

Long recognized as providing leading-edge vehicle and portable radiation monitoring solutions to the metal recycling industry, Thermo Scientific's RadEye GR grapple-mounted radiation detection system is the latest application-specific system designed to minimize the threat of radioactive material in the scrap metal stream.

RadEye GR

Wireless Radiation Detection System for Grapple Installation
Second Line of Defence

- Rugged radiation detection and alarm system
- Small size – negligible load capacity reduction
- Enhanced sensitive for low gamma energies
- Superior Value: Small investment & low cost of ownership
- Multiple portable RadEye R display units possible
- Extremely high battery lifetime
- Nearly maintenance free
- Very straightforward installation process
- Simple and comprehensive data logging and reporting
- Only 1 person required for radiation test
- ViewPoint™ centralized real time monitoring option

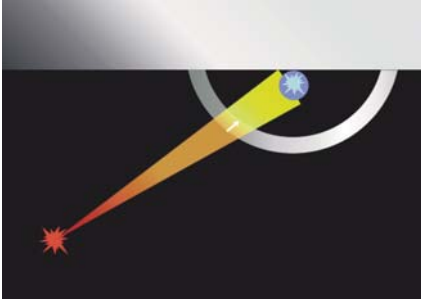


The battery powered receiver RadEye R displays current readings, annunciates alarms and logs data wirelessly whether you are in the cabin of the crane or nearby the grapple. Multiple RadEye R units can receive data from one grapple detector!



The Thermo Scientific RadEye GR is a radiation detection device designed for the extreme forces and harsh conditions experienced when installed in a grapple. While the detector inside the RadEye GR grapple monitor is smaller than the detectors used in a portal monitor at the entrance of a facility it more than makes up any loss in sensitivity as the RadEye GR detector is much closer (law of $1/r^2$ for the radiation field) and the radioactive source is

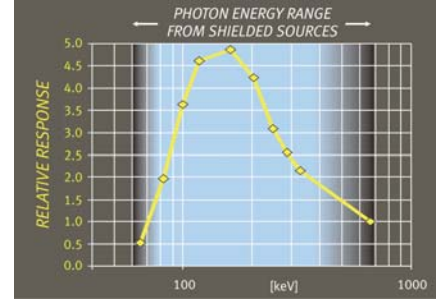
less shielded by the surrounding scrap. Furthermore, the contact time is longer than for a portal monitor which is the other critical element in determining sensitivity. Therefore, the RadEye GR grapple monitor is an extremely powerful tool to detect radioactive threats in the scrap and should be considered for use in addition to the portal monitors already found at most facilities.



The optimized shape and thickness of the detector dome allows even low energetic radiation to cause a significant signal in the detector in comparison to the low radiation background due to the compact detector size.



The RadEye GR detector unit is installed quickly and relatively easily at most of the common grapple types. It's compact size takes a minimum of space and so does not significantly impact the grapple's carrying capacity. Check with us for your installation instructions!



The Thermo Scientific RadEye GR provides superior response to radiation exactly at the energy range of importance to catch shielded radiation sources.



RadEye GR

Detector Unit

Baseplate to be welded to grapple	Diameter 210 mm (8.3")	Weight 5 kg, 11 lbs
Quick exchange protection dome	2 l volume	Weight 5 kg, 11 lbs
Quick exchange sealed scintillation detector	Nal(Tl) with PMT & Shock Absorber	Weight 1 kg, 2.2 lbs

Battery Module and Radio Transceiver (Grapple)

Base plate to be welded to grapple		Weight 8 kg, 17.6 lbs
Quick exchange protection hood		Weight 3 kg, 6.6 lbs
Quick exchange electronic box	4 AA batteries	Operation time 1300 h
Wireless data communication	ZigBee transmitter, 1 mW, Range > 100 m, 328 ft	

Display, Alarm and Data Logger Unit RadEye R

Portable module	2 AAA batteries	Operation time 600 h	Weight is less than 0.2 kg, 0.4 lbs
Alarm annunciation	85 dB in 30 cm distance	High power LED	
Fixing inside the crane cabin	Suction cap, goose neck holder included	No mechanical installation	No electrical wiring required
Internal data logger	RadEye PC-software compliant		
PC – interface	IR (standard) or Bluetooth (option)		

This specification sheet is for informational purposes only and is subject to change without notice. Thermo makes no warranties, expressed or implied, in this product summary.

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