



## FEATURES

- evaluation of single TL-elements or TL-dosimeter cards
- high measurement reproducibility with standard industrial N<sub>2</sub> heating
- fully programmable pre-heat, measurement and anneal cycles
- hole code or bar code identification of the dosimeter card

## RE-2000S

### Semi-automatic TLD Reader

RE-2000S is a universal, low cost and high precision TLD-reader for processing of dosimeter cards, and single chips.

WinTLD Light application software running on a separate PC provides the easy-to-learn and -operate reader control and user interface for the reader.

The reader can automatically process up to 20 dosimeter cards or 80 single TL-elements at one load. The maximum processing speed is 180 single elements or 100 two element cards per hour. The photon counting method used over the whole measurement range provides an excellent signal to noise ratio for the measurement. Cooled PMT and built in self diagnostics guarantee high measurement stability and an error free operation.

With the optional cassette feeder, processing capacity is 200 dosimeter cards or 800 single elements.



health physics

A Mirion Technologies Division

Featuring:

**RADOS**

TECHNICAL SPECIFICATIONS:	
<b>Physical Characteristics</b>	Dimensions: (HxWxD) 40 x 57 x 34 cm Weight: 33 kg
<b>Functional Characteristics</b>	<ul style="list-style-type: none"> <li>Capacity: 20 personnel dosimeters or 80 single elements per loading</li> <li>Processing speed: <ul style="list-style-type: none"> <li>- 100 ea. two element cards per hour</li> <li>- 50 ea. four element cards per hour</li> <li>- 180 ea. single elements per hour</li> </ul> </li> <li>Element types: <ul style="list-style-type: none"> <li>- round pellets 4.5 mm ø</li> <li>- square chips 3.2 x 3.2 x 0.9 mm</li> </ul> </li> <li>Dynamic range: 7 decades (9 decades with neutral filter)</li> <li>Signal measurement: photon counting with max. count rate of 100 MHz</li> <li>Linearity: &lt; 1% deviation</li> <li>System stability: <ul style="list-style-type: none"> <li>- dose: &lt; 1 µSv (standard deviation)</li> <li>- high voltage: negligible while using photon counting</li> </ul> </li> <li>Reference light: high stability temperature controlled reference light source, short term stability &lt; 0.5%</li> <li>Heating method: contactless hot nitrogen, typically 5 l/min</li> <li>Time temperature profile: <ul style="list-style-type: none"> <li>- hot blast gas heating</li> <li>- temperature range 60 - 400 °C; stability ±1 °C</li> </ul> </li> <li>pre heat, readout and post heat time: adjustable up to 140 seconds</li> <li>Dark current: negligible while using photon counting - variation in the bgr. count rate &lt; 1 µSv <sup>137</sup>Cs equivalent dose</li> <li>User interface: WinTLD Light Software running on a separate PC</li> </ul>
<b>Environmental Characteristics</b>	<ul style="list-style-type: none"> <li>operating temperature: from +10 to +40 °C</li> <li>storage temperature: from -10 to +50 °C</li> </ul>
<b>Electrical Characteristics</b>	<ul style="list-style-type: none"> <li>voltage: 100 - 250 VDC 50/60 Hz</li> <li>consumption: 150 VA at 50 Hz</li> <li>data interface: RS-232 (9pin D-connector) or LAN (RJ-45 optional)</li> </ul>
<b>Options</b>	<ul style="list-style-type: none"> <li>Upgrade kit for upgrading to fully automatic reader RE-2000A</li> <li>WinTLD Pro Management software</li> </ul>



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