

## Data Sheet- EddyCus® TF map 5050 Series

P\_T\_5050\_12



### Highlights

- ▶ Contact-free imaging
- ▶ High resolution imaging (25 to 1,000,000 points)
- ▶ Defect imaging
- ▶ Mapping of encapsulated layers

### Applications

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

### Parameters

- ▶ Sheet resistance (Ohm/sq)
- ▶ Metal layer thickness (nm,  $\mu\text{m}$ )
- ▶ Metal substrate thickness ( $\mu\text{m}$ )
- ▶ Anisotropy
- ▶ Defects
- ▶ Integrity assessment

### Materials

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

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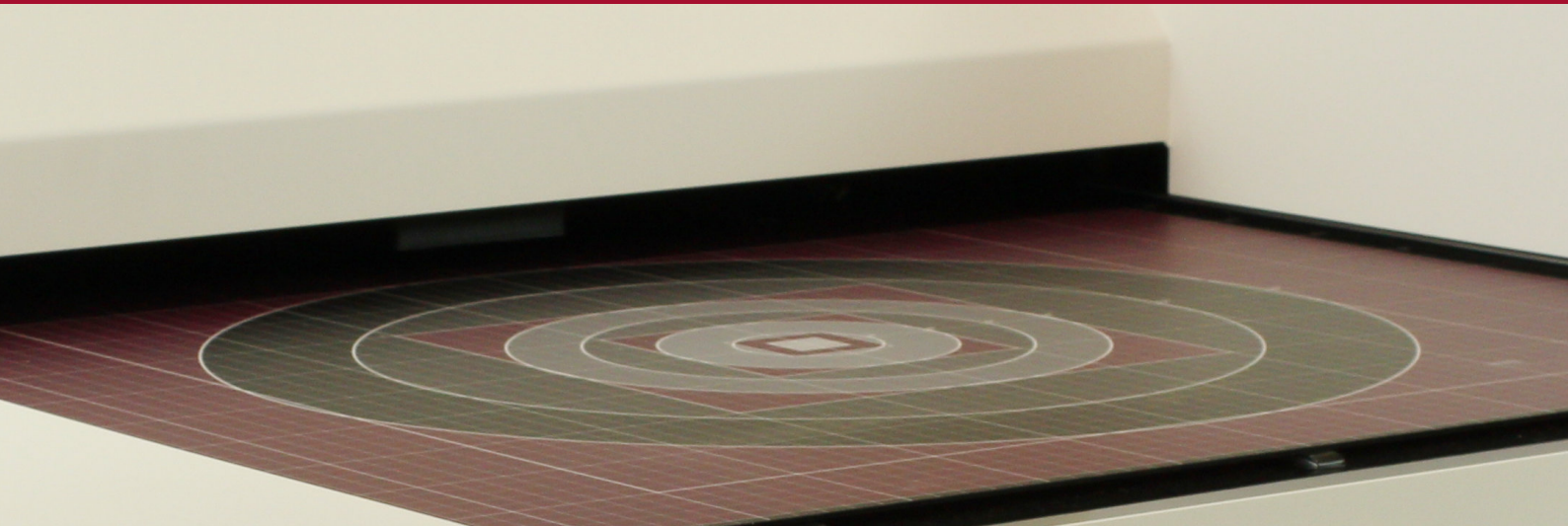
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Made and Engineered in Germany

Innovation Award by  
Free State of Saxony 2013  
1st Place





Measurement technology	Non-contact eddy current sensor
Substrates	2, 4, 6, 8, 12 inch wafer
Max. Scanning area	20 inch / 508 x 508 mm (larger on request)
Edge effect correction / exclusion	2 - 5 mm edge exclusion for standard sizes
Max. Sample thickness / sensor gap	2 / 5 / 10 / 25 mm (defined by the thickest sample)
Sheet resistance range	Low 0.0001 - 10 Ohm / sq; 2 to 7 % accuracy
accuracy can be optimized over sheet resistance decade within a customer specified range	Standard 0.01 - 1,000 Ohm / sq; 2 to 7 % accuracy
	High 10 - 10,000 Ohm / sq; 3 to 7 % accuracy
Thickness measurement of metal films (e.g. Aluminum, Copper)	2 nm - 2 mm (in accordance with sheet resistance)
Scanning Pitch	1 / 2 / 5 / 10 mm (other on request)
Measurement points per time	10,000 measurement points in 5 minutes 1,000,000 measurement points in 30 minutes
Scanning time	8 inch / 200 x 200 mm in 0.5 to 5 minutes (1-10mm pitch) 12 inch / 300 x 300 mm in 1.5 to 15 minutes (1-10mm pitch)
Device dimension (w/h/d) / weight	46.5 x 11.4 x 35.4 inch / 1,180 x 290 x 900 mm / 120 kg
Available features	Metal thickness imaging Anisotropy sheet resistance sensor Optical transparency

## Software and Handling - Sheet Resistance Analyzer 2.0

