

# RADOS TELEMETRY-REMOTE MONITORING

## RADOS Transdose 51 Advanced Teledosimetry System

- ⇒ **Uses the Transmitting version of RAD-51 Fully Programmable Dosimeter**
- ⇒ **Light Weight and Compact Makes it Extremely "Wearer Friendly"**
- ⇒ **Cellular Concept Means No Bulky Wires or Transmitters**
- ⇒ **GEDDS v 3.0 runs in *Microsoft Windows*®**
- ⇒ **Compact and Easy to Install and Operate**



TransDose 51 employs the standard RAD-51 Dosimeter, thus solving the problems of size and weight that plague other transmitting dosimeters. No need for bulky transmitters or wires that can impede worker performance. This remarkable feature translates into greater ease of use. Evident in high dose and high contamination environments where the worker is commonly encumbered by many other extensive protective measures normally required. This is notably advantageous when TransDose 51 is used in multibadging situations.

The use of the rugged and reliable RAD-51 as a transmitting dosimeter illustrates the unprecedented versatility that RADOS has designed into this dosimeter. The transmitting version of the standard RAD-51, the RAD-51T can be used in any RADOS ADR system. In addition to its compact size and weight, the RAD-51T provides many other advantages. Among them are a long battery life (RAD-51T uses a standard (AAA) alkaline battery), fast and accurate transmission of data and extremely competitive acquisition cost.

Using a Central Unit in conjunction with single or multiple Repeater Units greatly increases transmission range and system flexibility. Information received by the Repeater can be sent to the Central Unit by radio or short haul modems or RS-232 serial link, ensuring dependable and accurate real time data flow. Whether integrated with your present RADOS dose management program, or used in a stand alone mode. TransDose 51 is the final solution when selecting a transmitting dosimetry system.

## The Graphical Electronic Dosimetry Display System (GEDDS 3.0)

The Graphical Electronic Dosimetry Display System (GEDDS 3.0) is a Windows® based software application which provides a user-friendly graphical interface for the control and display of radio transmitted electronic dosimetry data providing real-time dose tracking, with simultaneous live video monitoring capability. GEDDS provides a high performance solution for the management and display of data received from radio transmitting devices such as electronic dosimeters, Area Radiation Monitors, Continuous Air Monitors, as well as Industrial Hygiene instruments. This very powerful and economical software



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### Specifications:

<b>Radiation detected:</b>	gamma and x-rays
<b>Detector type:</b>	energy compensated Si-Diode
<b>Measurement range:</b>	dose: 0.001 - 999 mSv or 0.001 - 999 rem dose rate: 0.005 - 3000 mSv/h or 0.001 - 300 rem/h
<b>Calibration</b>	better than $\pm 5\%$ (Cs-137, 2.0 mSv/h or 200 mrem/h)
<b>Energy response:</b>	60 keV - 3 MeV, better than $\pm 25\%$ or 50 keV - 6 MeV, better than $\pm 35\%$
<b>Dose rate linearity:</b>	better than $\pm 10\%$ , 0.005 - 1000 mSv/h or 0.001 - 100 rem/h and better than $\pm 20\%$ , 1 - 3 Sv/h or 100 - 300 rem/h
<b>Audible alarms:</b>	eight separate alarms (80 dBA at 30 cm) <ul style="list-style-type: none"><li>- integrated dose</li><li>- dose rate</li><li>- dose and dose rate overflows</li><li>- low battery 1 and 2</li><li>- elapsed time</li><li>- defect</li></ul>
<b>Alarm thresholds:</b>	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 ADR-1 reading system
<b>Power supply:</b>	one triple-A size alkaline cell, life typically 150 h when data transmission is activated
<b>Reader communication:</b>	by infrared through bottom part; directly compatible with RAD-51 based reading systems and earlier Rados systems with modification kit
<b>Temperature range:</b>	-10 - +50 °C
<b>Dimensions:</b>	78 x 67 x 22 mm (antenna whip excluded)
<b>Weight:</b>	100 g including battery
<b>Data transmission:</b>	
Transmission mode and speed:	A1, 2400bps
Transmission frequency:	433.92 MHz or 418.0 MHz
Transmission power:	1 mW
Transmission interval:	variable by the dose rate; from 30 sec in background down to 5 sec in 100 $\mu$ Sv/h (10 rem) or higher dose rate

