



Any scenario. Maximum protection.

Radiation detection solutions for
safety and security

Radiation detection solutions for security personnel

Delivering dependable safety and security solutions for over 60 years, we offer the most comprehensive portfolio of products for any industry

Key products

Law Enforcement



RadEye PRD *pg. 3 & 6*
RadHalo *pg. 8 & 10*
PackEye *pg. 7, 8, & 10*
RIIDEye *pg. 7*

Customs & Border Patrol



RIIDEye *pg. 7*
RadEye SPRD *pg. 3, 4, & 10*
RadEye PRD *pg. 3 & 6*

Fire Departments



RadEye G *pg. 4 & 5*
RadHalo *pg. 8 & 10*
RIIDEye X *pg. 7*

Maritime



RadEye SPRD *pg. 3, 4, & 10*
PackEye *pg. 7, 8, & 10*

Military



RadEye SPRD *pg. 3, 4, & 10*
RadHalo *pg. 8 & 10*

Event Planning



RadHalo *pg. 8 & 10*
PackEye GN-2 *pg. 7*
RadEye SPRD *pg. 3, 4, & 10*

We are constantly advancing technology to protect against the threat of radiation and radioactive material with real-time detection and immediate results. From mobile detection devices to mobile and portal detection monitors we have a solution for any scenario.

 To view the full portfolio, visit thermofisher.com/threatdetection

Handheld personal radiation detection instruments

Our portfolio of Thermo Scientific™ RadEye™ handheld radiation meters offers a comprehensive range of solutions for detection, dose rate and contamination measurements. These versatile pocket meters are small, easy to use, utilize low power and deliver superior measurement performance. Fully automated self-diagnosis minimizes required maintenance.

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 the natural background radiation that is registering, delivering you a more accurate result of artificial radiation levels.



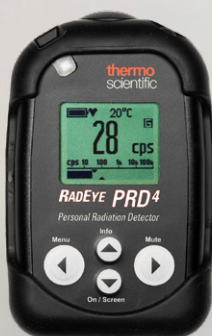
In the Spotlight: RadEye SPRD

During a typical day walking the streets in a busy metropolitan area, an officer receives 5 alarms from his radiation detector. Most radiation detectors require time intensive investigations to determine if the radiation alarm is a true threat. However, with SPRD, the NBR immediately classifies 1 of the alarms as natural radiation from building material. Its identification algorithm automatically identifies 3 of the alarms as medical with the nuclide information, and the remaining alarm as an industrial nuclide, requiring a full investigation.

These added features keep the officer focused on the critical functions of their day because only one of the alarms requires a detailed investigation.

Handheld detection

Natural Background Rejection



Thermo Scientific RadEye PRD4

Basic search and find instrument with NBR to quickly determine if alarms are due to natural or artificial radiation. Ideal for those with secondary identification capability

Who: Customs, counter terrorism, security, military, industrial

Measurement types: Low to medium levels of gamma radiation

Energy range: ($\pm 30\%$) – 58keV to 3.0MeV

Dose rate range: 1 μ R/h -25mR/h (0.01 μ Sv – 250 μ Sv/h)

Features: NBR, Prompt Neutron Gamma Detection, Lutetium Alignment



Thermo Scientific RadEye PRD-ER4

Dual purpose search and find with extended range personal dose rate monitoring. For those whose job may require operating in a high dose rate environment

Who: Fire departments, hazmat teams, counter terrorism, military forces and other first responders who require sensitive search and find as well as operating in high dose environments

Measurement types: Background to critical safety levels of gamma radiation

Energy range: ($\pm 30\%$) – 58keV to 3.0MeV

Dose rate range: 1 μ R/h - 1000R/h (0.01 μ Sv – 10Sv/h)

Features: NBR, Prompt Gamma Neutron Detection, Extended Range, Lutetium Alignment



Thermo Scientific RadEye SPRD

The new standard for personal radiation detection. Accurate dose rate monitoring with search, find and nuclide classification

Who: Security/law enforcement, customs and border guards, counter terrorism teams, industrial applications, and any other users whose mission is to detect and identify illicit radiation

Measurement types: Accurate dose rate readings with identification of gamma radiation

Energy range: 58keV to 3.0MeV

Dose rate range: 1μR/h -25mR/h (0.01μSv – 250μSv/h)

Features: NBR, Full ID capability, Prompt Gamma Neutron Detection, Lutetium Alignment



