

InLight® Systems Readers

Onsite Scalable Systems

- Single portable microStar reader
- A network of microStars with a common database
- Automatic 200 or 500 readers for high volume analysis

User-Friendly Operations

- Menu-driven software—read out, analysis, database maintenance, QC procedures, reporting
- Simple calibration process—no source required
- Cleaner, less complicated equipment—reduced maintenance

Efficient Processing

- Fast 12-13 second read
- No heat induced artifacts causing false readings
- No detector element corrections factors—sensitivities provided
- Dosimeter serial number bar coded—facilitates chain of custody

Non-Destructive Read Out

- Reanalysis for dose verification
- Intermittent analysis while maintaining total dose
- Dose archives

Multiple Dosimeter Configurations

- InLight case and slide whole body or environmental
- nanoDot single-point dose measurement (microStar)

Onsite Applications

- Access control points
- Laboratories that process their own dosimetry
- Laboratories requiring immediate reading of dosimetry
- Laboratories requiring confidence in the dose measurement(s)

InLight Systems are turnkey solutions for onsite dosimetry using Landauer's optically stimulated luminescence (OSL) technology. Systems are scalable, and can be configured to complement your current dosimetry program, or can enable you to maintain your own in-house accredited dosimetry program (dose algorithms meet NVLAP and DOELAP accreditation requirements).

The microStar reader is a unique, portable dosimetry solution that can be easily moved throughout a facility. For volume processing, the automatic readers handle the heavy loads at 280 dosimeters per hour. Comprehensive software can exist on a stand-alone PC and/or a network.

InLight readers are exclusively for use with InLight dosimeters for whole body, environmental, and emergency response monitoring, or any single-point radiation dose measurement (microStar). InLight dosimeters measure radiation exposure with aluminum oxide detectors ($Al_2O_3:C$) and OSL technology. The read out process uses a light emitting diode (LED) array to stimulate the detectors, and the light emitted by the OSL material is detected and measured by a photomultiplier tube (PMT) using a high sensitivity photon counting system. The amount of light released during optical stimulation is directly proportional to the radiation dose and the intensity of stimulation light. The nondestructive OSL read out process of $Al_2O_3:C$ enables reanalysis for dose verification, and intermittent analysis while maintaining total dose accumulation.

InLight readers include an external PC with menu-driven software that provides control over reader setup, analysis, and data recording enabling dosimeter read out, reporting, and the monitoring of reader performance.

microStar® Reader

- Portable
- Dosimeter: InLight case and slide; NanoDot™
- Capacity: 1 dosimeter
- Bar code input: keyboard; external bar code reader; file upload
- Dimensions: 4.3" H x 12.9" W x 9.1" D (109.5 x 327 x 231.8 mm)
- Weight: 17.7 lbs. (8.03 kg)



Automatic 200 Unit Reader

- Dosimeter: InLight case and slide
- Processing: 280/hour throughput
- Capacity: 4 cassettes @ 50 dosimeters/cassette
- Bar code input: internal optical reader
- Dimensions: 15" H x 44" W x 18" D (381 x 1118 x 457 mm)
- Weight: 75 lbs. (34 kg)



Automatic 500 Unit Reader

- Dosimeter: InLight case and slide
- Processing: 280/hour throughput
- Capacity: 10 cassettes @ 50 dosimeters/cassette
- Bar code input: internal optical reader
- Dimensions: 30.5" H x 43" W x 19.5" D (775 x 1092 x 495 mm)
- Weight: 125 lbs. (56.7 kg)