## RAD-51

## **Programmable Personal Dosimeter**

## **Specifications**

Radiation detected:

gamma and x-rays

**Detector type:** 

energy compensated Si-Diode

Measurement range:

dose:

0.000 - 999.999 mSv or 0.000 - 999.999 rem

dose rate:

0.005 - 3000 mSv/h or 0.001 - 300 rem/h

Calibration:

better than  $\pm$  5 % (Cs-137, 662 keV at 2,0 mSv/h), Hp(10)

**Energy response:** 

Hp(10), 60 keV - 3 MeV, better than  $\pm$  25 % or 60 keV up to - 6 MeV,

better than ± 35 %

Dose rate linearity:

better than ± 10 % up to 1 Sv/h or 100 rem/h and better than

 $\pm$  20 % up to 3 Sv/h or 300 rem/h

Audible alarms:

nine separate alarms, sound level typically 80 dBA at 30 cm

- integrated dose

- dose rate

- dose and dose rate overflows

- low battery I and 2

- elapsed time

- defect

- count down alarm

Alarm thresholds:

five freely selectable values for integrated dose for sequential alarm (in steps of 0.001 mSv or rem); one freely presettable value for dose rate (in steps of 0.001 mSv/h or rem/h) all values set through reading system

Power supply:

one triple-A size alkaline cell, life typically 1500 h in background field

(dose mode)

Reader communication:

by infrared through bottom part; compatible with RADOS 85-series

reading systems

**Push button functions:** 

secondary measuring units and active alarm levels display via

push button operation

**Environmental conditions:** 

-10 - +50 °C up to 90% RH, non-condensed, operational

- 20 - +70 °C, storage

**Dimensions:** 

 $78 \times 67 \times 22 \text{ mm}$ 

Weight:

90 g including battery