Thermo Scientific RadEye SPRD-ER

Extended dose rate range combined with search, find, and nuclide ID capability

Who: Specialized response teams, security/law enforcement, CBP

Measurement types: Extended dose rate readings with identification of gamma radiation

Energy range: 58keV to 3.0MeV

Dose rate range: 1uR/h to 1000 R/h (10nSv/hr to 10Sv/hr)

Features: NBR, Full ID capability, Prompt Gamma Neutron Detection, Lutetium Alignment, Extended Range



Thermo Scientific RadEye SPRD-GN

RIID capability in the palm of your hand

Who: Law Enforcement, Military personnel where combined primary and secondary screening is required or ideal: such as event support, maritime investigations and remote border monitoring

Measurement types: Accurate gamma dose rate readings with ID and high sensitivity neutron detection (thermal and fast neutrons)

Energy range: 50keV -3MeV gamma energy range

Dose rate range: 1μR/h-25mR/h (0.01μSv – 250μSv/h)

Neutron energy range: 0.025eV-14MeV

Features: NBR, Full ID capability, True neutron detection and measurement, Lutetium Alignment



Thermo Scientific RadEye GN+

Basic gamma and neutron search and find instrument with NBR to quickly determine if alarms are due to natural or artificial radiation

Who: Ideal for missions where supporting tools are limited, especially those with neutron detectors. Industrial, law enforcement, and first responders who require basic gamma and neutron detection in a single instrument

Measurement types: Accurate Gamma dose rate readings, and Neutron detection (thermal and fast)

Energy range: (± 30%) – 50keV-3.0MeV

Dose rate range: 1μR/h - 25mR/h, (0.01μSv – 250μSv/h)

Neutron detection: Meets ANSI N42.32-2006 (20,000 n/s Ca252)

Features: NBR, True neutron detection and measurement, Lutetium Alignment

Handheld detection



Thermo Scientific RadEye G, G-10, GF and GF-10

Rugged and Reliable basic gamma dose rate survey meter for personal protection

Who: First responders whose job does not require location of hidden sources but may encounter high gamma dose rate environments

Dose rate range: G (G-10): 50µR/h to 10R/h (5µSv/h to 100mSv/h)

Dose rate range: GF (GF-10): 0.5mR/h – 300R/h (5µSv/h – 3Sv/h)

Energy range: G/ GF – 45 keV – 3MeV

Energy range: G-10/GF-10 - 50keV – 3MeV

Gamma sensitivity: G (G-10) – 17cps per mR/h (1.7 cps per µSv/h)

Gamma sensitivity: GF (GF-10) - 1.3cps per mR/h (0.13 cps per µSv/h)



Models available with
ATEX certification for
explosive environments



Thermo Scientific RadEye B20 and B20ER

Multipurpose surface contamination detector for alpha, beta and gamma radiation with configurable dose rate measurements

Who: Post accident first responders to measure surface contamination or quick dose rate surveys, industrial and medical applications

Measurement types: alpha, beta, gamma and X-Ray detection. Optional energy compensated filters for accurate dose rate readings

Dose rate energy range B20: 0-200mrem/h (0-2mSv/h)

Dose rate energy range B20-ER: 0-10rem/h (0-100mSv/h)

Contamination energy range B20: 0-10kcps

Contamination energy range B20-ER: 0-500kcps



Thermo Scientific RadEye SX, PX, and GX

Be prepared for virtually any radiation exposure scenario with multi-purpose survey meters that operate with external Geiger-Mueller (GM), scintillation or proportional counters.

Who: Configurable for security and law enforcement personnel to detect illicit radiation as well as first responders to detect radiation contamination post accident

Measurement types: Probe dependent. Capable of alpha, beta, gamma, neutron and X-Ray detection.

Features:

- 16 different probes configurations can be stored on the instrument
- Automatic recording of 250 alarms and 1500 measured values
- 0-100,000 cps default measuring range

Accessories

Thermo Scientific RadEye Telepole

For safe, convenient detection at a distance

- Fits all RadEye models
- 2.3 meter (7.6 ft) and 4m (13.1 ft) versions available
- Fully adjustable
- Alarm vibration transferred from RadEye to handle
- RadEye automatically stores data for review later
- Live readings from RadEye can be read at the handle with optional Bluetooth transmitter and receiver



Thermo Scientific Probes

Variety and flexibility

- We have numerous probe options for a wide range of applications
- Custom probe kits can be generated upon request to meet your customer needs



Thermo Scientific Holsters

Versatile, rugged and field tested

- We offer a wide range stock or customizable holsters. Backed by the quality of DeSantis, our holsters are rugged enough for any application.
- We can work with your specific needs to design a custom holster to meet your specific needs.



