

G/GN Versions
identiFINDER R200

Spectroscopic Personal Radiation Detector



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 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.



CONFIDENT, BELT-WORN GAMMA AND NEUTRON IDENTIFICATION

Outstanding spectral ability to enable fast frontline detection and response

- Fully ANSI N42.42 and ANSI N42.48 compliant for 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 only (R200-G) and gamma/neutron (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

identiFINDER R200

SPECIFICATIONS

Technology

Technology	Spectroscopic personal radiation detector (SPRD)
Gamma (Csl)	(18mm) ³ Cesium Iodide (Csl) 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, Csl) 3 cps/urem/h
Neutron Sensitivity	≥ 2.6 cps/nv (GN model only)
Dose Rate / Accuracy (Cs-137)	≤100 nSv/h – 250 μSv/h (≤10μRem/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 emissions
Threats	Detects gamma 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
GPS (removable)	66-channel MediaTek MT3329 receiver; sensitivity ≥165 dBm
Software	On-board webserver software

Power

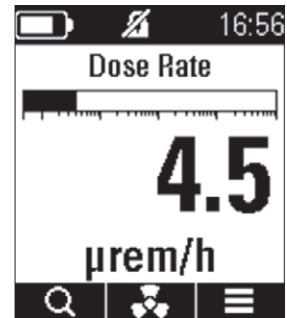
Input Voltage	100-240 VAC (wall and car adapters and USB cable supplied)
Battery Specs	Internal single cell Li-ion; operational battery life ≥36h; replaceable back-up CR123A with ≥18h operational battery life; recharge time ≤6h when using AC or USB power source
Cold Start Time	<2 mins from cold start

Environmental

Operating Temp	-22 to 122 °F (-20 to 50 °C)
Operating Humidity	93% RH @ 35 °C (non-condensing)
Storage Temp	14 to 95 °F (-30 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

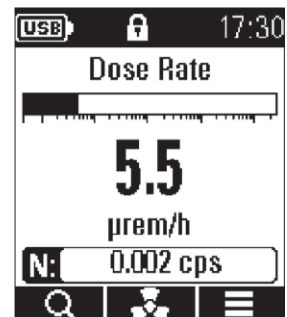
Dimensions (L x W x H)	5.7 x 2.2 x 1.9 in (14.5 x 5.6 x 4.8 cm)
Weight	≤0.88 lb (0.4 kg)



Dose Rate Mode



Radioisotope identification



Neutron Detection

