linearization of scintillator spectra
Spectral Data Storage	≥1 GB on SD Card
Channel storage	1024
Dose Rate Range	0.01 μSv/h – 1 Sv/h
Dose Range	0.1 μSv – 1 Sv
Sensitivity (¹³⁷ Cs)	>2900 cps per μSv/h
Neutron Sensitivity *1	11 cps/nv
Stabilization	LED and ²³⁷ Cs
Stabilization Accuracy	±1 % for temperature change rate 0.5 °C (0.9 °F)/min

BATTERY

Type	NiMH rechargeable
Capacity	4 × 2200 mAh
Operating Time	≥8 h in Dose Rate Mode

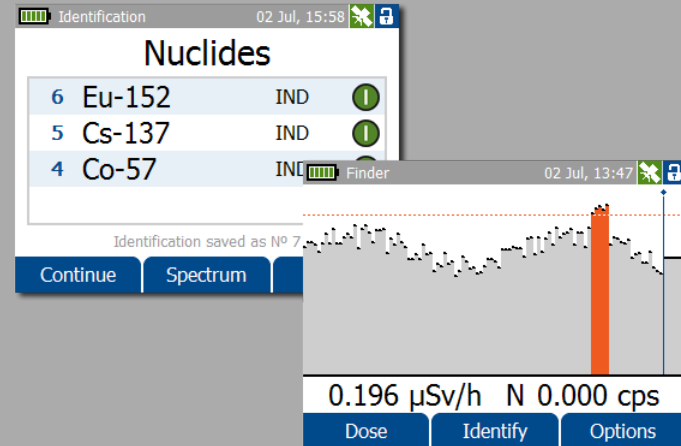
DETECTORS

Gamma Detector (Dia. × L)	4 " × 0.75 "
Typical Resolution	≤8 % @ 662 keV
Gamma	GM tube
³ He Neutron Detector *1	0.75 " × 3 " ; 8 atm; surrounded by polyethelene moderator

DISPLAY

Type	Transflective, TFT, true color
Size	68 mm (2.701"); 320 pixel × 240 pixel

Complete specifications available on request.



VARIANTS

Following variations of this device are available. Specifications differing for the variants are marked in the table.

- *1 radHUNTER ULCS NGH Grey Housing.
4" × 0,75" NaI detector, GM tube, ³He tube.
- *2 radHUNTER ULCS NG Grey Housing.
4" × 0,75" NaI detector, GM tube.

For situations not covered by these variants please contact our Marketing and Sales Department at the email address or phone number listed below.

Sales Europe, Asia, Africa and Oceania

FLIR Radiation GmbH
Piepersberg 12
42653 Solingen, Germany
T + 49 212 222090
F + 49 212 201045

Sales North and South America

ICx Radiation Inc.
100 Midland Road
Oak Ridge, TN 37830, USA
T + 1.865.220.8700
F + 1.865.220.7181



www.flir-radiation.com