

Thermo Scientific's newest RadEye instrument  
for surface contamination measurements

The perfect solution for

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

## RadEye AB100

Alpha Beta Contamination Monitor

### Features of RadEye AB100

- Light Weight (900 g), excellent grip with or without gloves
- Rugged and compact design, thick rubber protection cover
- Low cost of ownership with > 1,000 h operation time using 2 C batteries – rechargeable NiMH-cells can be used
- Menu-driven user interface resulting in low training cost and immediate familiarity
- Huge internal data memory for both scaler type 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
  - Alpha, Beta and Alpha + Beta modes
  - Gross or net counting
- Audible indication: single pulse for alpha, chirper mode for beta - proportional to count rate
- Earphone output for operation in a loud environment
- One hot and four advanced buttons - easy to use, no PC required



The RadEye AB100 is a modern contamination meter for surface contamination measurements with excellent alpha/beta discrimination. The user can select the proper calibration factor within a list of isotopes (e.g. Bq, Bq/cm<sup>2</sup>, dpm).

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

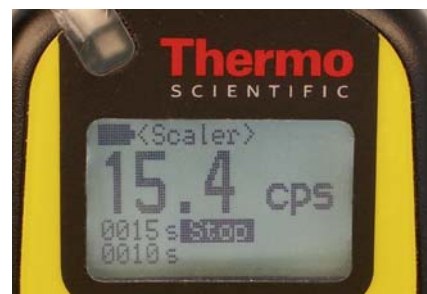
Large graphic display with clear prefix and bar-graph



**Simultaneous measurement of alpha-, beta-, and gamma radiation**



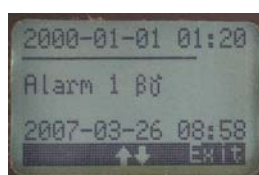
**Alpha alarm is indicated**



**Scaler Mode**

## Menu Operation

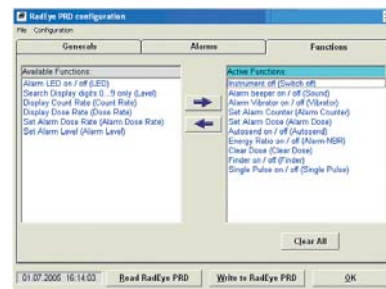
All factory-set parameters can be easily modified on the RadEye or using optional software. These menu operations can also be partially or fully blocked to simplify the instrument and to avoid any faulty operation. Navigation is made easy by a clear and intuitive user concept. Separate alarm levels for alpha, beta, gamma respectively alpha mode can be set.



## RadEye Software

All settings and the data analysis can be done by an optional Windows™-based PC-software and an accompanying reader device. At the end of the scaler measurement the data are recorded with date and time (up to 1,200 data sets).

Changes in configuration, occurring alarms and errors are saved in the RadEye memory. These saved events can be read out via the option "logbook". It is shown as a table and can be saved to the PC hard disc or printed. The logbook has a maximum of 250 data sets. Several events at the same time are saved as one record. On the display every event is shown in one line for a clear view.



RadEye AB100 configuration

Efficiency (per surface emission)	Am-241: 36 % (α) Co-60 : 23 % (β) Sr/Y-90: 49 % (β)
Gamma response (Cs-137)	approx. 40 s <sup>-1</sup> /(μSv/h)      0.4 s <sup>-1</sup> /(μR/h)
Window thickness/Active area	Thickness: 0.87 mg/cm <sup>2</sup> aluminized plastic film Sensitive area of 69 x 145 mm [2.71" x 5.71"]; Open area of approx. 85 %
Dimensions / Weight	355 mm x 100 mm x 180 mm [14" x 4" x 7.1"] / approx. 0.9 kg [2 lb]

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