

## Model : DUORES®

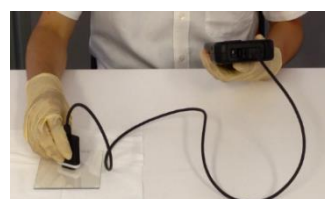
Hand held Sheet resistance measurement instrument  
[Replaceable probe set (Non-destructive probe & Contact probe) ]



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

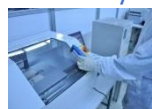
### Applications

- 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.



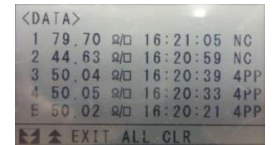
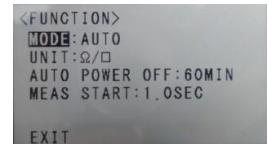
## Measurement Range & Accuracy

Probe Type	Measurement Range	Measurement Accuracy
Non-destructive probe (Eddy current type)	0.5 - 200 Ω/sq	<ul style="list-style-type: none"> <li>• 0.5~100 Ω/sq : ≤3.0%*1</li> <li>• 100~200 Ω/sq : ≤5.0%*1</li> </ul>
Contact probe (4point probe type)	0.001 - 4000 Ω/sq	≤±0.5%*2

\*1 Repeatability : Repeatability of Napson STD sample measurement(CV = STDEVP/AVG × 100%). [Before Shipment]

\*2 Accuracy : Accuracy of Napson STD resistor measurement. [Before shipment] and the range 0.1-4000 Ω/sq.

## DUORES : Configuration



Main Display

<Configurations> Mainbody, Contact probe, Non-destructive probe, STD resistor(For Contact/Non-destructive probe, each 1pc), Battery charger

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



Contact probe  
Spacing : 3 mm



Non-destructive probe  
Meas.Spot : φ25 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(φ50) × D20(φ50) × 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.