

# RadEye SPRD Kit

Spectroscopic Personal Radiation Detector



*detection  
monitoring  
identification*

**radiation**



The RadEye™ SPRD KIT bundles a RadEye™ SPRD Spectroscopic Radiation Detector with a compact belt holster, easy to use hardware and software tools for PC-based data review and transfer, and a Lutetium Test Adapter for quick and reliable performance verification all in a compact, robust transportation case ideal for first responders and emergency response teams.

## 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.

## 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 CBR teams are needed.

## Key Features and Benefits

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

# RadEye SPRD



Model	RadEye SPRD	RadEye SPRD-GN
Radiation detected	Gamma	Gamma Neutron
Detector	CsI	CLYC (Cs2LiYCl6)
Energy resolution (662 keV)	7.50%	7.50%
cps per uSv/h (662 keV)	200	200
ID-time @ 100 uR/h (1uSv/h)	< 5 min	< 5 min
Detection from	60 keV	60 keV
NBR (Natural Background Rejection)	good	good
PSD (Pulse Shape Discrimination)	no	Yes
Neutron Alarm Response ANSI N42.48-2008	no	Yes (< 2 s)
Neutron verification	via prompt gamma	thermal neutrons & fast neutrons
Estimated Battery Life	200 hrs	120 hrs

First Responders use for both interdiction and personal protection when radiation monitoring is not your primary function. 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. Respond to an emergency at a hospital, alarms that dose rates are high near the blood irradiation area

4 times more sensitive to neutrons compared to RIID devices

Ideally suited as primary screening tool at borders, on boats and remote outposts where larger detection systems are not available

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.



Our Lutetium test adaptor ensures quick and reliable performance verification

