



ResMap 178

The ResMap Model 178 has become an industry standard for cost effective resistivity measurement. Designed to meet the needs of process development and tool characterization engineers, this four point probe has the accuracy, repeatability and reliability required. Its large installed base is testimony to its performance, ease of use and low cost of ownership.

Wafer handling:	Manual load
Wafer Size:	2" - 8" manual load
Max Diameter:	8.2"
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); ≤ ±0.1% (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:	Polar map (align with notch/flat, straddle, or follow flat); 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)