

EddyCus[®] inline RM – Resistivity Monitoring

P_inlineRM_23



Highlights

- ▶ Contact-free and realtime
- ▶ Accurate measurement
- ▶ High degree of variability and flexibility
 - ▶ In- and ex-vacuo solutions
 - ▶ Fixed sensor and traverse solutions
 - ▶ Single-lane and multi-lane solutions
- ▶ High sample rate up to 1,000 measurements per second

Applications

- ▶ Wafer resistivity
- ▶ Ingot and boule resistivity
- ▶ Sputter target composition
- ▶ Purity assessment
- ▶ Electrical discharge machining
- ▶ Material sorting
- ▶ Melting, casting, sintering
- ▶ Defect imaging and integrity assessment

Sensor Series

- ▶ Sheet resistance (Ohm/sq)
- ▶ Metal layer thickness (nm, μm)
- ▶ Metal substrate thickness (μm)
- ▶ Anisotropy
- ▶ Defects
- ▶ Integrity assessment

Materials

- ▶ Semiconductors
 - ▶ Si (mono, poly)
 - ▶ SiC, SiSiC
 - ▶ GaAs
 - ▶ GaN
- ▶ Alloys
- ▶ Metals
- ▶ Graphite
- ▶ Graphene
- ▶ Compounds
- ▶ Composites

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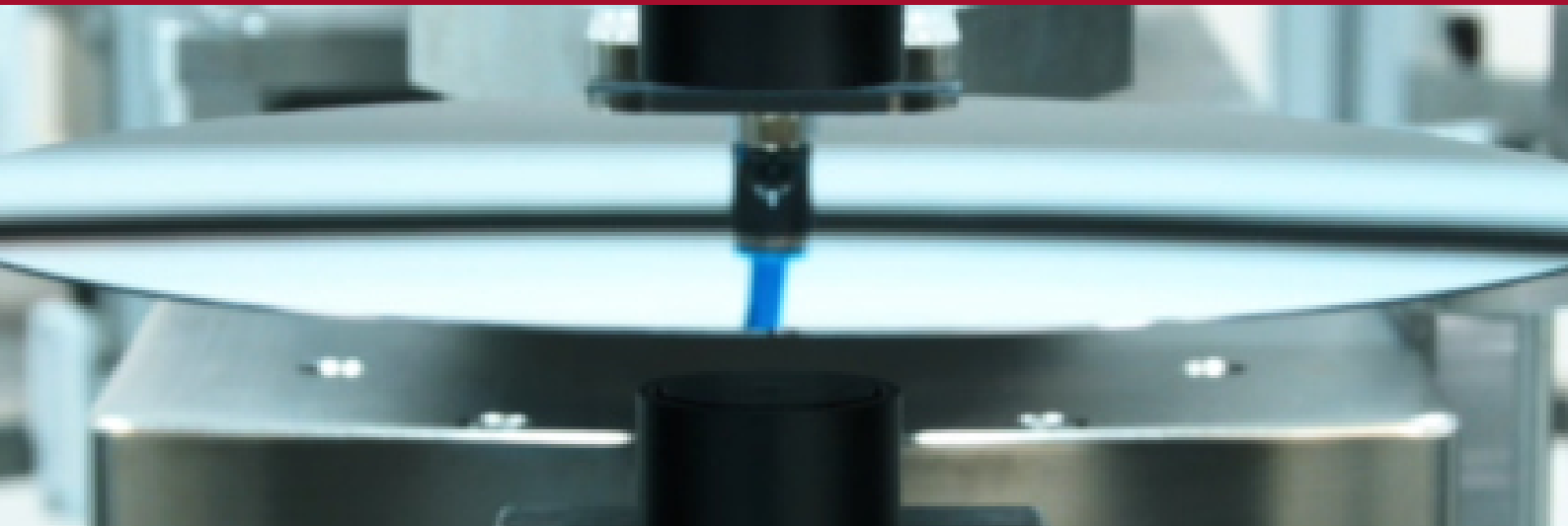
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www.suragus.com
www.suragus.com/calculator
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Engineered and Made in Germany 





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|--------------------------------|--|
| Measurement technology | High frequency eddy current sensor |
| Substrates | Wafer, metals, alloys, ceramics, plastics etc. |
| Materials | Semiconductors, metals, alloys, conductive polymers, conductive ceramics |
| Spot size | Various sensors are available. Coil size is 875 µm to 100 mm |
| Measurement gap size | 5 / 10 / 15 / 25 / 50 / 75 mm |
| Number of sensor | 1 – 99 |
| Sensor sizes (W x L x H) in mm | Sensor M: 80 x 100 x 66 Sensor S: 34 x 48 x 117 |
| Resistivity range | 0.1 – 1,000 mOhm-cm |
| Conductivity range | 0.01 – 65 MS/m |
| Environment | Ex-vacuo/ in-vacuo @ T < 60°C / 140°F (higher upon request) |
| Sample rate | 1 / 10 / 50 / 100 / 1,000 measurements per second |
| Other integrated measurements | Metal thickness / optical transmittance / density / anisotropy |
| Hardware trigger | 5 / 12 / 24 V |
| Interfaces | UDP, .Net libraries, TCP, Modbus, analog/digital |

Device Control and Software

- ▶ Several views and user levels
- ▶ Live view with upper and lower limits and alarm functions
- ▶ Analysis view providing statistics
- ▶ Can handle data of several thousands measurements per second
- ▶ Data storage into SQL database
- ▶ Customizable automatic data export (csv, txt, xls,...)
- ▶ Several smart functions (automated DB cleaning, self-reference etc.)
- ▶ Parameterizable I/O modules (triggering of actions or alarms)

