TF map 2530SR

Semi-auto contactless sheet resistance tester

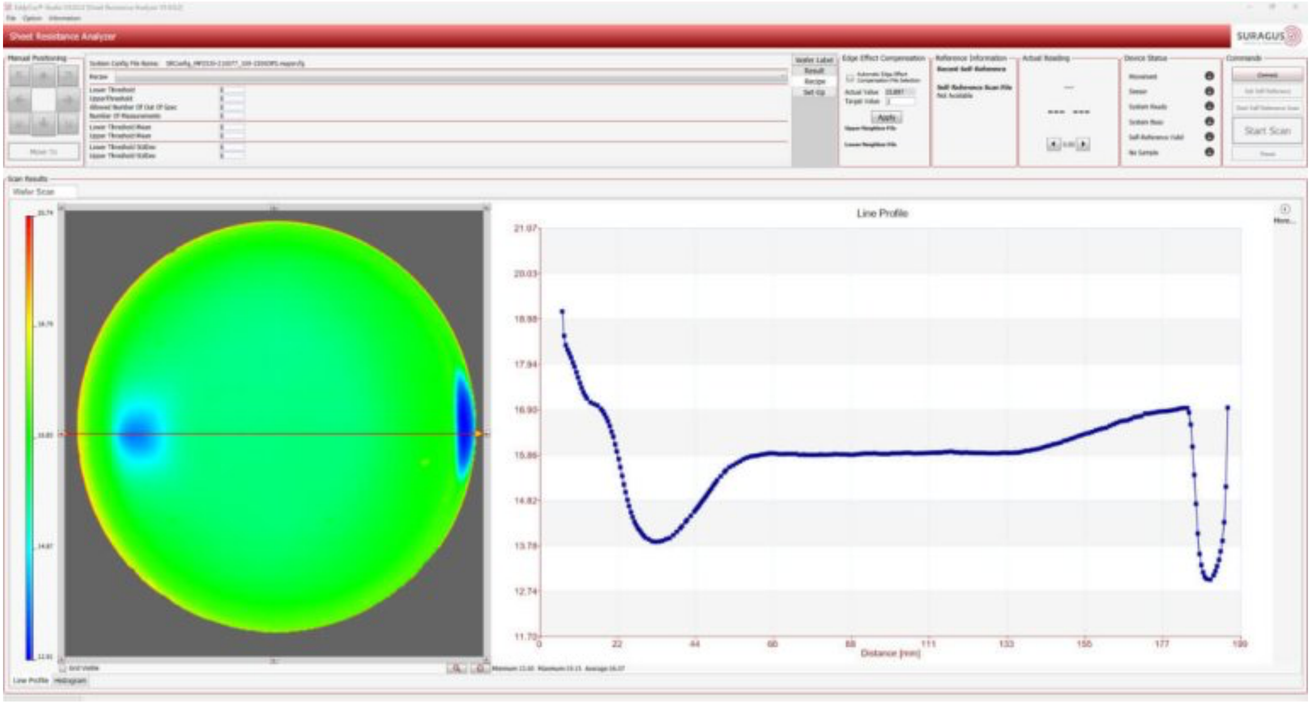
The EddyCus® map 2530 SR automatically measures the sheet resistance of large samples up to 300 × 300 mm^2 (12 × 12 inches) in non-contact mode. After manual placement of the sample, the system performs a fully automated scan and generates a high-resolution sheet resistance map across the entire surface.

The tool uses a stationary eddy current sensor, while the sample stage moves to enable scanning. This design allows for measurements on the fly, with no physical contact required, eliminating errors due to contact resistance. Depending on the selected settings, users can prioritize fast measurement times (under 1 minute) or high spatial resolution (up to 90,000 measurement points per scan).

The non-contact measurement ensures high accuracy and repeatability, independent of surface condition or contact quality. The dense measurement grid enables reliable detection of material variations, inhomogeneities, and defects. The included software offers a wide range of advanced analysis tools, supporting systematic quality control of thin films in both manufacturing and research environments.

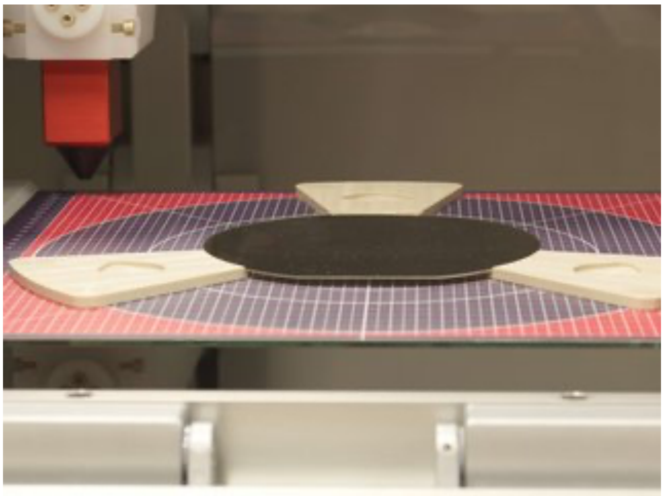
The device is typically used for:

- Technology: non-contact eddy current
- Imaging by multipoint mapping
- Sampling area: 300 x 300 mm
- Recommended sample sizes: 1 inch to 12 inch or 25 to 300 mm



Software and Device Control

- Very user-friendly software
- Realtime mapping measurement
- Easy-to-use statistical analysis options
- Pre-defined measurement and product recipes (sizes, pitches, thresholds)
- Line scan, histogram and area analysis
- Black and colored image coding
- Csv & pdf export
- PC summary and export
- 3 user level
- Material database for parameter
- conversion
- Edge effect compensation
- Storage and import of data
- Export of data sets (e.g. to EddyEva, MS Excel, Origin)



Measurement range:

	VLSR	**LSR**	**MSR**	**HSR**	**VHSR**
6 decades are measurable by one sensor, but with slightly affected accuracy					
Range (ohm/sq)	0.0001 – 0.1	0.01 – 10	0.1 – 100	10 – 2 000	1 000 – 200 000
Accuracy / Bias	+/- 1%	+/- 1%	+/- 1%	+/- 1 – 3%	+/- 3 – 5%
Repeatability (2σ)	< 0.5%	< 0.5%	< 0.5%	< 1%	< 0.5%

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

Specifications:

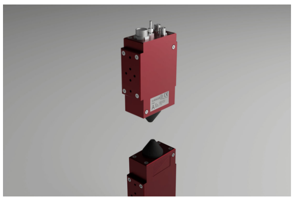
Measurement technology	Non-contact eddy current sensor
Max scanning area	300 x 300mm (larger upon request)
Wafer holding	Clamps
Mouvement	Semi-automatic
Edge effect correction / exclusion	2 – 10mm (depending on size, measurement range and requirements)
Max sample thickness /sensor gap	3/ 5 / 10 / 25 mm (defined by the thickest sample)
Thickness measurement range of metal films	2nm – 2mm (in accordance with sheet resistance)
Scanning pitch (X and Y)	1 / 2.5 / 5 / 10 / 25mm (other upon request)
Measurement points per time (square shaped samples)	100 measurement points in 0.5 minutes 10 000 measurement points in 5 minutes
Scanning time	8” / 200 x 200mm in 1 to 10 minutes (1 – 10mm pitch) 12” / 300 x 300mm in 2 to 6 minutes (2.5 – 25mm pitch)
Connexion	Ethernet
Computer	Not included
Software	EdduCus Control included (Win10/11 required)
Dimensions (w x l x h)	785 x 850 x 486mm
Weight	90kg

Related products

Handheld device

Manual system

Inline sensor



Calibration service