



# RAD-60/62™

*Electronic Dosimeters*



## FEATURES

- enhanced EMI immunity
- ruggedized clip fixing
- improved wear-out and decontamination properties
- increased buzzer volume
- compact and lightweight
- standard AAA alkaline battery for 1800 h of operation
- solid state detector
- digital display for integrated dose or alternatively dose rate
- user selectable alarm levels for both dose and dose rate

## DESCRIPTION

**RAD-60 Personal Alarm Dosimeter** is a precise radiation measuring instrument for reliable detection and registration of radiation in order to ensure the personal safety of the user. It is suitable for a broad range of everyday radiation monitoring purposes in stand alone conditions.

**RAD-62 System Dosimeter** is an integrated solid state dosimeter with a full range of functions for use in the automatic dose management systems. It forms a highly cost effective package with its outstanding performance and is handy and convenient to use even by people wearing protective clothing.



## PHYSICAL CHARACTERISTICS

- Radiation detected:
  - gamma and X-rays
- Detectors:
  - energy compensated Si-Diode
- Measurement range:
  - dose: 1  $\mu$ Sv - 9.99 Sv or 0.1 mrem - 999 rem
  - dose rate: 5  $\mu$ Sv/h - 3 Sv/h or 0,5 mrem/h - 300 rem/h
- Calibration accuracy:
  - better than  $\pm 5\%$  (Cs-137, 662 keV at 2 mSv/h), Hp(10)
- Energy response:
  - Hp(10), 60 keV - 3 MeV, better than  $\pm 25\%$ , up to 6 MeV, better than  $\pm 35\%$
- Dose rate linearity:
  - better than  $\pm 15\%$ , up to 3 Sv/h (300rem/h)
  - better than  $\pm 10\%$  for 0.005 mSv/h - 1 Sv/h (1mrem/h-100 rem/h)
- Audible alarms:
  - eight separate alarms, sound level typically better than 85 dBA at 30 cm
  - integrated dose
  - dose rate
  - dose overflow
  - dose rate over flow at 3 Sv/h or 300 rem/h
  - low battery 1 and 2
  - defect
- Alarm thresholds\*:
  - RAD-60:**
    - seven preset values each for integrated dose and dose rate, manually selectable by push-button
  - RAD-62:**
    - wo freely selectable values for integrated dose and one for dose rate
- Push-button functions\*:
  - Front panel push-button has the following selectable functions.
  - RAD-60:**
    - toggle between dose and dose rate display
    - switch ON/OFF
    - chirp ON/OFF
    - reset integrated dose
    - change alarm thresholds
    - activate battery test
  - RAD-62:**
    - toggle between dose and dose rate display
    - display alarm level

*\*) Note RAD-60: the active alarm thresholds and configuration of push button functions of RAD-60 can be changed by using ADR-1 Reader Head in combination with Mirion PC Software.*

## MECHANICAL CHARACTERISTICS

- Dimensions: 78 x 67 x 22 mm (3.1 x 2.6 x 0.8 in)
- Weight: 80 g (2.8 oz) including battery

## ENVIRONMENTAL CHARACTERISTICS

- Temperature range:
  - RAD-60:**
    - 20 °C to +50 °C (-4 °F to 122 °F) operational, humidity up to 90% RH, non condensed
  - RAD-62:**
    - from -20 °C to +50 °C (-4 °F to 122 °F) operational
    - from -20 °C to +70 °C (-4 °F to 158 °F) storage
    - humidity up to 90 % RH, non-condensed

## ELECTRICAL CHARACTERISTICS

- Power supply:
  - one AAA alkaline cell, life typically 1800 h in background field (dose mode)
- Reader communication:
  - by infrared through bottom part; by using ADR-1 Reader Head in combination with Mirion PC software