

CDE

## ResMap 273-Solar

Based on the technology of the Model 178Solar, the ResMap Model 273-Solar is the first 210 mm table top automatic four point probe. The Model 273Solar extends the capability and performance of previous ResMap models to meet the needs of the 210 mm solar process development and solar conductive film characterization. The small footprint and rugged design have the same accuracy and repeatability which define ResMap metrology.

| Wafer handling: | Manual load |
| :---: | :---: |
| Wafer Size: | $\begin{aligned} & 125 \mathrm{~mm} \times 125 \mathrm{~mm} \\ & 156 \mathrm{~mm} \times 156 \mathrm{~mm} \\ & 210 \mathrm{~mm} \times 210 \mathrm{~mm} \text { (maximum) } \\ & 2 "-12 " \text { diameter } \end{aligned}$ |
| Typical <br> Measurement Time: | 1 second per site |
| Maximum Throughput: | 1 minute per wafer (49 sites) |
| Measurement Range: | $2 \mathrm{~m} \Omega / \square-5 \mathrm{M} \Omega / \square$ <br> (can be optimized to $1 \mathrm{~m} \Omega / \square$ ) |
| Repeatability <br> (1 $\sigma$, typical): | ```\leq 0.02% (static or Rs pack); \leq 0.1% (dynamic nearby spots)``` |
| Accuracy: | $\leq \pm 0.5 \%$ using NIST traceable ResCal standards |
| Minimum Edge Exclusion: | 1.5 mm (center of probe to edge of film) |


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


| Facilities |  |
| :--- | :--- |
| House Vacuum : | Vacuum is not required. |
| AC Power: | 100 V to $240 \mathrm{~V}<10 \mathrm{KVA}$ |
| Size (inches): <br> width x depth x height | $15 " \mathrm{w}$ x 18 "d x 10 "h; <br> tabletop (table not included) |

