

## ResMap 168

The ResMap Model 168 is the most popular ResMap model for production requirements under 300mm - delivering the reliability, accuracy and repeatability that thin film engineers have to come to rely on. With its auto cassette load capability the Model 168 lowers the cost of ownership for thin film metrology for CMP, ion implant, diffusion process development and monitoring.

Wafer handling:	Auto cassette load
Wafer Size:	4"- 8" auto load; 2"- 8" manual load
Max Diameter:	8.2"
Max Square:	5.8" x 5.8"; 156mm x 156mm
Typical Measurement Time:	1 second per site
Typical Wafer Handling Time:	10 seconds each way
Typical Notch Find Time:	12 seconds with optional notch finder
Maximum Throughput:	40 wph (49 sites); 80 wph (5 sites)
Measurement Range:	2 mΩ/ $\square$ - 5 MΩ/ $\square$ (can be optimized to 1 mΩ/ $\square$ )
Repeatability (10, typical):	$\leq \pm 0.02\%$ (static or Rs pack); $\leq \pm 0.1\%$ (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, 1/3 $\sigma$ , 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 :	Required; >500 mm Hg, on ¼" OD flexible tubing
AC Power:	100V to 240V < 10 KVA
Size (inches): width x depth x height	12" w x 28"d x 10"h; tabletop (table not included)