RadEye PRD-ER

The RadEye PRD-ER Personal Radiation Detector is an advanced pocket-size instrument that detects and localizes radiation sources generated by man-made devices such as nuclear weapons, improvised nuclear devices (IND) or radiological dispersal devices (RDDs). Single detector arrangement offers the following unique advantages over the whole measuring range:

- Consistent angular dependence.
- No mutual shielding of neighbored detectors.
- Consistent energy response.
- No transition range with annoying hysteresis effects.
- No high-activity source for function test of high dose rate detector required.
- Menu-driven with an intuitive, easy-to-use format.
- Patented Natural Background Rejection (NBR) technology provides high sensitivity with high selectivity; eliminates nuisance alarming due to naturally recurring radiation sources (such as granite).
- Low-power-technology components and fully automated self-checks result in minimum maintenance.
- Equipped with large clear graphic display and audible/visible/vibrating alarms; earphone-output for silent alarming.

Lutetium Test Adapter for PRD and PRD-ER
To “challenge” the radiation detector’s functionality of the RadEye PRD and RadEye PRD-ER, Thermo Fisher Scientific has developed an innovative test adapter based on high purity natural Lutetium-Oxide.

Gamma test adapter containing 36 g Lu2O3 for RadEye PRD and RadEye PRD-ER. Net count rate approximately 100 cps. Item # 425067071

The design of a special shape enclosure and the use of high Density Lu2O3 ceramics minimizes the required activity for the RadEye PRD and PRD-ER.

Technical data of RadEye PRD-ER (deviating from RadEye PRD specifications)

<table>
<thead>
<tr>
<th>Measuring Range</th>
<th>1 μrem/h - 10 rem/h (0.01 μSv/h – 100 mSv/h)</th>
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</thead>
<tbody>
<tr>
<td>Overrange Indication</td>
<td>10,000 rem/h (100 Sv/h)</td>
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<tr>
<td>Linearity error (Cs-137)</td>
<td>max. ± 20 %</td>
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