

Wireless Non-contact Semiconductor Conductivity Tester

SM530

Features

- Quickly test the conductivity of semiconductors;
- Non-contact measurement
non-destructive measurement
- It can be used to classify and test pot bottom materials, ingots, rods, slices, etc.
- Resistivity over limit sound alarm function
- Can be measured polished or unpolished without sample pretreatment
- Fully automatic testing and data evaluation system

Application

- Detect the volume resistivity of silicon ingots, rods, and returned materials
- Volume resistivity test
- Single crystal or polycrystalline measurement
- Round and Square Measuring

Description

The quality of silicon crystal material itself determines the maximum conversion efficiency of photovoltaic products. Therefore, the stability of silicon crystal quality control in the production process is especially important for solar cell manufacturing. Optosky offers various solutions to control important material parameters in polysilicon and monocrystalline ingots.

The SM530 launched by Optosky is a resistivity testing system, which is controlled by a computer and has a micro-table with a touch screen. The eddy current-based method can be used to quickly measure the resistivity of samples and be integrated into various systems. Use a wide range of different tests. Accuracy is $\pm 5\%$ over the test range. Optional PN type test function based on surface photovoltage method.



Performance

Number	index	parameter												
1	Resistivity range	0.5~20 ohm.cm (optional 0.001~0.5 ohm.cm)												
2	detection rate	1s/data point												
3	Test point diameter	15mm												
4	Resistivity Accuracy	<table border="0"> <tr> <td></td> <td>0.5~15 ohm.cm</td> <td>±5%</td> </tr> <tr> <td></td> <td>15~20 ohm.cm</td> <td>±10%</td> </tr> <tr> <td>Optional</td> <td>0.01~0.5 ohm.cm</td> <td>±5%</td> </tr> <tr> <td></td> <td><0.01 ohm.cm</td> <td>±15%</td> </tr> </table>		0.5~15 ohm.cm	±5%		15~20 ohm.cm	±10%	Optional	0.01~0.5 ohm.cm	±5%		<0.01 ohm.cm	±15%
	0.5~15 ohm.cm	±5%												
	15~20 ohm.cm	±10%												
Optional	0.01~0.5 ohm.cm	±5%												
	<0.01 ohm.cm	±15%												
5	Resistivity Repeatability	3% (<2 ohm.cm) , 5% (≥2 ohm.cm)												