

Non-Contact Sheet Resistance Tester



DATA SHEET - EddyCus[®] TF lab 2020

HIGHLIGHTS

- Contact-free & real-time
- Accurate single-point measurement of sheet resistance for conductive thin films (Ohm/sq)
- Layer thickness measurement of metal films (nm)
- Wall thickness monitoring of low and high conductive substrates (μm)
- Characterization of multilayer systems
- Manual mapping of sheet resistance guided by an easy-to-handle software

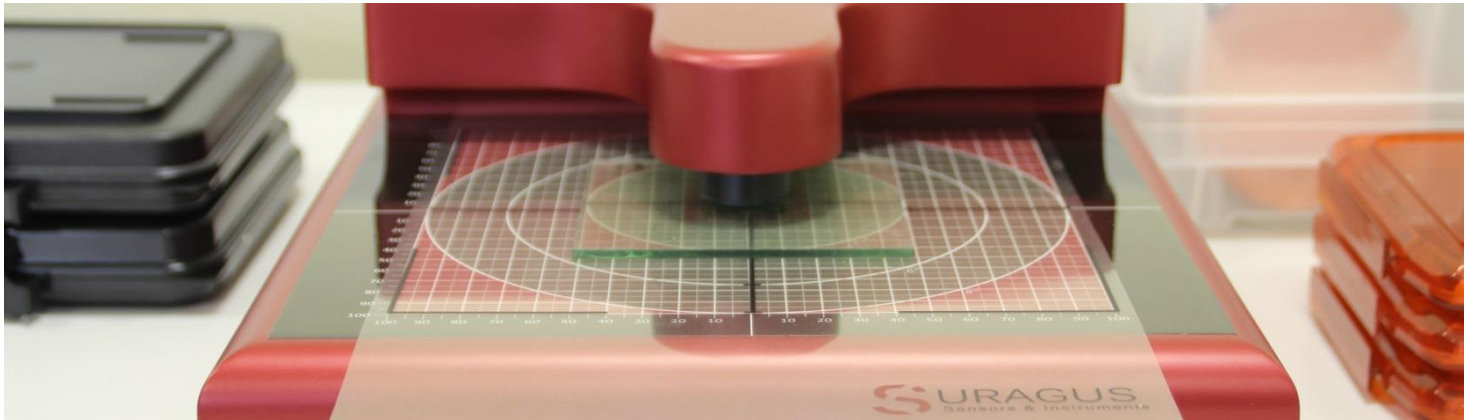
APPLICATIONS

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



DATA SHEET

EddyCus® TF lab 2020 – Sheet Resistance Tester



EddyCus® TF lab 2020

Sheet resistance measurement technology

Non-contact eddy current sensor

Substrates

e.g. foils, glass, wafer, etc.

Substrate area

8 inch / 204 x 204 mm² (open to three sides)

Max. sample thickness/sensor gap
(defines distances)

1 / 2 / 5 / 10 / 25 mm
(defined by the thickest sample / application)

Sheet resistance range

0.001 – 10 Ohm/sq < 2 % accuracy
10 – 300 Ohm/sq < 3 % accuracy
300 – 1,000 Ohm/sq < 5 % accuracy
higher range on request

Thickness measurement of thin films (e.g. copper)

1 nm – 500 µm (in accordance with sheet resistance)

Device dimension (w/h/d)

290 x 445 x 140 mm³

Weight

10 kg

SOFTWARE & HANDLING – EddyCus® TF lab Control

Real Time Measurement

Sheet Resistance

103.30 Ω/sq

Automatic

Self Referencing

Set No of Digits: < 0.00 >

Data Tracker

Series Name: Sample Serie Name

<input checked="" type="checkbox"/>	Id	Time	Series N.	Value	Unit
<input checked="" type="checkbox"/>	1	3:58:42...	Sample...	12.62	Ω/sq
<input checked="" type="checkbox"/>	2	3:58:53...	Sample...	4.13	Ω/sq
<input checked="" type="checkbox"/>	3	3:58:59...	Sample...	27.94	Ω/sq
<input checked="" type="checkbox"/>	4	3:59:10...	Sample...	52.53	Ω/sq
<input checked="" type="checkbox"/>	5	3:59:28...	Sample...	103.56	Ω/sq
<input checked="" type="checkbox"/>	6	3:59:35...	Sample...	189.26	Ω/sq
<input checked="" type="checkbox"/>	7	4:00:06...	Sample...	265.28	Ω/sq

Graph showing Sheet Resistance (Ω/sq) vs Id (1 to 7). The resistance increases from approximately 12.62 Ω/sq at Id 1 to 265.28 Ω/sq at Id 7.