In the Spotlight: Responding to Events

The first responders who help the general public during an accident require a high dose rate capable monitor beyond typical turnback levels (20mR/h) to alert them when they have exceeded their dose. During normal activities, they assist first preventers in large events and require a highly sensitive device to find threats. The RadEye PRD-ER4 delivers the functionality to two devices in one small, portable instrument.

Radiation detection and identification for any scenario

Our range of radiation detection instruments offers you the latest technology and innovation to quickly and efficiently identify radiation sources. For over 50 years we have been providing those responsible for safety and security with dependable radiation detection instruments.

Solutions to meet any organizations' budget



Thermo Scientific™ RadEye™ SPRD
Spectroscopic Personal Radiation Detector



Thermo Scientific™ PackEye GN-2
Radiation Detection Backpack



Thermo Scientific™ RIIDEyeX™-GN
Handhold Radiation Isotope Identifier

Handheld radiation detection

Thermo Scientific™ RIIDEye™

Extraordinary performance and reliability with an unequaled cost of ownership

- Lightweight and balanced for comfortable long term use
- Automatic calibration and rugged design minimizes repairs
- He3 neutron detection performance without He3
- Withstands drops up to 1 meter from every angle
- Intuitive interface for new and seasoned users



• In the Spotlight: Monitoring our ports

A Customs official assigned to monitor incoming cargo gets a radiation hit on a shipment by their portal monitor. The Official leverages his secondary screening process using RIIDEye X, locates and identifies the source in the shipment without entering the cargo container. The large, high sensitivity detector is capable of measuring and identifying sources at longer distances than typical RIIDs.

Mobile detection



Thermo Scientific™ RadHalo™ RDP & FM

Fast, autonomous, reliable radiation detection and identification

- Lightweight and balanced for comfortable long term use
- Automatic calibration and rugged design minimizes repairs
- Optional high sensitivity neutron detector
- Withstands drops up to 1 meter from every angle
- Intuitive interface for new and seasoned users



In the Spotlight:

Simplified cargo scanning

Utilizing a network of RadHalo devices at a border port to inspect cargo eliminates the need for dozens of officers to be trained radiation detection experts. Deploy officers as you normally would and rely on 1 or 2 trained radiation experts to monitor all points and instruct officers if a threat is identified.

Thermo Scientific™ PackEye™ Radiation Detection Backpack

Quickly locate radiation threats

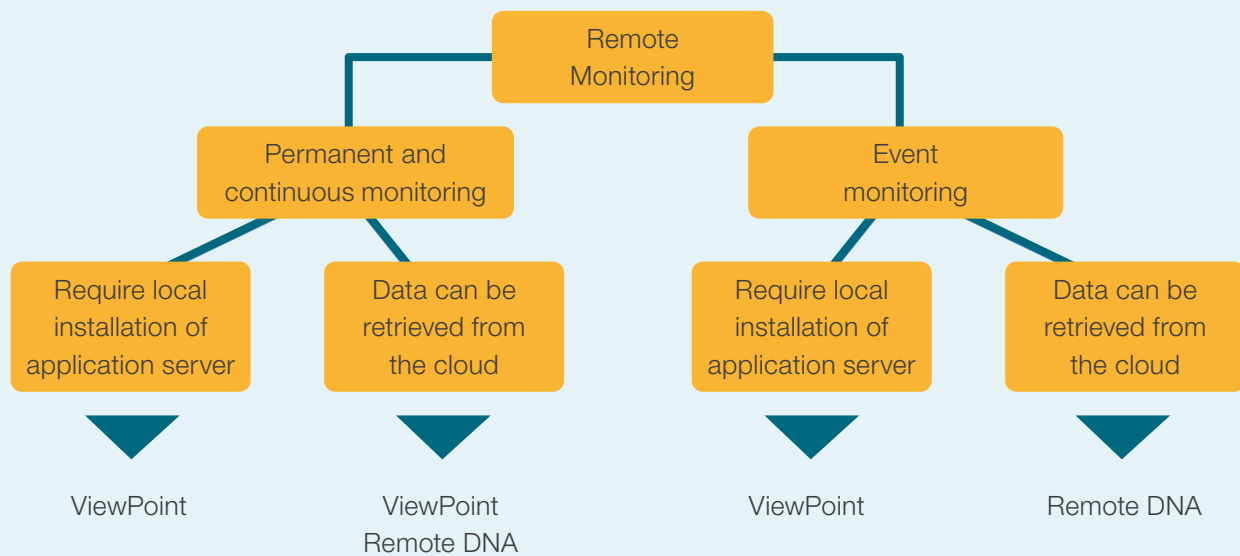
- High neutron sensitivity with either He3 or Li6 based detector option
- Lightweight and simple to use
- Stable product over lifetime with no need for regular optimization or stabilization
- Ideal for field use to quickly locate orphaned or hidden sources
- Optional rugged transport case for mobile and marine vehicle use. Monitor data nearby, in real time, SmartEye Mobile application connected with Bluetooth



