

InLight™ Systems



Introducing

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**microStar**

*The industry's first portable dosimetry reader*



# Go where no reader has gone before



Landauer has once again changed the shape of radiation dosimetry with the introduction of our new microStar portable reader. The microStar's mobility expands your potential range of applications and flexibility allowing immediate and accurate radiation dose assessments. With the microStar, you can go where you never could before – read doses anywhere onsite or in the field, whenever the need arises. The microStar reader offers you new choices to measure ionizing radiation to protect employees, to monitor your work environment or to measure clinical radiation doses. The microStar is another example of how Landauer combines our tradition of service, technical innovation, leadership and integrity to help you work more easily, efficiently and confidently.

## Revolutionary Design

Landauer makes radiation measurement onsite simple and easy with third generation, state-of-the-art, aluminum oxide (Al<sub>2</sub>O<sub>3</sub>:C) with optically stimulated luminescence (OSL) technology. Flexible handling options with the use of a single OSL element or multi-element OSL slide are available for the desired dosimetry application.

## Features You Can Take Into the Field

FEATURES	BENEFITS
<b>Portable</b>	<ul style="list-style-type: none"> <li>• Small and lightweight</li> <li>• Durable carrying case</li> <li>• Immediate results anywhere, anytime</li> <li>• Use for emergency response, area monitoring, clinical dose measurements or any radiation assessment application</li> <li>• Speedy throughput – 13 second readout</li> <li>• Works with laptop</li> </ul>
<b>Easy 1, 2, 3 readout process</b> <ul style="list-style-type: none"> <li>• Place dosimeter in drawer and close the drawer</li> <li>• Turn knob</li> <li>• Read dose from display</li> </ul>	<ul style="list-style-type: none"> <li>• Minimum training requirements</li> </ul>
<b>Reanalysis</b>	<ul style="list-style-type: none"> <li>• Non-destructive readout allows for dose verification</li> </ul>
<b>Dosimeter preparation eliminated</b>	<ul style="list-style-type: none"> <li>• No annealing</li> <li>• No element correction factors required</li> </ul>
<b>No heating parameters to maintain</b>	<ul style="list-style-type: none"> <li>• Heat induced artifacts eliminated</li> <li>• Thermal quenching eliminated</li> </ul>
<b>No nitrogen gas required</b>	<ul style="list-style-type: none"> <li>• Less complicated equipment</li> </ul>
<b>Low power consumption</b>	<ul style="list-style-type: none"> <li>• 1.5 amp</li> </ul>
<b>Low maintenance requirements</b>	<ul style="list-style-type: none"> <li>• Cost effective and dependable</li> </ul>

## Technical Specifications

- Al<sub>2</sub>O<sub>3</sub> with OSL technology is linear from 10 µGy to in excess of 100 Gy
- No fade
- Energy dependence within ± 10% over diagnostic energy range; within ± 1% for photons and electrons from 5 MeV to 20 MeV
- High environmental integrity – not affected by heat, humidity, chemical solvents
- Replacement for prior radiation measuring technologies, e.g. TLD
- 110 – 220 V, 1.5 amp, 50 – 60 Hz

Works-In-Progress  
 Not for sale for patient measurements at the present time  
 510(k) to be submitted to the U.S. Food and Drug Administration



*Thinking outside the badge™*

133-4001 (11/05)