

## TF lab 2020SR

Contactless sheet resistance tester



The EddyCus® lab 2020 SR Series is a compact, benchtop system designed for non-contact, single-point measurements of conductive thin films, metal layer thicknesses, and sheet resistance using eddy current technology. It enables fast, accurate measurements of samples up to 200 x 200 mm<sup>2</sup> (8 x 8 inches) and supports a broad range of materials, including thin metal layers, doped wafers, and conductive polymers.

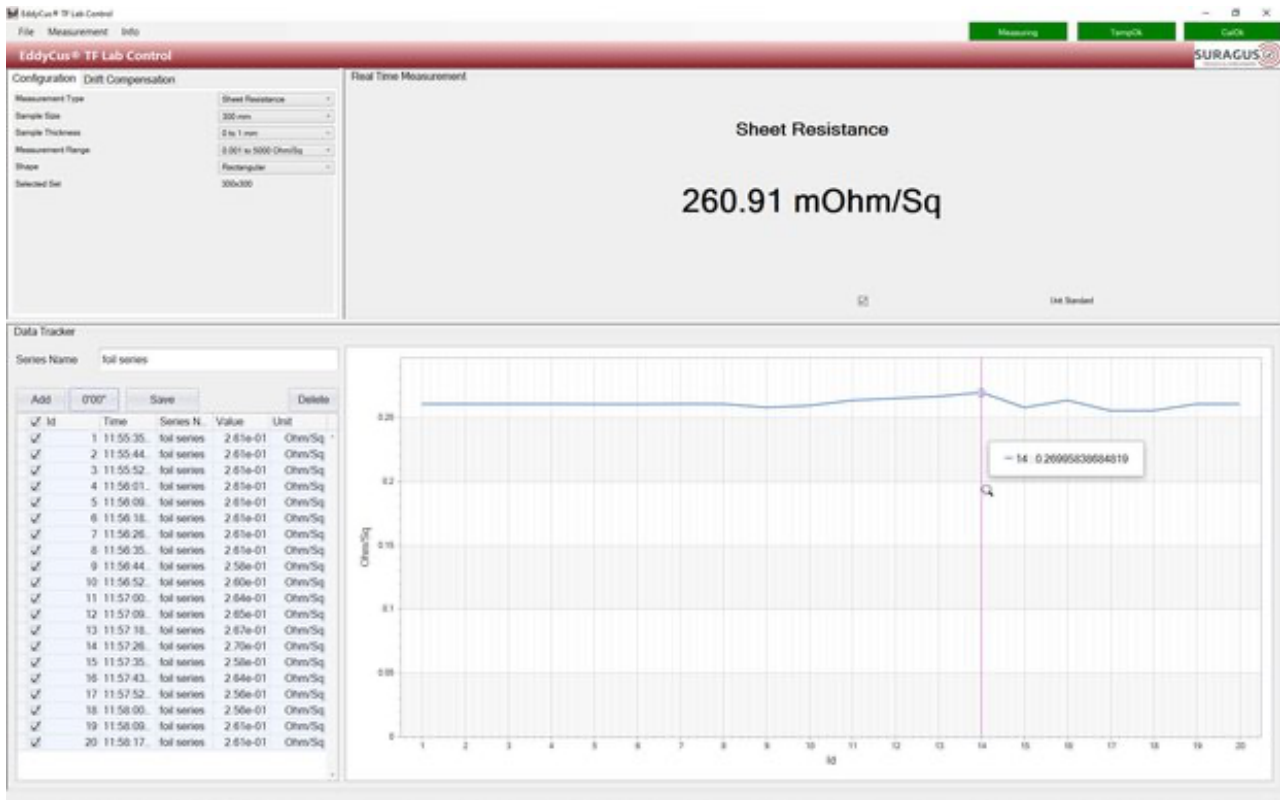
The EddyCus® lab 2020 offers a modern, contact-free alternative to traditional 4-point probe (4PP) and other contact-based measurement methods. Unlike 4PP systems, it requires no physical contact, no surface preparation, and is unaffected by encapsulations or surface roughness. You can learn more about the comparison between eddy current and 4PP methods [here].

These advantages make the EddyCus® lab 2020 an excellent choice for R&D laboratories, quality control, and process monitoring, where speed, repeatability, and non-destructive testing are essential.

The device is typically used for:

- Quality control, input and output control
- R&D
- Sample sizes between 10 x 10 mm<sup>2</sup> and 200 x 200 mm<sup>2</sup> (0.5 x 0.5 inches to 8 x 8 inches)
- Measurement ranges between 0.1 mOhm/sq and 100 kOhm/sq





This device comes with a measurement control software. It provides real-time reading of the sheet resistance when a sample is placed under the sensor.

Several options are available, such as a table for saving values and the ability to export results.

**Measurement range:**

	ULSR	VLSR	LSR	MSR	HSR
6 decades are measurable by one sensor, but with slightly affected accuracy					
Range (ohm/sq)	0.008 – 10 (mohm/sq)	0.05 – 300 (mohm/sq)	0.001 – 100	0.001 – 3 000	100 – 300 000
Accuracy / Bias	+/- 2 – 3 %	+/- 1 – 3 %	+/- 1 – 3 %	+/- 1 – 3 %	+/- 2 – 5 %
Repeatability (2σ)	< 0.3 – 0.5%	< 0.3 – 1%	< 0.3 – 1%	< 0.3 – 3%	< 0.5 – 2%

ULSR – Ultra Low Sheet Resistance, VLSR – Very Low Sheet Resistance, LSR – Low Sheet Resistance, MSR – Medium Sheet Resistance, HSR – High Sheet Resistance

## Specifications:

Measurement technology	Non-contact eddy current sensor
Sample area	204 x 204mm (open on the three sides)
Mouvement	Manual
Number of measurement sites	1 point
Wafer holding	No
Max sample thickness /sensor gap	4 / 10 / 14 / 20 mm (defined by the thickest sample)
Thickness measurement range of metal films	2nm – 2mm (in accordance with sheet resistance)
Connexion	Ethernet
Computer	Not included
Software	EdduCus TF Lab Control included (Win10/11 required)
Size (w x l x h)	290 x 445 x 140mm
Weight	10kg

## Related products

**Handheld device**



**Semi-auto system**



**Inline sensor**



**Calibration service**

