

EddyCus® inline Sensorline – Full Area Inline Monitoring

P_sensorline_21





Highlights

- ► Contact free and real time
- ► Accurate measurement
- ► High degree of variability and flexibility
- ► High sample rate up to 1,000 measurements per second
- ▶ Full width measurement

Parameters

- ► Sheet resistance (Ohm/sq)
- Metal layer thickness (nm, μm)
- Metal substrate thickness (μm)
- Distance [μm]
- Anisotropy
- Defects
- ► Integrity assessment

Materials

► Architectural glass (LowE)

Applications

- ► Touch screens and flat monitors
- ▶ OLED and LED
- ► Smart-glass
- ► Transparent antistatic foils
- ► Photovoltaics
- ► Semiconductors
- ► De-icing and heating
- ▶ Batteries and fuel cells
- ▶ Packaging materials

- ▶ Wafer
- ► Metal films and meshes
- Conductive oxides
- ► Nanowire films
- ► Graphene, CNT, Graphite
- ▶ Printed films
- ► Conductive polymers (PEDOT:PSS)
- ▶ Other conductive films and materials

SURAGUS GmbH Maria-Reiche-Strasse 1 01109 Dresden Germany

For further questions: +49 351 32 111 520

sales@suragus.com

Visit us at: www.suragus.com www.suragus.com/calculator www.suragus.com/EddyCusSensorline

Engineered and Made in Germany







Sheet resistance measurement technology	Non-contact eddy current sensor
Substrates	Foils, glass, wafer, paper etc.
Measurement gap size	3 / 5 / 10 / 15 / 25 / 50 / 75 mm
Number of sensor pairs / monitoring lanes	Up to 128 sensors
Sensor sizes (W x L x H) in mm	Sensor M: 80 x 100 x 66 Sensor S: 34 x 48 x 117
Conductive layers	Metals/TCOs/CNTs/ nanowires/ graphene/ grids/ PEDOT/ others
Sheet resistance range accuracy can be optimized over sheet resistance decade within a customer specified range	Low 0.0001 – 10 Ohm / sq; 2 to 7 % accuracy Standard 0.01 – 1,000 Ohm / sq; 2 to 7 % accuracy High 10 – 100,000 Ohm / sq; 3 to 7 % accuracy
Metal thickness measurement range	2 nm – 2 mm (in accordance with sheet resistance)
Sensor pitch	40 mm (5 to 100 mm on request)
Environment	Ex-vacuo/ in-vacuo @ T < 60° C / 140° F (on request < 90° C / 194° F)
Sample rate	1 / 10 / 50 per second
Hardware trigger	5 / 12 / 24 V
Interfaces	UDP, .Net libraries, TCP, Modbus, analog/digital
Available options	8-sensor array, 40 mm pitch (total array width of 320 mm)* 16-sensor array, 40 mm pitch (total array width of 640 mm)* 32-sensor array, 40 mm pitch (total array width of 1,280 mm)* 48-sensor array, 40 mm pitch, (total array width of 1,920 mm)* 64-sensor array, 40 mm pitch (total array width of 2,560 mm)*

Software – EddyCus® inline Series

- ► Several views and user level
- ► 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 automated data export (csv, txt, xls,...)
- ► Several smart functions (automated DB cleaning, self-reference etc.)
- ► Parameterizable I/O modules (triggering of actions or alarms)

* with standard sensor housing

