

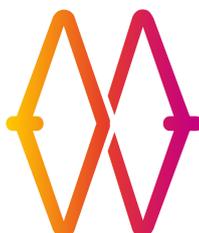


HIGHLIGHTS

- ▶ Compact system
- ▶ Industrial mode
- ▶ Large choice of mapping
- ▶ Complete software suite

SPECIFICATIONS

- ▶ Up to 200 mm wafer
- ▶ Y, Z and Theta motorized
- ▶ 60 to 180 g probe head
- ▶ SECS II optional



Model 280i is a semi-automatic 4 point in-line measurement systems on samples ranging from 10 mm to 200 mm in diameter. Thanks to their motorized chucks and probe, the 280i can map up to 5 000 measurement points on surface resistance ranges from 1 mohm/sq to 8E11 Ohm/sq. A large choice of probe heads allows measurements on a lot of samples. Its software has been designed for R&D and industrial application.

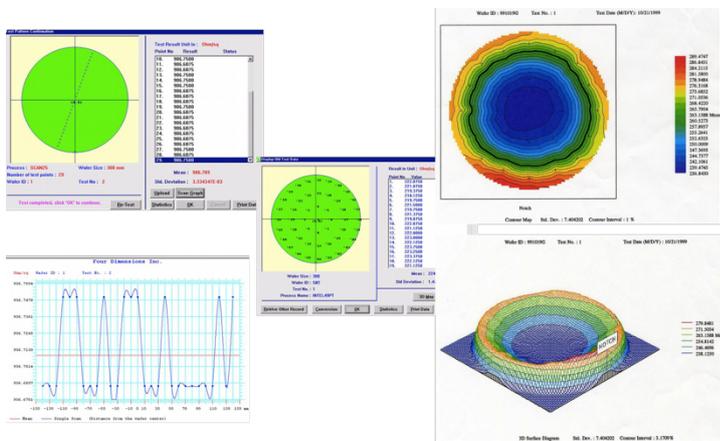
This system can be used for a large variety of applications like Metal films, ITO, amorphous Si, poly silicon, SOI, bulk substrates, epitaxial, diffused and ion implanted layers...

Calibration can be made by user by an electronic calibration for internal SMUs and a wafer calibration software function to allow very accurate measurements.

Models

280SI	1 mΩ/sq to 800KΩ/sq
280DI	1 mΩ/sq to 8E9Ω/sq
280DI extended	1 mΩ/sq to 8E11Ω/sq

Software



The software allows to use the machine in R&D mode (engineering) or industrial mode (operator) hiding several functions. The software will create recipes with a lot of maps examples (single points, diameter scan, X patterns, custom sites...). Average, Std. dev. and results table can be exported as files (Excel, ASCII...) or 2D/3D maps. SPC and wafer analysis can be used to follow the wafer production.

Probe head

This system uses cylindrical probe head with quick mount connector. The probe head has an internal pressure adjustment system from 60 to 180g. Radius can be chosen to match customer application (40µm, 300µm, 500 µm).



Specifications

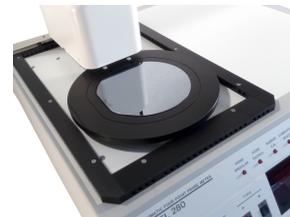
Wafer size	Up to 200 mm (8")
Measurement range	1 m Ω /sq to 800K Ω /sq (up to 8E11 Ω /sq optional)
Movement type	Semi-automatic Y, Z and theta
SMU	Internal
Measurement repeatability	< 0.2 % typical
Measurement accuracy	< 0.1 % typical
Quick mapping	1, 5, 9 sites, 5, 6, 9, 10, 13 sites ASTM/SEMI-X patterns or custom
Cartesian maps	Any site interval to nearest mm, up to 5 000 sites
Polar map	9, 25, 45, 49, 65, 81, 121, 169, 225, 289, 361, 441, 529, 625
Diameter scan	Any site interval to nearest mm
Parameters calculation	Ω /sq, Ω .cm, V/I, t(μ m), t (\AA)
Export parameters	2D map, 3D map, table
Export format	Excel, CSV, ASCII (SECS II optional)
Results analysis	SPC, by day, by wafer....
Computer	Desktop style with screen, mouse and keyboard
OS	Windows 11 pro edition
Power supply	240 VAC / 50 Hz / 1A (single phase)
Vacuum	25 in Hg – 1/4" OD push in



4PP head choice



Calibration wafer



Semi-automatic