

## Rad-62 System Dosimeter



Reader and Software available  
for Dosimeter Configuration-  
Calibration-or  
Access Control

*detection*

*radiation*

The RAD-62 System dosimeter is a new dose and dose rate meter for use in the Rados Electronic Dosimetry System. Like the well proven RAD-51 Programmable Dosimeter on which it is based, it is an integrated solid state dosimeter with a full range of functions for those who do not need the user programming feature of the RAD-51.

The RAD-62 will detect gamma radiation over the energy range from 60 keV to 3 MeV, the accuracy of the dose reading is +/- 15 % over the whole measurement range (1uSv...10 Sv). The RAD-62 is light, compact and rugged so that it will stand up to hard use. It is handy and convenient to use even when used by people wearing protective clothing. It is powered with a standard alkaline battery that will provide about 1800 hours of continuous operation at background.

The RAD-62 forms a highly cost effective package with the same outstanding performance as other Rados dosimeters. It will fully integrate into automatic dose management systems and improve personnel safety.



### 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
- compatible with all Rados automatic dose management systems

**TECHNICAL SPECIFICATIONS:**

<b>Radiological characteristics</b>	<ul style="list-style-type: none"><li>• Radiation detected: gamma and X-rays</li><li>• Detectors: energy compensated Si-Diode</li><li>• Measurement range: - integrated dose: 1 <math>\mu</math>Sv - 10 Sv or 0.1 mrem - 1000 rem - dose rate: 0.005 - 3000 mSv/h or 0.001 - 300 rem/h</li><li>• Calibration: better than <math>\pm 5</math> % (Cs-137, 662 keV, at 1.4 mSv/h, 140 mrem/h), Hp(10)</li><li>• Energy response: Hp(10), 55 keV - 3 MeV, better than <math>\pm 25</math> %, up to 6 MeV, better than <math>\pm -25</math> %...+35</li><li>• Dose rate linearity: better than <math>\pm 15</math> %, up to 3 Sv/h (300rem/h)</li><li>• Dose rate linearity: better than <math>\pm 10</math> % for 0.005 mSv/h - 1 Sv/h (1mrem/h - 100 rem/h)</li><li>• Audible alarms: - eight separate alarms, sound level typically better than 85 dBA at 30 cm - integrated dose - dose rate - dose overflow - dose rate overflow at 3 Sv/h or 300 rem/h - low battery 1 and 2 - defect</li><li>• Alarm thresholds: two freely selectable values for integrated dose and one for dose rate</li><li>• Push button functions: - toggle between dose and dose rate display - display alarm level</li></ul>
<b>Mechanical characteristics</b>	<ul style="list-style-type: none"><li>• Dimensions: 80 x 67 x 22 mm (3.1x2.6x0.8 in)</li><li>• Weight: 80 g (2.8 oz) including battery</li></ul>
<b>Environmental Characteristics</b>	<ul style="list-style-type: none"><li>• Temperature range: - from -20 oC to +50 oC (-4 oF to 122 oF ) operational - from -20 oC to +70 oC (-4 oF to 158 oF) storage - humidity up to 90 % rH, non-condensed</li></ul>
<b>Electrical characteristics</b>	<ul style="list-style-type: none"><li>• Power supply: one AAA alkaline cell, life typically 1800 h in background field (dose mode)</li><li>• Reader communication: by infrared through bottom</li></ul>

