

# RIIDEye TENORM Kit

## Radiation Isotope Identifier & Analyzer



The Thermo Scientific™ **RIIDEye™** is an advanced spectroscopic instrument for isotopic gamma identification of samples including water or soil. The RIIDEye M is multi-configurable and can be paired with a low-background lead shield to operate as a low-level radiological analyzer, ideally suited for quantification of Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) such as Ra226 and Ra228.

### Features and Benefits

- RIIDView software (printable results with supporting spectra data ideal for traceability and archival)
- Patented QCC (for industry's fastest and most accurate identification)
- Patented beaker with lid (for easy sample loading, sealing and removal)
- Autocal thermal stabilization (long-term maintenance free operations)
- Lightweight lead shield for ultra low radioactivity measurements (operations in field or lab)
- Battery or mains supply (operations in field or laboratory)
- Published method supporting data (academic peer review publications)

The Thermo Scientific RIIDEye TENORM Kit is ideally suited for the rapid testing and analyzing of thousands of gallons of waste water, sludge, and drill cuttings stored on-site before disposal, reducing the holding time by giving near real time results in less than 30 minutes.

The TENORM kit scans, analyzes and reports radioactivity in a sample, in 3 easy steps: Prepare and weigh the sample in the

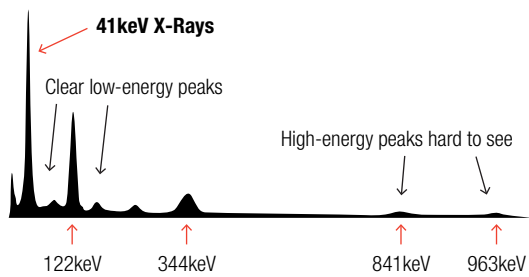
provided beaker with the weigh scale, analyze the sample with the RIIDEye M and shield, and report the results via PC and RIIDView 2. The GUI on RIIDView 2 will report sample pass/fail in a clear, simple report.

- Rapid on-site screening saving time and money
- Patented QCC Algorithm allows for fast and accurate identification of radioactive contaminations
- Instrument operational flexibility for use at multiple sites and applications
- Spectra data for easy archival and traceability
- Protect our environment
- Proper waste management avoids expensive disposals
- Shielded RIIDEye M allows low level sample analysis



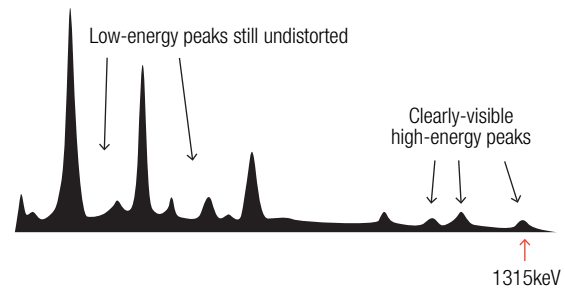
## RIIDEye Spectroscopic Advantages

### Eu152 over 1,024 Linear Channels



- Scintillation detectors have non-linear energy response
- Linear MCA leads to distorted peaks over full energy range

### Eu152 over 512 QCC Channels



- Apply quadratic algorithm to signal processor
- Compressed peaks are identified faster and more accurately

## SPECIFICATIONS

Feature	Details
Gamma Detector	2x2 NaI.
Software Analysis	PC with Windows XP or newer, 1GHz or faster 32 (x86) or 64 (x64) bit processor, 1GB RAM, DirectX 9 graphics with WDDM 1.0 or higher
Spectrum Compression	QCC (see illustrations above)
Instrument Display	Yes
Computer Analysis	Yes
Pre-Installed Isotopes	Ra226, Ra228
Low Detection Limits	0.5pCi/g, 500pCi/L (20Bq/L)
Analysis Time	10-30 minutes
Stabilization Source	K40
Sample Beakers	0.5L (36 per case)
Shield Thickness	0.5in
Weight	80lbs
Battery Operations	Yes (8 hours with 8 AA NiMH rechargeable batteries)
Accessories	Digital scale
Isotope Identification	QCC enhances spectrum analysis for faster and more accurate identification
System Certification	Ra226 and Ra228 certified standard sources provide users security against future audits
Data Archival	ANSI N42 spectra data for simple storage and recovery
Field Operations	Instruments is battery-operated and lightweight shield allows for onsite applications that maximize users productivity
User-Friendly	Pre-installed calibrations and automated analysis means non-skilled operations

