



LEHIGHTON ELECTRONICS INC.

LEHIGHTON ELECTRONICS, INC.
Quality Service Since 1963
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Contactless Bulk Resistivity / Sheet Resistance Measurement and Mapping Systems

Process Monitoring & Quality Control for High Production Yields, efficiency, and maximize production uptime.

Characterization of

- * **All Compound Semiconductor materials** (epi, annealed ion-implants on semi insulating and some doped substrates)
- * **Silicon wafers** (Bulk Si, Epi, annealed ion-implants, and POC13 doping uniformity on high resistivity substrates)
- * **Thin film metallization**
(Contact factory for details)

Measurement Capabilities

- * Sample thickness range of 450 to 800 microns
- * Normal coil gap ($\geq .035"/.889\text{mm}$)
- * Robotic handling of 2" (50mm) to 8" (200mm) wafers

Sensor Transducer Sizes

- * 14 mm diameter for all ranges

Sample Handling and Sensing

- * Up to 300 measurement points
- * Automatic drift compensation
- * Software-selectable resistivity ranges

Accessories and Options

- * Cassette-to-cassette sorting
- * Capacitance thickness capability
- * Scanning End Effector
- * Light Shield

Specifications

Range	Sheet Resistance	Bulk Resistivity
HI	15 - 3,000 Ω / \square	1.0 - 200 $\Omega\text{-cm}$
LO	0.2 - 15.0 Ω / \square	0.01 - 1.0 $\Omega\text{-cm}$
XL	0.035 - 1.5 Ω / \square	0.005 - 0.1 $\Omega\text{-cm}$

- * **Standard Deviation**
0.1% to 1.0% - Depends on the range
- * **Linearity**
0.035 to 3,000 $\Omega / \square < \pm 3\%$

** Specifications based on current NIST Standards. Actual performance may exceed this depending on application.*



LEI 1510ERP (Robotic Pick and Place) shown with 1 cassette (product may differ from photo)

LEI1510ERP



REV002

Nondestructive Measurement of Semiconductor Wafers