

# **Model: NC-80MAP**

Non-contact sheet resistance measurement system

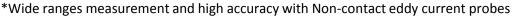


The NC-80MAP measures sheet resistance for GaAs, GaN, SiC wafer and metal layer etc. without contacting (Eddy current measurement method). It provides high accuracy/high tact measurement.

And also it can expand to full automatic system with robot and cassette station.

#### Feature and function

\*Multi-points measurement and Mapping display (and 2-D map / 3-D map graphic display with maximum 217 points)

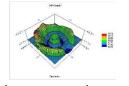


- \*Mapping program software
- Arranged in a concentric multipoint pattern measurement is programmed (maximum 217 points) and random pattern is programmable by operator.
- SPC charts and 2-D, 3-D mapping software.
- SPC chart function includes Ave, Max, Min and each limit(Upper/Lower control and setting), and Uniformity (%, Standard deviation)
- \*Wafer load/unload function and the aligner unit.
- \*2 to 8 inch wafer measurement is available
- \*Easy operation by Windows 7 system software
- \*Measurement data base link with Excel via CSV format file

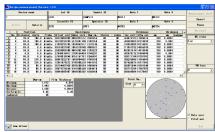
# **Specifications**

\*Measurement range(Total): 0.005 to 3,000 ohm/sq

Probe type	Measurement Range	
(1) Super Low	0.005 ~ 0.01 ohm/sq	
(2) Low	0.01 ~ 0.5 ohm/sq	
(3) Middle	0.5 ~ 10 ohm/sq	
(4) High / Super High	10 ~ 3000 ohm/sq	













<sup>\*</sup>Diameter of probe cores: 14 mm diameter (5 mm is available: S-Low, Low)

# Measurement accuracy performance

#### Conforms to ASTMF673.

The data is driven using NIST or VLSI wafers with manually placed on probing unit and 1.7 to 2 mm gap.

## Linearity (Less than)

Measurement Range	%
0.005 ~ 0.01 ohm/sq	±3 %
0.01 ~ 0.05 ohm/sq	±2 %
0.05 ~ 10 ohm/sq	±2 %
10 ~ 1000 ohm/sq	±2 %
1000 ~ 3000 ohm/sq	±3 %

### Repeatability

\*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).

Measurement Range	%
0.005 ~ 0.01 ohm/sq	0.1 %
0.01 ~ 0.05 ohm/sq	0.1 %
0.05 ~ 10 ohm/sq	0.1 %
10 ~ 1000 ohm/sq	0.2 %
1000 ~ 3000 ohm/sq	1.0 %

## **Throughput (Tact time)**

\*The time is estimated with  $\phi4$ " wafers. Measurement tact is 0.1s/point.

Points	Tact time	Time / Point
5(-)	17s(±1s)	3.4s
5(+)	21s(±2s)	4.2s
9(+)	24s(±2s)	2.67s
17	45s(±3s)	2.65s
37	70s(±3s)	1.89s
73	125s(±5s)	1.71s
121	195s(±10s)	1.61s
217	320s(±10s)	1.47s

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

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



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

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