

InLight Reader - Model Microstar



The MicroStar reader provides readout for InLight System dosimeters. The InLight System measures radiation exposure with aluminum oxide detectors (Al₂O₃:C) read out by optically stimulated luminescence (OSL) technology. (Al₂O₃:C) read out by optically stimulated luminescence (OSL) technology. The reader stimulates the detector with a light emitting diode (LED) array causing it to luminesce in proportion to the amount of radiation exposure and the intensity of stimulation light. The luminescence is detected and measured by the reader's photo multiplier tube using a high sensitivity photon counting system. A dose calculation algorithm is then applied to the measurement to determine exposure results. This nondestructive type of read-out allows for dose verification through reanalysis.

InLight menu-driven software residing on an external PC provides control over the setup, analysis, and data recording enabling dosimeter read out and reader quality control.

Designed for portability, the small lightweight reader can be used anywhere to measure immediate and accurate radiation dose assessments. For emergency response use, area monitoring, single point radiation assessment, or any radiation assessment application.

Purchase or lease of Microstar reader includes operating, analysis and dose calculation algorithm software, laptop computer, carrying case, and a choice of InLight whole body dosimeters or OSL dots for single point measurements.



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MICROSTAR® READER

The Power to Know. The Power to Act.

The microStar's mobility expands your potential range of applications and flexibility. You now can easily MONITOR for radiation exposures to patients or employees, make quick MEASUREMENTS, and MINIMIZE the dose to all.

Landauer has once again changed the shape of radiation dosimetry with the introduction of our new microStar portable reader.

MicroStar

The microStar Reader offers you new choices to measure clinical radiation doses such as patient monitoring, to measure ionizing radiation to protect employees, or to monitor your work environment.

MicroStar InLight® System

The microStar System provides read out for single-point Dot measurements and InLight Systems dosimeters. MicroStar is the smallest InLight reader available. Easy to setup, requires no nitrogen gas, and dosimeter preparation is eliminated. The read out process is three easy steps, and reader maintenance is simple.

MicroStar Software

MicroStar software is a menu-driven program with task oriented tab menus for easy navigation. It provides the ability to read out dosimeters, import data files, associate identification information to a dosimeter, and export data to formatted reports. Included are quality control and reader performance procedures and reporting to ensure the accuracy of dosimetry measurements.

Read out onsite, in the clinical lab, or in the field

Designed for portability, the microStar reader can be used anywhere to perform immediate and accurate radiation dose assessments.



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MICROSTAR® READER

Single point measurements for skin entrance dose:



Dose equivalent for whole body measurements and special environmental dose option:



InLight® Whole Body Basic



InLight Whole Body



InLight Environmental

Landauer makes radiation measurement onsite simple and easy with third generation, state-of-the-art, aluminum oxide ($Al_2O_3:C$) 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.

Software Features

Multiple dosimeter configurations available	<ul style="list-style-type: none"> • Dot dosimeter • New nanoDot dosimeter • Whole body dosimeter • Environmental dosimeter
Multiple calibrations stored	<ul style="list-style-type: none"> • Establish a variety of radiation environments for accurate analysis • User defined calibration expirations • Flexibility to incorporate correction factors based on clinical environment
Non-linear calibrations	<ul style="list-style-type: none"> • Designed to account for non-linear response of Al_2O_3 at "high" doses > 300 cGy
Transparent dose calculations	<ul style="list-style-type: none"> • Allows the user to "see" how the dose is computed from the measurement
Variety of measurement units available	<ul style="list-style-type: none"> • mrem, mrad, or cGy
Customizable Report	<ul style="list-style-type: none"> • Exposure data download to XLS, PDF, XML, CSV

Hardware Features

Portable	<ul style="list-style-type: none"> • Small and lightweight • Immediate results anywhere, anytime • Use for clinical dose measurements, emergency response, area monitoring or any radiation assessment application
Easy 1, 2, 3 read out process <ul style="list-style-type: none"> • Place dosimeter in drawer and close • Turn knob • Read dose from display 	<ul style="list-style-type: none"> • Speedy throughput • Easy access to data • Works with laptop software
Reanalysis	<ul style="list-style-type: none"> • Non-destructive read out • Allows for dose verifications • Allows for intermittent analysis while maintaining total dose accumulations
No dosimeter preparation	<ul style="list-style-type: none"> • Dosimeters ready-to-go • No annealing required • Bar code sensitivities for accurate dose results • Bar code serial numbers for chain of custody
Less complicated equipment <ul style="list-style-type: none"> • No heating parameters to maintain • No nitrogen gas • Lower power requirements 	<ul style="list-style-type: none"> • Low maintenance • Simple cleaning and repairs • No heating • Heat induced artifacts eliminated • Thermal quenching eliminated