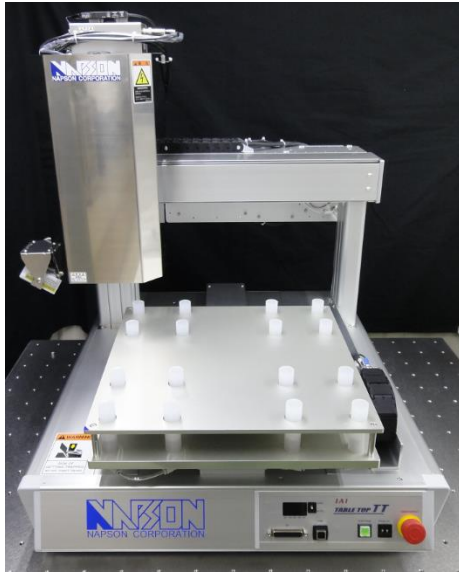


Model : CRN-100

Non-contact Ultra-High range sheet resistance measurement system



CRN-100 : Non-contact Ultra-High range sheet resistance measurement system measures

**Ultra-High range sheet resistance :
 $10^9 \sim 10^{15}$ ohm/sq**

without contacting (Corona discharge method).

The probe is composed of a grid type corona charger and a surface voltmeter located next to the charger. A test material was placed below the probe without contact to the material at a gap of 2 mm.

Epoch-making measurement system for Ultra-High range sheet resistance by Non-contact

Feature and function

- *Ultra-High range sheet resistance measurement for $10^9 \sim 10^{15}$ ohm/sq without contacting.
- *Mapping program software
 - Arranged in a multipoint pattern measurement is programmed
 - 2-D, 3-D mapping software
- *Easy operation by Windows 7 system software
- *Measurement data base link with Excel via CSV format file

<Corona discharge method>

Joint development with Yamagata Univ.
(Associate Professor : Toshiyuki Sugimoto)
Obtain a patent [Pat.No.5510629]

Applications

Any sample within the measurement range can be measured.

- Thin film layer (a-Si, IGZO etc)
- Coating material
- Semiconductor material
- Approximate material as Insulator

***Please contact us for demo measurement.**

Sample sizes

Size : $\sim 300 \times 400$ mm (or more larger)

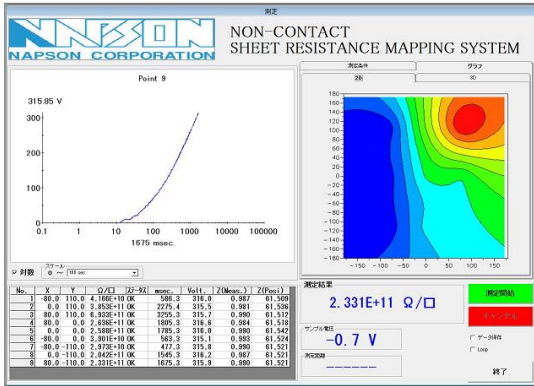
Thickness : ~ 2 mm

*We can design as your requirement.

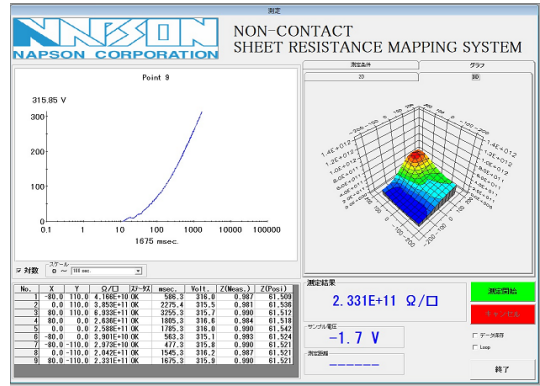
Please contact us for customize.



Software Interface

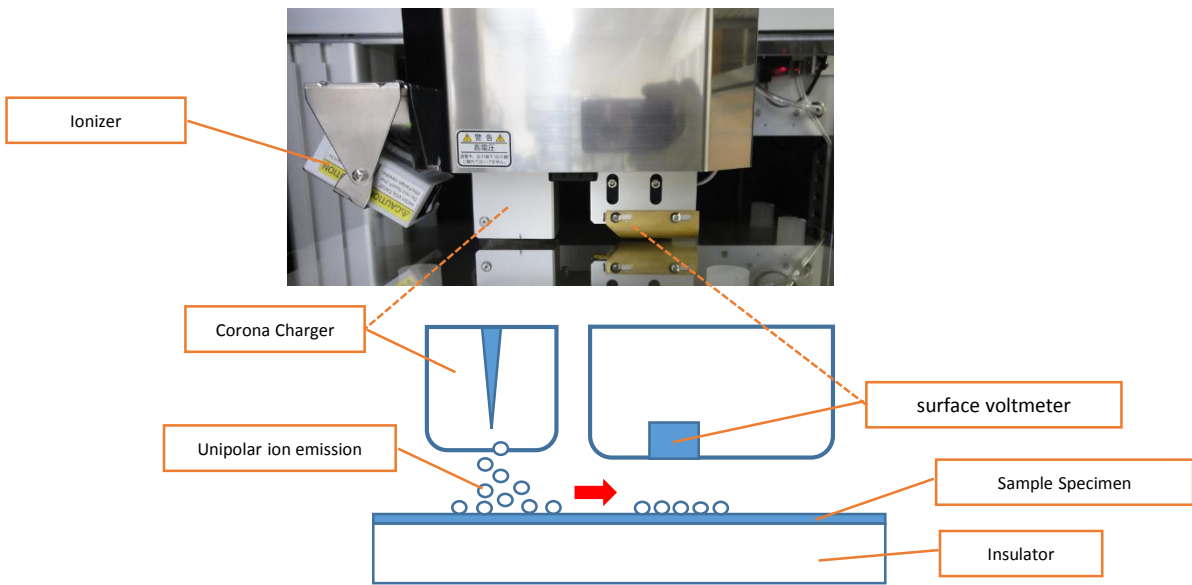


2-D Mapping



3-D Mapping

About [Corona discharge method]



- (1) Unipolar corona ions are supplied to the surface of the test specimen.
- (2) The surface of the test specimen is partly charged.
- (3) The surface charge is traveled through the surface toward an area of lower surface potential.
- (4) The surface potential rise time is measured by the surface voltmeter(detector.)
- (5) This rise time depends on the surface resistance of the materials.

Notice: Expected measurement range of sheet resistance is 10^9 to 10^{15} ohm/sq.

Feature of this method;

- 1 : The measurement is not affected from surface conditions of specimen such as sparseness oxide layer.
- 2 : The surface of the specimen is not damaged.
- 3 : The measurement is not affected by the contact resistance.

☆ Please visit our website for the movie of this system.

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