

## Model : DUORES®

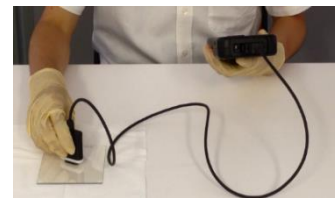
Hand held Sheet resistance measurement instrument  
[Replaceable probe set (Non-destructive probe & Contact probe) ]



Mainbody + Contact probe(Left) + Non-destructive probe(Right)



Non-destructive probe  
(Eddy current method)



Contact probe  
(4point probe method)

### Easy to measure sheet resistance & carry around

### Replaceable hand-held probes for Non-destructive & Contact type

#### Features

- **<NAPSON Original Technology>**  
**Replaceable hand-held probes for 2 kinds of measurement methods**  
<1> Non-destructive type(Eddy current method)  
<2> Contact type(4point probe method)
- Auto-measurement start by probe head unit put on/probe contact to sample
- Long-battery run time : 24h\*  
(\*Battery-operated mode)
- Measurement data display : Max.100 data
- Measurement data save : Max.50,000 data
- Measurement data transfer by USB-Mini
- Measurement unit :  $\Omega/\square$ , S/ $\square$ , n/m
- Data displayed by 4 digit floating decimal point

#### Applications

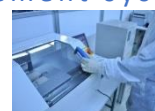
- Any sample within the measurement range can be measured. (Films, Glass, Papers etc)
- Thin-film (ITO, TCO etc)
  - Low-E-Glass
  - CNT(Carbon nanotubes), Graphen materials
  - Metals (nano-wires, grids, meshes, thin films)
  - Others

\*Please contact us for details & demo-measurement.

#### Sample sizes

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

A global leading company for resistivity measurement system.



## Measurement Range & Accuracy

Probe Type	Measurement Range	Measurement Accuracy
Non-destructive probe (Eddy current type)	0.5 - 200 ohm/sq	<ul style="list-style-type: none"> <li>• 0.5~100 ohm/sq : <math>\leq 3.0\%^{*1}</math></li> <li>• 100~200 ohm/sq : <math>\leq 5.0\%^{*1}</math></li> </ul>
Contact probe (4point probe type)	0.1 - 4000 ohm/sq	$\leq \pm 0.5\%^{*2}$

\*1 Repeatability : Repeatability of Napson STD sample measurement( $CV = STDEV/P / AVG \times 100\%$ ). [Before Shipment]

\*2 Accuracy : Accuracy of Napson STD resistor measurement. [Before shipment]

## DUORES : Configuration



Main Display

<Configurations> Mainbody, Contact probe, Non-destructive probe, STD resistor(For Contact/Non-destructive probe, each 1pc), Battery charger, USB-USB mini cable, carrying case for DUORES

\*One-half configurations ; (1)Mainbody + Non-destructive probe set, (2)Mainbody + Contact probe set are also available.



Contact probe  
Spacing : 3mm



Non-destructive probe  
Meas.Spot :  $\phi 25\text{mm}$



Battery cell x 4pcs [\*Not included]  
(AA NiMH rechargeable cell battery)



Easy replacement work  
for each measurement

## Dimensions & Utilities

<Dimensions> Main body : W80(100) × D210 × H36 mm, approx.350g [\*Battery cells are not included]

Non-destructive probe : W70( $\phi 50$ ) × D20( $\phi 50$ ) × H70 mm, approx.170g

Contact probe : W40 × D15 × H50 mm, approx.85g

<Utilities> AC100~240V, 50/60Hz, DC9V 1A

\*Please contact us for more details.

\*The customers are always welcome to do Demo measurement.

\*Specification subject & appearance to change without notice.