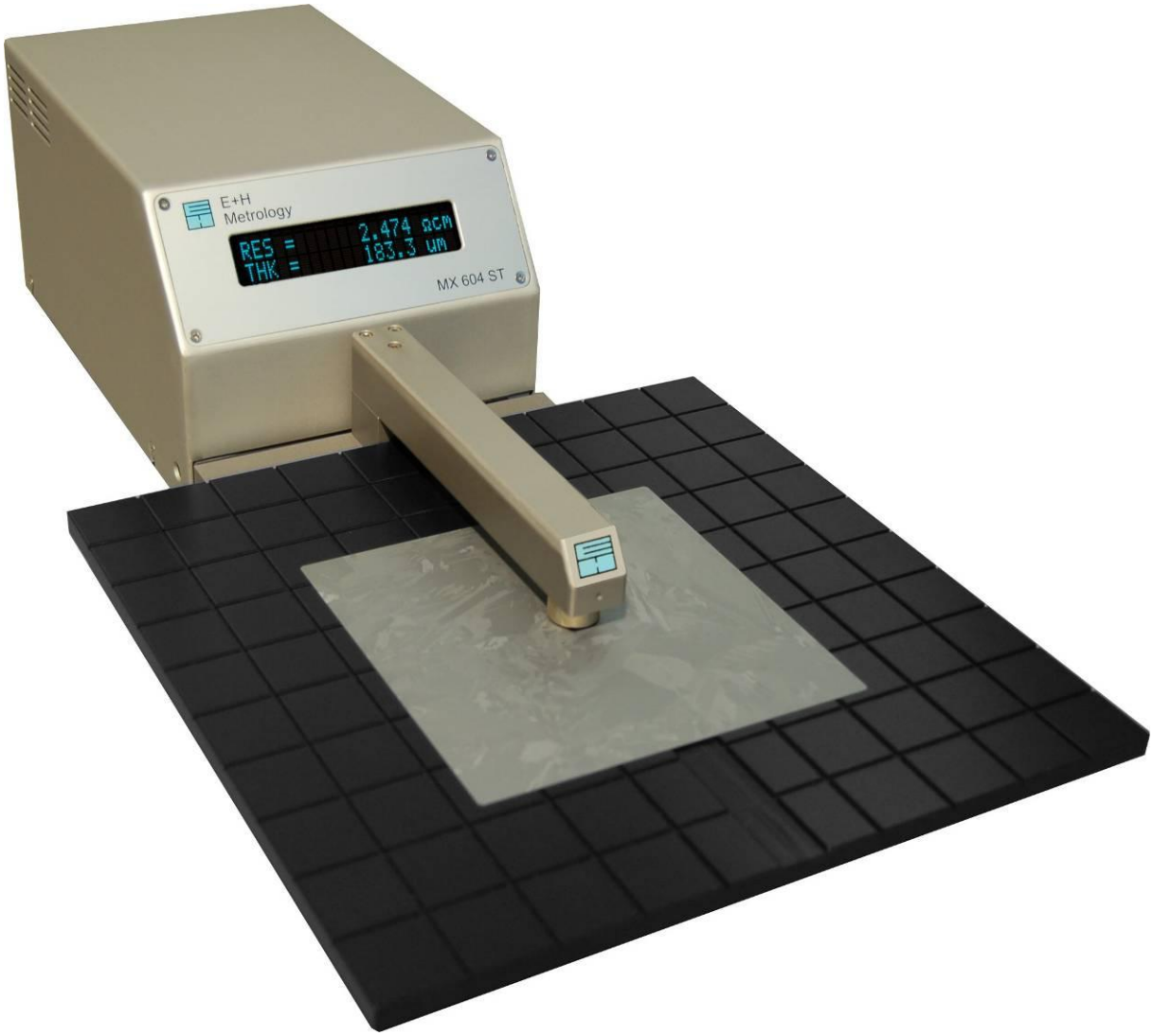
E+H
Metrology GmbH

MX 604-ST

Electronic Thickness and Resistivity Gauge



This easy to use metrology tool is designed for characterisation of mainly Solar wafer (of course, also round wafers with similar specification range). It uses a combined capacitive and inductive sensor construction for measuring thickness and resistivity at the same wafer spot. The system is completely self calibrating, thus temperature and humidity changes are negligible.
The stand-alone gauge can also be PC-connected using an RS 232 interface. This enables collecting data of multiple measurements, calculating TTV, mean value or standard deviation of single wafers or of complete wafer lots.

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Technical Specifications

Wafer Sizes	Square, Pseudo-Square up to 156 mm Round 2” to 8”
Thickness	60 – 300 µm *)
Accuracy	+/- 1 µm
Sensor Diameter	20 mm
Active Area	12 mm Ø
Distance from Edge	10 mm
Sheet Resistance	10 – 1000 Ω/□ *)
Resistivity	0.06 – 6 Ω×cm (thk.= 60µm) 0.3 – 30 Ω×cm (thk. = 300µm)
Accuracy	± 5 %
Sensor Diameter	20 mm
Active Area	ca. 12 mm Ø
Distance from Edge	10 mm
Gap between Sensor and table	1000 µm
Measuring time	0.3 s
Power Voltage	100 – 240 VAC
Consumption	15 VA

*) Up to factor two higher thicknesses and sheet resistances are possible with accordingly reduced accuracy