



**Thermo Scientific RadEye SPRD**  
Personal Radiation Detector

- Locate and Identify Radioactive nuclides
- Only pager sized NBR radiation detector
- Built for real-life

**Definitive answers**  
through pin-point accuracy

# Thermo Scientific RadEye SPRD

## Personal Radiation Detector

When the threat is real, you need quick and accurate identification.

The Thermo Scientific™ RadEye™ SPRD Spectroscopic Personal Radiation Detector helps you locate and identify radioactive nuclides such as those employed in nuclear weapons and dirty bombs in a pager sized PRD.

### SMART ALARM INTERPRETATION

- Automatically and quickly distinguish between threatening and non-threatening radioactive sources
- Provides neutron presence indication as standard with the base RadEye SPRD

### BUILT FOR REAL-LIFE

- Can be worn in holster on standard service belt
- Does not interfere with sitting or squatting
- Small and lightweight
- Long battery life
- Rugged, drop resistant construction

### HIGH VALUE

- Numerous accessories and add-ons such as contraband detector or rapid deployable area monitor kit
- Same rugged and proven design as full RadEye family simplifies adoption
- Leverage our high volume RadEye production and the latest cost effective technology



#### Easy-mode Operation

Easy mode simplifies responding with the device for infrequent users. It quickly guides you through the next steps after an alarm.

## Natural Background Rejection

NBR is a technology used to eliminate fluctuating natural background levels while measuring radiation. This proprietary and patented technology is used to quickly differentiate between natural and artificial radiation by stripping away any natural background radiation that is registering, delivering you a more accurate result of artificial radiation levels.

The RadEye SPRD offers the next generation of NBR. The added fidelity of the new multi-channel NBR algorithm provides higher sensitivity to positively differentiate between natural and man-made radiation during search and find operation and better detection performance against masked isotopes. Once an alarm indicates the presence of significant gamma radiation the RadEye SPRD can automatically switch into radionuclide identification mode for immediate analysis. The editable trigger list allows users to select nuclides of concern from a list that includes all in the ANSI N42.48 standard. Users may also define custom subsets based on their areas of interest such as medical or industrial applications.



Our Lutetium test adaptor ensures quick and reliable performance verification



### Law enforcement, border guards and special forces

The SPRD is ideal for primary inspection of its surroundings and provides basic secondary inspection, allowing users to quickly adjudicate the most common alarms such as distinguishing medical

patients from RDDs or crates of bananas from orphaned sources.

Law enforcement officers can take advantage of its small, wearable size and its affordability to provide a sensitive and significant network of sensors to locate radiation. Rapidly determine identity and type of radiation, providing key information faster to determine if HAZMAT or CBRN teams are needed.






### Metal recyclers

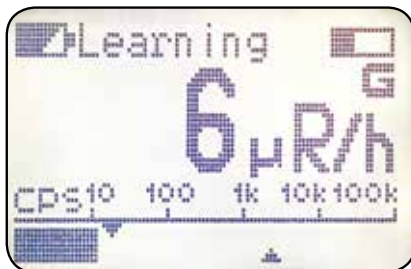
Detect, locate and identify orphan radionuclides in your incoming scrap material.



## Specifications and ordering information

Model	 RadEye SPRD	 RadEye SPRD-GN	 RadEye SPRD-H
<b>Radiation detected</b>	Gamma	Gamma Neutron	Gamma
<b>Detector</b>	CsI	CLYC (Cs2LiYCl6)	CeBr3
<b>Energy resolution (662 keV)</b>	7.5%	7.5%	4%
<b>cps per <math>\mu\text{Sv/h}</math> (662 keV)</b>	100	110	170
<b>ID-time @ <math>1\mu\text{Sv/h}</math></b>	< 5 min	< 5 min	< 2 min
<b>Detection from</b>	40 keV	50 keV	20 keV
<b>NBR (Natural Background Rejection)</b>	good	good	very good
<b>PSD (Pulse Shape Discrimination)</b>	no	Yes	no
<b>Neutron Alarm Response ANSI N42.48-2008</b>	no	Yes (< 2 s)	no
<b>Neutron verification</b>	via prompt gamma	thermal neutrons & fast neutrons	via prompt gamma
<b>Estimated Battery Life</b>	180 hrs	120 hrs	180 hrs
	<p>First Preventers use for both interdiction and personal protection when radiation monitoring is not your primary function.</p> <p>Capable of distinguishing NORM sources such as granite or bananas from artificial sources such as medical, industrial and SNM immediately through advanced NBR. ID capability can fully adjudicate medical patients from threat nuclides.</p> <p>Respond to an emergency at a hospital, alarms that dose rates are high near the blood irradiation area</p>	<p>4 times more sensitive to neutrons compared to RIID devices</p> <p>Ideally suited as primary screening tool at borders, on boats and remote outposts where larger detection systems are not available</p>	<p>Increased sensitivity</p> <p>Higher resolution</p> <p>Can detect and ID hidden, masked and shielded sources</p> <p>Can be used as a secondary screening tool accompanying the PackEye GN-2 backpack radiation detector and as an alternative to a large RIID for source localization and identification</p>

We have an expansive library of radionuclide information. Our easy to read display allows you to quickly set thresholds and identify dose rates.



Our screen continuously shows you dose rate. As we are also monitoring count rate you will be alerted by an audible or vibrating alarm if your count rate suddenly increases suggesting you are facing an immediate threat.



Learn more about SPRD at  
[www.thermoscientific.com/sprd](http://www.thermoscientific.com/sprd)

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**USA, Canada, Mexico, Central & South America** +1 (508) 553 1700 | +1 (800) 274 4212 US toll-free | [customerservice.rmsi@thermofisher.com](mailto:customerservice.rmsi@thermofisher.com)  
**India** +91-22-41578800 | [info.rmsi.india@thermofisher.com](mailto:info.rmsi.india@thermofisher.com)  
**United Kingdom** +44 (0) 1256 693960 | [customerservice.eid.beenham@thermofisher.com](mailto:customerservice.eid.beenham@thermofisher.com)  
**Europe, Africa Middle East & Countries Not Listed** +49 (0) 9131 998-226 | [customerservice.eid.erlangen@thermofisher.com](mailto:customerservice.eid.erlangen@thermofisher.com)  
**China** +86 10 8419 3588 | [info.eid.china@thermofisher.com](mailto:info.eid.china@thermofisher.com)  
**Singapore** +65 6478 9728 | [info.rmsi.singapore@thermofisher.com](mailto:info.rmsi.singapore@thermofisher.com)

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