



ResMap 178-Solar

The ResMap Model 178-Solar was designed to meet the needs of photovoltaic and other solar cell manufacturing metrology -- delivering the reliability, accuracy and repeatability for which the ResMap four point probe is known. Based on the technology of the highly successful ResMap 178, the 178-Solar has demonstrated its capabilities on solar substrates and conductive films.

Wafer handling:	Manual load
Wafer Size:	125mm x 125mm 156mm x 156mm 2" – 8" diameter
Max Square:	156mm x 156mm
Typical Measurement Time:	1 second per site
Maximum Throughput:	1 minute per wafer (49 sites)
Measurement Range:	2 mΩ/□ - 5 MΩ/□ (can be optimized to 1 mΩ/□)
Repeatability (1σ, typical):	≤ ±0.02% (static or Rs pack); ≤ ±0.2% (dynamic nearby spots)
Accuracy:	≤ ±0.5% using NIST traceable ResCal standards
Minimum Edge Exclusion:	1.5mm (center of probe to edge of film)

Computer System:	Pentium class; Windows XP Home (display not included)
SECS-II Option:	Available
Mapping Patterns:	Square or rectangular map (choose inside edge exclusion); line scan (diameter, radius or any point to point along diameter, minimum step 0.1mm); user defined (template)
Plots:	Contour (spacing choice, 1/3σ, fixed and auto %), 3D, line, data map, histogram, data sequence, radial and angular distributions; various modes of trend charts available
Data:	All ResMap data files may be ported to programs such as Excel® for further analysis.

Facilities	
House Vacuum :	Vacuum is not required.
AC Power:	100V to 240V < 10 KVA
Size (inches): width x depth x height	12" w x 19"d x 10"h; tabletop (table not included)