Networking and remote monitoring

Flexible solutions to meet your needs
and environment

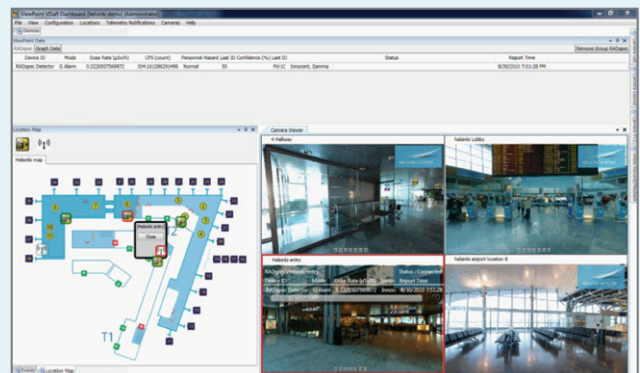
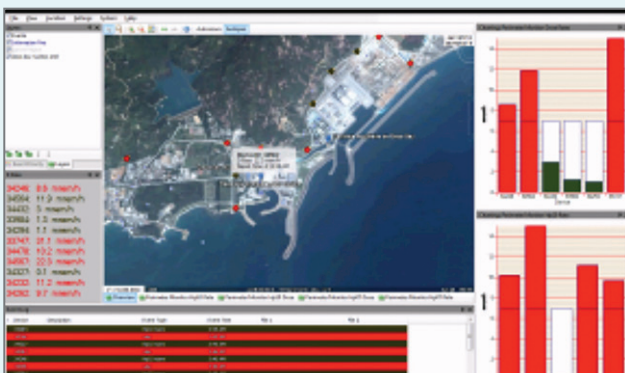
What solution is best for you?

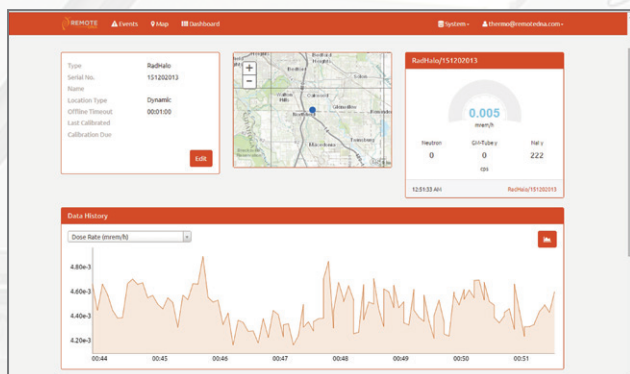


ViewPoint

Ideal for comprehensive comprehensive initiatives and fixed monitoring programs

- Proven implementation with leading agencies
- Unmatched data storage capability and report generation
- Over 90 instruments already in plug-in database





Remote DNA

- Low yearly cost per instrument
- Cloud based solution
- Manage your fleet from your browser (requires all instruments to be internet connected)



In the Spotlight: Radiation threats increase during key events and conventions

Local agencies participate in securing these events. The monitoring starts as a wide net (20 mi) and gets tighter with police forces from different communities working together. Quickly set up your system before the event to share data from RadEye SPRD and RadHalo RDP units deployed at the event entrance and PackEye, RadEye SPRD and MDS on the outskirts of the city. Viewing the data being collected in the Cloud allows teams to rapidly communicate threats easily and automatically.

Thermo Scientific™ RADSafe™ Certified Services

Configurable services tailored to your specific needs

Select from a wide variety of service products to maximize the productivity of your assets while managing the high cost on unplanned maintenance and repair.

- Performance plans for customers who need standard service responses
- Essential plans for when rapid service response and uptime are business priorities

Configure your extended warranty, preventative maintenance, calibration and commissioning and start up services plan and enjoy peace of mind.



Learn more at thermofisher.com/radsafe

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