

# DoseRAE Pro

## Personal Alarming Dosimeter



**DoseRAE Pro** is a rugged, compact, direct-reading and alarming electronic personal radiation detector and dosimeter. It uses a diode and a scintillation crystal to detect X- ray and gamma radiation, and provides real-time monitoring of personal dose and dose-rate allowing immediate action to reduce personal radiation exposure. DoseRAE Pro includes a Stay-time countdown timer with warning alarm to allow the user to set a specific time limit when working in a radiation area, limiting the users personal radiation exposure.

### FEATURES

- Rugged electronic dosimeter with high sensitivity
- Csl Scintillator sensor
- Multiple units with reader and software can be used as a dosimetry system
- Continuous LCD digital dose rate readout in Sv/h or R/h
- Continuously accumulated total dose readout in Sv or R
- Prominent visible, audible, and vibration alarms
- User configurable Stay-Time countdown timer and alarms to prevent excessive radiation exposure
- Fast near field communication wireless data transfer
- Long calibration life
- Simple two button operation and programming

- **Dosimeter and PRD functionality in a rugged, compact package**
- **Wide dose rate range and energy range maximizes personal protection**
- **Fast response time to immediately detect radiation threats**
- **Ease of use minimizes personnel training & support costs and reduces total cost of ownership**

## SPECIFICATIONS

### SENSORS

Gamma Sensors	CsI (TI) + photodiode (low environment radiation) Energy-compensated PIN diode (level of radiation protection)
Dose Rate Range	1 uR/h to 999 R/h (0.01 uSv/h to 9.99 Sv/h)
Dose Rate Accuracy	±20% (from 1mR/h to 999 R/h or from 10 iSv/h to 9.99 Sv/h)
Dose Accuracy	±30% (from 1 uR/h to 1 mR/h or 0.01 uSv/h to 10 uSv/h)
Dose Range	1uR to 999R (0.01uSv to 9.99Sv)
Dose Accuracy	±15%
Energy Range	50 keV to 6 MeV for X- and gamma radiations

### ALARMS

Alarm Alerts	Loud audible buzzer (85+dB @ 30 cm/12") Highly visible LED lights, Built-in vibration alarm Each alarm individually enabled/disabled
Alarm Settings	Dose: continuously adjustable: 1 uSv to 9.99 Sv (100 uR to 999 R) Dose Rate: adjustable: 100 uR/h to 999 R/h (1 uSv/h to 9.99 Sv/h) Stay Time: 1 to 999 min. Chirp alarm: 1 beep per accumulated dose increment (1 uSv to 9.99Sv or 100uR to 999R) All alarm settings are passcode protected with 3 digit code Low battery alert when 48 hours of life remain

### DATALOGGING & COMMUNICATIONS

Data Storage	3000 points
Datalog Interval	User programmable, from 30 to 3,600 seconds
Communication	Near-field Communications to optional PRR-1 Dosimeter Reader for datalog download, dosimeter programming, factory configuration, calibration and firmware upgrade

### POWER

Battery	1 AA alkaline battery, easily accessible with a coin
Operating Hours	750 hours of continuous use

### ENVIRONMENTAL

Temperature	Operating: -4° to +122°F (-20° to +50°C) Storage: -22° to +158°F (-30° to +70°C)
Humidity	5 to 95%, non-condensing
Shock Resistance	Drop tested from 4.9 ft. (1.5m) onto hardwood surface
IP Rating	IP-54

### PHYSICAL

Display	LCD display with pushbutton backlight Three-digit floating-point readout
Direct Readout	Dose and dose rate, autoranging uR, mR, or R (uSv, mSv, or Sv)
User Interface	2 buttons
Size	2" x 3.5" x 0.9" (52 x 89 x 924 mm) without clip
Weight	4.6 oz. (130g) with battery and clip
Attachments	Rugged metal alligator clip and belt clip

## APPLICATIONS

Nuclear power plants  
Environmental survey and clean-up  
Fire Departments  
Hazardous Material Response Teams  
Police  
EMS  
Military  
Industrial safety  
Waste management  
Hospitals and Medical Clinics

### DoseRAE Pro Kit includes:

- DoseRAE Pro electronic personal dosimeter with belt clip
- Alligator clip
- 1 AA battery
- User manual on CD
- Quick-start user guide
- Calibration and test certificate
- Warranty/registration card

### Optional Equipment:

- PRR-1 DoseRAE Pro Dosimeter Reader and software



PRR-1 Dosimeter Reader

### Ordering Information

Product	Part Number
DoseRAE Pro Dosimeter Kit US version (display unit: R)	R04-0002-000
DoseRAE Pro Dosimeter Kit EU version (display unit: Sv)	R04-0001-000

