

# Model: EC-80P

Sheet resistance/resistivity measurement instrument [Hand held probe type, Eddy current method]







# Free measurement by pen-type probe head Easy measurement handling & setting

#### **Features**

- Auto-measurement start by probe head contacting to sample
- 3 measurement modes for wafer resistivity, bulk resistivity and sheet resistance
- Easy set up to measurement condition by JOG dial
- 5 types of probe for each measuring range
- Resistivity probe can be changed by sample's resistivity range

(\*Option; 2<sup>nd</sup> & 3<sup>rd</sup> probe types)

- Measurement spot size (probe core size): 14mmφ
- <Option> PN type checker probe
  (\*PN Checking range in resistivity: 0.1 1,000 ohm.cm)

# **Applications**

Any sample within the measurement range can be measured.

- Wafer sample;
  Si, Compound wafer, Epitaxial on the compound (Gan, GaP), SiC, etc
- Thin film layer;
  Semiconductor process, Metal, ITO, IZO,
  Low-E glass, LED/OLED etc
- Others

### Sample sizes

Any size and shape can be measured. (\*Larger than measurement spot size)









| Probe Type      | Measurement Range                            |
|-----------------|--|
| (1) Low         | 0.01 - 0.5 ohm/sq<br>(0.0005 - 0.025 ohm.cm) |
| (2) Middle      | 0.5 - 10 ohm/sq<br>(0.025 – 0.5 ohm.cm)      |
| (3) High        | 10 - 1000 ohm/sq<br>(0.5 – 50 ohm.cm)        |
| (4) Solar wafer | 5 - 500 ohm/sq<br>(0.1 – 10 ohm.cm)          |

<sup>\*</sup>Resistivity range for each probe type(ohm.cm) assumed thickness: 500µm (solar wafer:200µm).

## **Measurement Repeatability**

| Measurement Range | %               |
|-------------------|-----------------|
| Low, Middle       | <b>≦</b> 0.5 %  |
| High              | <b>≦</b> 1.0 %  |
| Super High        | <b>≤</b> 5.0 %* |
| Solar wafer       | <b>≦</b> 3.0 %  |

<sup>\*</sup>CV = STDEVP/AVG × 100%

Repeatability by each ohm/sq (% of one sigma) and 10 times measurement (same site of the certified area of NIST and/or VLSI standards).

### **Dimensions & Utilities**

<Dimensions> Main body : W255 × D275 × H95mm, 4kg

Handy probe : 20mmΦ x 80mm

<Utilities> AC100V±10%, 50/60Hz, 100VA

<sup>\*</sup>Specification subject to change without notice.



<sup>\*</sup> Resistivity is a reference value due to variations with sample thickness.

<sup>\*</sup>CV value is based on the inspection before shipment.

<sup>\*</sup>CV value will depend on the operator, especially, Supe High range will have big influence by operating.

<sup>\*</sup>Please contact us for more details.

<sup>\*</sup>The customers are always welcome to do Demo measurement.