

Thermo Scientific's newest RadEye instrument  
for contamination and dose rate measurements

The perfect solution for

- **Civil Defence**
- **Fire Brigades**
- **Hospitals**
- **Nuclear Industry**
- **Pharmaceutical Industry**

## RadEye B20 / B20-ER

Multi-Purpose Survey Meter

### Features of RadEye B20 and RadEye B20-ER

- Light Weight (300 g), excellent grip with and without gloves
- Rugged and compact design, thick rubber protective cover
- Low cost of ownership with > 500 h operation time with 2 AAA batteries – rechargeable NiMH-cells can be used
- Menu-driven user interface results in low training cost and immediate familiarity
- Huge internal data memory for both scaler results and continuous data recording
- Bright backlit LCD display – plain text messages - different languages can be selected
- Easy adaptation to different tasks by supervisor configuration, calibration, selection of measuring units
- Versatile operation modes:
  - Scaler / Timer with preset count and preset time for sample measurements
  - Continuous ratemeter mode for frisker operation
  - Dose rate mode
- Audible indication: single pulse or chirper mode proportional to count rate
- Earphone output for operation in loud environment



**Order number: 4250685**

The RadEye B20 is a modern compact multi-purpose contamination meter for alpha, beta, gamma and X-ray radiation. By virtue of an optional gamma energy filter, gamma dose rate measurements from 17 – 1300 keV can be performed. For emergency response purposes alpha and beta contamination can be discriminated using another optional filter.

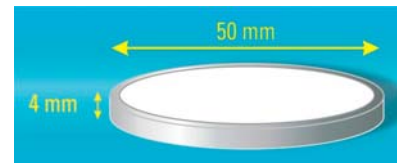
The instrument is part of the growing RadEye family of high-end stand-alone meters, which are designed to exceed the most demanding user expectations.

# RadEye B20 / B20-ER

## Accessories

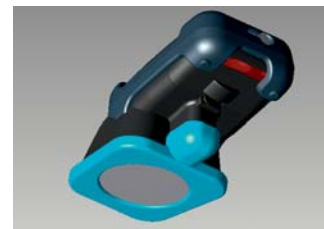
High precision, low energy test adapter for performance verification **Order number: 425068571**

- 9 g natural Lutetium-Oxide with 50 Bq/g (1.4 nCi/g):  
non radioactive in respect to StrSchV and NRC 49 CFR 173.403(y)
- Lu-176: half life 37,000 Million years
  - No error prone half life correction by the user
  - Check sources with short half-live are no longer required
- Extremely uniform activity content and surface emission rate
- Identical surface emission rate for each check source



## Energy Filters

- Removable energy filter for X-ray & gamma dose rate measurements in Sv/h or Rem/h from 17 keV. **Order number: 425068582**
- Removable alpha-rejection filter for quick estimation of alpha contamination in emergency response situations. **Order number: 425068581**



Car Adapter Interface **Order number: 425067065**

- AAA NiMH cells can be charged in the instrument
- Continuous monitoring in the car / fire truck with illuminated display
- RS 232 / USB / Bluetooth communication options



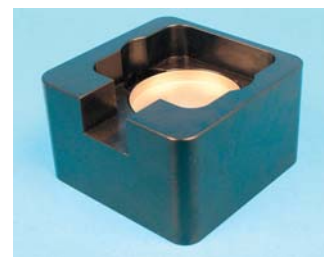
First Responder Laboratory Kit  
Without RadEye: **Order number: 425069011**

### Pelican Case containing:

- Sample changer for use with the RadEye B20
- Sample planchets with different lip heights
- Disposable gloves, spatula
- 50 mm paper filters

### Space for:

- Data cable
- User manual
- Lutetium-Oxide test adapter
- Additional RadEye (PRD or N)



<b>Detector</b>	1 pancake GM-tube, window dia. 44 mm (1.7"), 1.8 – 2.0 mg/cm <sup>2</sup>
<b>Measuring Range (gamma dose rate)</b> Uncompensated or with opt. energy filter	0 - 2 mSv/h [0 - 200 mR/h] RadEye B20 0 - 100 mSv/h [0 - 10 R/h] RadEye B20-ER
<b>Measuring Range (contamination)</b>	0 - 10 kcps RadEye B20 0 - 500 kcps RadEye B20-ER
<b>2 π Efficiency (ref. to 50 mm diameter without rubber sleeve)</b>	Am-241: 28%; Co-60: 25%; Sr/Y-90: 36%; C-14: 19 %
<b>Energy Range (with gamma energy filter)</b>	17 keV – 1.3 MeV
<b>Weight and maximum dimensions</b>	300 g (0.7 lb); 13 cm x 7 cm x 6 cm (5.2" x 2.8" x 2.4")
<b>Alarm indication</b>	LED, sound, vibrator

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