



## SPECTROSCOPIC PERSONAL RADIATION DETECTOR

# FLIR identiFINDER<sup>®</sup> R200

FLIR identiFINDER R200 instruments are rugged, pager-sized Spectroscopic Personal Radiation Detectors (SPRD). They provide full ANSI N42.32 Personal Radiation Detector (PRD) compliance and feature next-generation solid state detector read-out technology that delivers ANSI N42.48 SPRD compliance with nuclide identification. The R200-G detects and identifies gamma radiation and the R200-GN additionally provides neutron detection capability. Law enforcement agencies and first responders use the R200 during routine traffic stops or high visibility events and in mass transit or critical infrastructure entry control points. The OneTouch Reachback™ feature uses the latest advancements in Bluetooth® and web server technologies to provide large-scale situational awareness by alerting others before arriving on-scene. The clear user interface and simple data presentation common to all identiFINDER products allow the R200 to quickly integrate with existing operational protocols and reduce training burdens.

[www.flir.com/R200](http://www.flir.com/R200)



### CONFIDENT, BELT-WORN GAMMA AND NEUTRON DETECTION

Outstanding spectral ability to enable fast front-line detection and response

- Fully ANSI N42.42 and ANSI N42.48 compliant for gamma identification performance
- Technologically advanced SiPM with CsI to provide <7.5% resolution
- Field-proven and trusted template matching algorithms shared with the rest of the identiFINDER line
- Two models available: gamma detection and ID (R200-G) and gamma detection and ID + neutron detection (R200-GN)



### RUGGED, IP67 AND MIL-STD 810G RATED ENCLOSURE

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
- Weighs less than 1 lbs. and is 1.5m drop-tested on all six sides
- No user maintenance
- Automatic calibration and stabilization



### EASY THREE-BUTTON CONTROL EMPOWERS OPERATOR

Low training burden for quick field adoption

- Easy to interpret results and interface designed to align with typical operating procedures
- Clear memory display outperforms competition in all lighting conditions
- OneTouch Reachback™ and intuitive mobile app provide large-scale situational awareness by allowing operators to send immediate notifications with the single push of a button

## SPECIFICATIONS

### identiFINDER R200 (G and GN models)

Technology	Spectroscopic personal radiation detector (SPRD)
Gamma (CsI)	(18mm) <sup>3</sup> Cesium Iodide (CsI) with Silicon Photomultiplier (SiPM)
Gamma/Neutron (ZnS)	27 mm x 62 mm x 5 mm (GN model only)
Energy Range (Gamma)	25 keV - 3 MeV
Gamma Spectrum	1024 channels; 3 MeV
Gamma Sensitivity (Cs-137, CsI)	3 cps/urem/h
Neutron Sensitivity	≥ 2.6 cps/nv (GN model only)
Dose Rate / Accuracy (Cs-137)	≤ 100 nSv/h – 250 μSv/h (≤ 10 μRem/h – 25 mRem/h); ± 20%
Typical Resolution	≤ 7.5 % FWHM at 662 keV
Service Interval	Recommended five-year factory maintenance interval; annual dose rate calibration interval

### 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	Memory LCD black and white display
Communication	USB 2.0; mini-B socket; Bluetooth® ≤ 10m range (removable)
Data Storage	30MB internal memory; up to 5000 spectra
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 ≥ 36h; replaceable back-up CR-123A: operational battery life ≥ 18h; Recharge time ≤ 6h when using AC or USB power source
Startup Time	< 2 mins from cold start

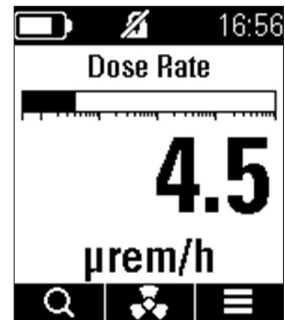
### Environmental

Operating Temperature	-22 to 122 °F (-30 to 50 °C)
Operating Humidity	93% RH @ 35 °C non-condensing
Storage Temperature	14 to 95 °F (-10 to 35 °C)
Enclosure & Protection	Plastic injection with rubber overmold; protection rating IP67 according to IEC 60529; MIL STD 810G (Salt Fog) compliant

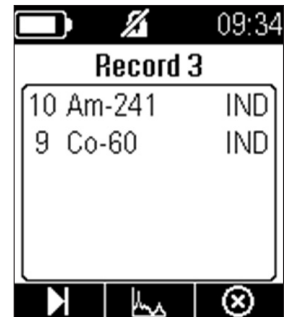
### Physical Features

Dimensions (L x W x H)	5.7 x 2.2 x 1.9 in (14.5 x 5.6 x 4.8 cm)
Weight	≤ 0.88 lb (0.4 kg)

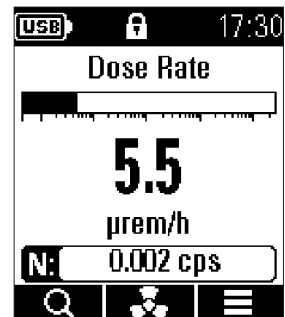
Specifications are subject to change without notice.  
For the most up-to-date specs, go to [www.flir.com](http://www.flir.com)



Dose Rate Mode



Radioisotope Identification



Neutron Detection

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20-0749-DET-DET-R200 Datasheet LTR



The World's Sixth Sense®