NAPSON CORPORATION

The Pioneer
for Sheet resistance/ Resistivity measurement

# 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 ; 2nd & 3rd probe types)
- Measurement spot size (probe core size): 14mmφ

### Applications

Any sample within the measurement range can be measured.

- Wafer sample ;
  Si, Compound Epitaxial (GaN, GaAs) GaP) wafer
  SiC wafer
- Thin film layer ( Metal, ITO, IZO)
  Low-E glass
- Others

### Sample sizes

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









## Measurement Range

*Concurrent connection ; Max. 2 probes, Number of probes ; Max. 3 probes

| Probe Type | Measurement Range |
|---|---|
| (1) Low | 0.01 - 0.5 ohm/sq<br>(0.001 - 0.05 ohm.cm) |
| (2) Middle | 0.5 - 10 ohm/sq<br>(0.05 - 0.5 ohm.cm) |
| (3) High | 10 - 1000 ohm/sq<br>(0.5 – 60 ohm.cm) |
| (4) Super High | 1000 – 2000 ohm/sq<br>(60 – 120 ohm.cm) |
| (5) Solar wafer | 5 - 500 ohm/sq<br>(0.2 – 15 ohm.cm) |

*Resistivity range for each probe type(ohm.cm) assumed thickness

## Measurement Repeatability

| Measurement Range | % |
|---|---|
| Low, Middle | ≦ 1.0 % |
| High (10 – 400 ohm/sq) | ≦ 1.0 % |
| High (400 – 1000 ohm/sq) | ≦ 2.0 % |
| Super High | ≦ 5.0 % |
| Solar wafer | ≦ 2.0 % |

*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

*Please contact us for more details.
*The customers are always welcome to do Demo measurement.
*Specification subject to change without notice.

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