DoseRAE 2 is a compact, direct-reading and alarming electronic personal radiation detector. It uses a diode and a scintillation crystal to detect X- and gamma radiation, and provides real-time monitoring of personal dose and dose rate. The real-time radiation dose rate monitoring allows immediate reaction in case of radiation occurrences and thus reduces the radiation exposure. By measuring dose equivalent and dose equivalent rate, this detector provides the functions of a dosimeter too. It also measures radiation exposure and exposure rate, which is appropriate for controlling the exposure of emergency responders to photon radiation.

**Dosimeter Meets Detector:**
Contains two separate sensors, CsI/photodiode and PIN diode. The energy-compensated PIN diode provides high-dose-rate range coverage and accurate dose measurements, while the CsI (Cesium Iodide) scintillator provides fast response to low-level radiation.

**Datalogging and Analysis:**
Offers continuous datalogging with a large, 3,000-point capacity. With associated software, the datalog can be downloaded via USB to a computer. The software is used for data display, analysis and record management.

**Alarm Types:**
Integrated loud audible, bright LEDs, and vibration alarms.

**Total Dose Data:**
Accurately accumulates real-time dose data.

**National Standard Compliance:**
Designed in compliance with IEEE ANSI N42.20 standard, with performance tested at Oak Ridge National Laboratory.

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**KEY FEATURES**
- Stand-alone electronic dosimeter with LCD display
- Multiple units with reader and software can be used as a dosimetry system
- Continuous digital dose rate readout in rem/h, Sv/h and R/h
- Continuously accumulated total dose readout in rem, Sv and R
- Prominent visible, audible, and vibration alarms
- Long calibration life
- Two operation keys, simple intuitive programming

**APPLICATIONS**
- Nuclear power plants
- Environmental survey
- Fire Departments
- Hazardous Material Response Teams
- Police
- EMS
- Military
- Hospitals

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### Specifications

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| Gamma Sensors                               | CsI (TI) + photodiode (low environment radiation)  
Energy-compensated PIN diode (level of radiation protection) |
| Dose Rate Range                             | 0.01 µSv/h to 10 Sv/h (1 µR/h to 1140 R/h)                                                       |
| Accuracy of Dose Rate                        | ±20% (from 10 µSv/h to 10 Sv/h or from 1.14 mR/h to 1140 R/h) and ±30% (from 0.01 µSv/h to 10 µSv/h or 1 µR/h to 1140 R/h) |
| Dose Range                                  | 0 µSv to 10 Sv (0 µR to 1140 R)                                                                  |
| Dose Accuracy                               | ±15%                                                                                              |
| Energy Range                                | 20 keV to 6 MeV for X- and gamma radiations                                                       |
| Size                                         | 3.3” x 2.2” x 0.4” (85 x 55 x 9.6 mm) without clip                                               |
| Weight                                       | 1.8 oz. (50g) with battery and clip                                                              |
| Battery                                      | LIR2450 Rechargeable batteries                                                                   |
| Operating Hours                             | Up to 200 hours after each charge (one week continuous use)                                       |
| Datalog Size                                | More than 3000 data points                                                                       |
| Datalog Interval                            | User programmable, from 30 to 3,600 seconds                                                       |
| Communication                               | USB interfaces with computer for datalog download                                                 |
| Alarms                                       | • Loud audible buzzer (85+dB @ 30 cm/12”)  
• Highly visible LED lights  
• Built-in vibration alarm                      |
| Alarm Settings                               | Dose alarm (adjustable from 1.0 µSv to 10 Sv or 114 µR to 1140 R)  
Dose rate alarm (adjustable from 1.0 µSv/h to 10 Sv/h or 114 µR/h to 1140 R/h) |
| Temperature                                  | -20º C to 50º C (-4º F to 122º F)                                                                 |
| Humidity                                     | 0% to 95% (non-condensing)                                                                       |
| IP Rating                                    | IP-54                                                                                             |
| Shock Resistance                             | Passes drop test from 1.5 m (59”)                                                                |

Specifications are subject to change.

### DOSRAE 2 Comes With:
- DoseRAE 2 electronic personal dosimeter with clip
- Charging and PC communication cradle
- USB communication cable
- Protective silicone boot
- CD with (1) ProRAE Dosimeter instrument configuration and data management software and (2) User’s Guide
- Protective pouch with alligator clip
- Calibration and test certificate
- Warranty/registration card