Honeywell

RAE SYSTEMS®

DoseRAE Pro

Rugged Electronic Dosimeter for Personal
Radiation Dosage Monitoring

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.

- *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*

KEY FEATURES

- Rugged electronic dosimeter with high sensitivity
  CsI Scintillator sensor

- 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

- Long calibration life

- Simple two button operation and programming

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

SPECIFICATIONS

SENSORS	
Gamma Sensors	CsI (TI) + photodiode (low environment radiation) Energy-compensated PIN diode (level of radiation protection)
Dose Rate Range	0.01 µSv/h to 9.99 Sv/h (1 µR/h to 999 R/h)
Accuracy of Dose Rate	±20% (from 10 µSv/h to 9.99 Sv/h or from 1mR/h to 999 R/h) ±30% (from 0.01 µSv/h to 10 µSv/h or 1 µR/h to 1 mR/h)
Dose Range	0.01µSv to 9.99Sv (1µR to 999R)
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 µSv to 9.99 Sv (100 µR to 999 R) • Dose Rate: continuously adjustable: 1 µSv/h to 9.99 Sv/h (100 µR/h to 999 R/h) • Stay Time: 1 to 999 min. • "Chirp" alarm: 1 beep per accumulated dose increment (1 µSv to 9.99Sv or 100µR to 999R) • All alarm settings are passcode protected with 3 digit code • Low battery alert when 48 hours of life remain
DATALOGGING AND COMMUNICATIONS	
Data Storage	3000 points
Datalog Interval	User programmable, from 30 to 3,600 seconds
POWER	
Battery	1 AA alkaline battery, easily accessible with a coin
Operating Hours	750 hours of continuous use
OPERATING ENVIRONMENT	
Temperature	Operating: -20° to +50°C (-4° to +122°F) Storage: -30° to +70°C (-22° to +158°F)
Humidity	5 to 95%, non-condensing
Shock Resistance	Drop tested from 1.5m (4.9 ft.) onto hardwood surface
IP Rating	IP-54
PHYSICAL CHARACTERISTICS	
Display	LCD display with pushbutton backlight Three-digit floating-point readout
Direct Readout	Dose and dose rate, autoranging in units of µSv, mSv, or Sv (µR, mR, or R)
User Interface	2 buttons
Size	52 x 89 x 924 mm (2" x 3.5" x 0.9") without clip
Weight	130g (4.6 oz.) with battery and clip
Attachments	Rugged metal alligator clip and belt clip

Specifications are subject to change

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

ORDERING INFORMATION (MODEL PRM-1300)

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

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