

# RIIDEye X

## Handheld Radiation Isotope Identifier



*detection  
identification  
radiation*



### **Unequaled cost of ownership.**

Without the need for regular calibration and built to last with no need for repair and service, the Thermo Scientific™ RIIDEye™ X Handheld Radiation Isotope Identifier offers you the lowest cost of ownership.

### **Differentiate between benign isotopes and threat material**

The unique, patented QCC algorithm maximizes the scintillation detector capabilities. It resolves difficult to see low energy peaks by expanding the number of channels, while simultaneously compressing the high energy peaks which improves the signal-to-noise ratio.

### **Accurately detect Special Nuclear Material**

SNM Assist on the RIIDEye X analyzes the acquired ID spectrum in real time and automatically displays the optimum scan time to accurately detect the presence of SNM (Pu, U, Np).

### **Easy interpretation**

View the real-time spectra build of isotopes present in the environment as the identification scan is in process. Isotopes are color coded to visually alert the operator to the presence of isotopes and indicates the moment an accurate identification is made.

### **Rugged**

- Rubber Shock Absorbers
- IP 65 rating
- Temperature shock resistant
- Withstands drops up to 1 meter
- Easily decontaminated

### **Built for real-life**

- One hand operation
- Light weight and balanced for comfortable long-term use
- Raised buttons allow for gloved operation
- Temperature shock resistant
- Withstands drops up to 1 meter from every angle
- Easily decontaminated

### **Foolproof operation**

- Oversized high-resolution display
- Easy-to-read color display, even in direct sunlight
- Intuitive interface for new and seasoned users

### **Predictable costs**

- Automatic calibration
- Rugged design minimizes repairs

### **Precise identification**

- He-3 performance without He-3
- Tested to ANSI N42.34-2006 standard

The RIIDEye X operator can view the real-time spectra build of isotopes present in the environment as the identification scan is in process.

Isotopes are color coded to visually alert the operator to the presence of benign, threatening or unknown sources and indicates the moment an accurate identification is made.

When activated, SNM Assist automatically calculates and alternately displays the optimal ID scan time, for the current environment, with the actual time remaining.

With Real Time Spectra Building and SNM Assist, users can customize the scan duration in real time for fast, reliable and efficient results.

# RIIDEye X

## SPECIFICATIONS & ORDERING INFORMATION

<b>Specifications</b>	RIIDEye X
<b>Detector</b>	Choice of 2" x 2" NaI Scintillator or 1.5" x 1.5" LaBr
<b>Energy Range</b>	20 keV to 3 MeV
<b>Display</b>	320 x 240 high brightness 32000-color 3.5 inch LCD
<b>I/O</b>	Removable memory card or via serial port
<b>Battery Life</b>	8 hrs with battery pack - spare battery adapter for 6- AA batteries provides additional hours
<b>Weight</b>	2.6 kg (5.7 lbs) with 2" x 2" NaI detector, 2.4 kg (5.3 lbs) with 1.5" x 1.5" LaBr
<b>Dimensions (with 2" x 2" NaI)</b>	11 x 4.7 x 8.6 inches (27.9 x 12 x 21.9 cm)
<b>Temperature</b>	-4 °F to 122 °F (-20 °C to 50 °C)
<b>Controls</b>	Well spaced 7-key pad for simple menu use with protective gloves
<b>Alarms</b>	Audio and visual on screen
<b>Stabilization</b>	Automated and continuous with natural potassium requiring no periodic source replacement or licensing
<b>Library</b>	47 isotopes with 6 different trigger lists including Standard ANSI, ANSI+, security, medical, industrial and user defined
<b>Neutron Detector</b>	1.8 x 3.4 cm Ce doped with optional Cs2LiYCl6 (CLYC) crystal
<b>Functions</b>	Isotope identification, spectral analysis, dose rate meter, source locator

### Options

- Test adapter for RIIDEye Series, 425085071: 9 g of Lu2O3 ceramic and 10 g of 2 % thoriated tungsten welding rod WT-20, energy range 20 keV to 3 MeV.
- Spare memory card PG-110796: Spare memory card containing factory calibration data and FW.
- Cables: Reachback cable for transmissions via phone (COMA001548); PC Interface cable for transmissions to hose USB device like a PC (COMA001568)

### RIIDEyeX Ordering Information

Product	Part No.	Description
RIIDEye X-G	4250880	Medium resolution gamma radiation detector with NaI
RIIDEye X-GN	4250885	Medium resolution gamma and neutron radiation detector with NaI and CLYC neutron detector
RIIDEye X-H	4250882	High resolution gamma radiation detector with LaBr (Lanthium Bromide)
RIIDEye X-HN	4250886	High resolution gamma and neutron radiation detector with LaBr and CLYC

### Ask about our complete RIIDEye X Kit

- Foam insulated hard carrying case
- USB memory card reader
- Adjustable foam shoulder strap
- AA alkaline battery adapter
- Print manual
- RIIDView SW for viewing spectra on PC

