

Total Solution for Electronic Measurement



Integration of Technologies with Expertise and High Precision Measurement

AXISNET contribute to R & D and productivity improvement of customers through our unique technology, integration of automatic measuring system, and consulting of electronic measurement.

1. Original products including High Sensitive Current Amplifier and Peltier Temperature Controller.
2. Evaluation system of solar cell and solar module.
3. System integration with equipment of Agilent Technologies and others.
4. Custom made electronic measuring system with special probers.
5. Testing system for characteristics of rechargeable batteries.

Evaluation System for Solar Cells

Full line up of 40mm sq. to 300mm sq.

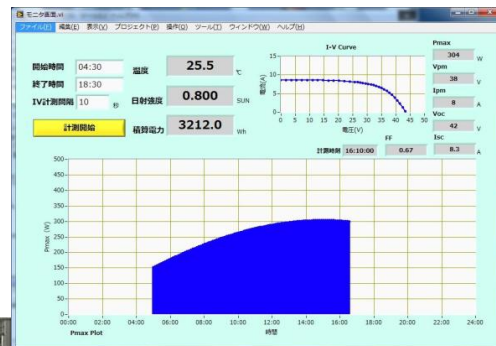
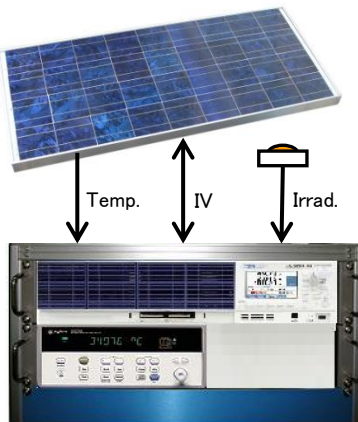
- Solar Simulator: All models are met to Class A-A-A of JIS C 8912.
- I-V Measurement: A high precision / high resolution source measure units working as voltage source / current meter / electronic load.
- Temperature Control Unit: Precisely controls solar cell temperature by Peltier elements.
- Measuring Software: From I-V measurement, it automatically calculates all of parameters to evaluate solar cells based on JIS C 8913.



Measuring System for Solar Panels

Record generated power of solar panels

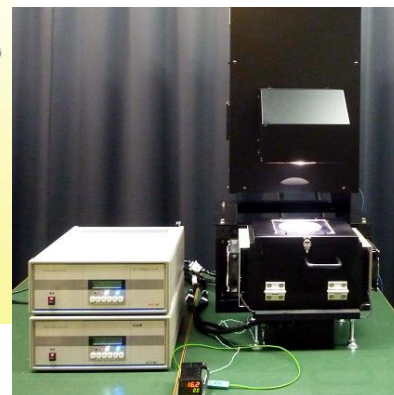
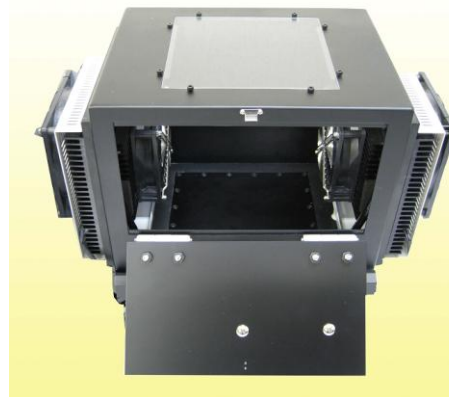
- Figure out photovoltaic generated power precisely from the I-V curves using a electronic load.
- Electronic Load: 500V max., 300W / 1kW
- High precision digital voltmeter measures panel temperature and irradiation power.
- Major items to be measured: Pmax, Vmax, Imax, and TPC.
- The software compensates measurement result to the standard 25 degrees in C.



Thermostatic Oven for Solar Cell

Best for focus type solar simulators

- Effective cool down / warm up capability by Peltier element control.
- A quartz gall plate installed on the top of the oven for focus type solar simulator.
- Dimension(inner size): 170(W) x 200(D) x 180(H)mm.
- Sample stage: 150mm x150mm.
- Temperature range; 15 to 80 degrees in C (depend on environment).



Temperature Control Unit for Soar Cell

Precise control by Peltier element

- Integrated system of Peltier element, sample stage, heat sink, cooling fan.
- Automatically control of cooling and heating.
- Temperature range: 0 to 80 degrees in C (depend on environment).
- Effective sample stage area: 50mm sq. to 300mm sq.
- Vacuum chucking of light sample is available.
- Custom made stages are also available.



1PT050

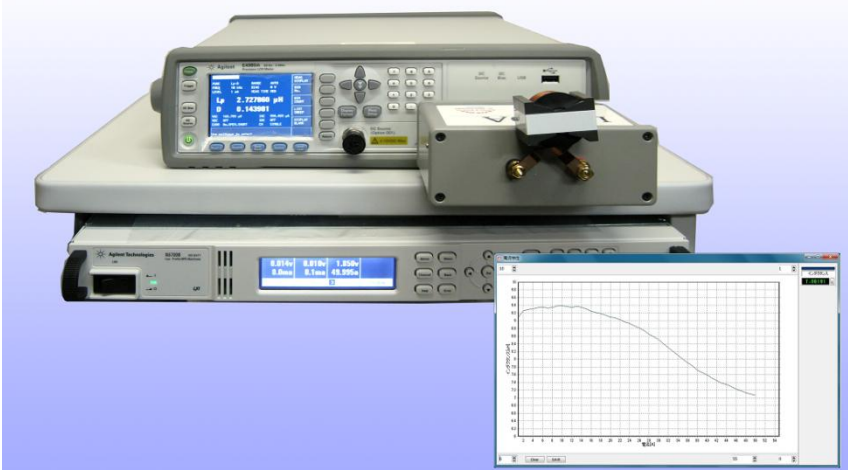


8PT300

Inductance Measurement System

Precise measurement of inductance

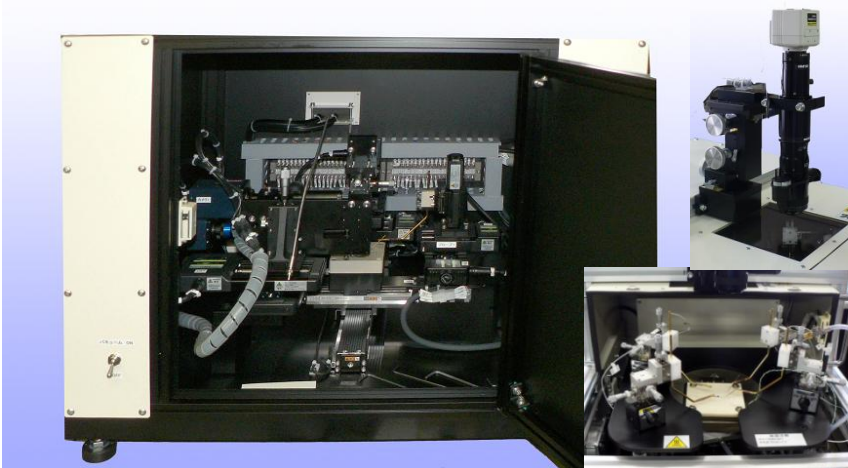
- Measurement of choke coils for EV, or large transformers with actual bias current.
- Maximum 600A bias current.
- Using Agilent Precision E4980A LCR meter.
- Selectable bias current from 50A to 600A.
- Customized software is available.



Multi functional 4 terminals prober

Precision measurement of semiconductors

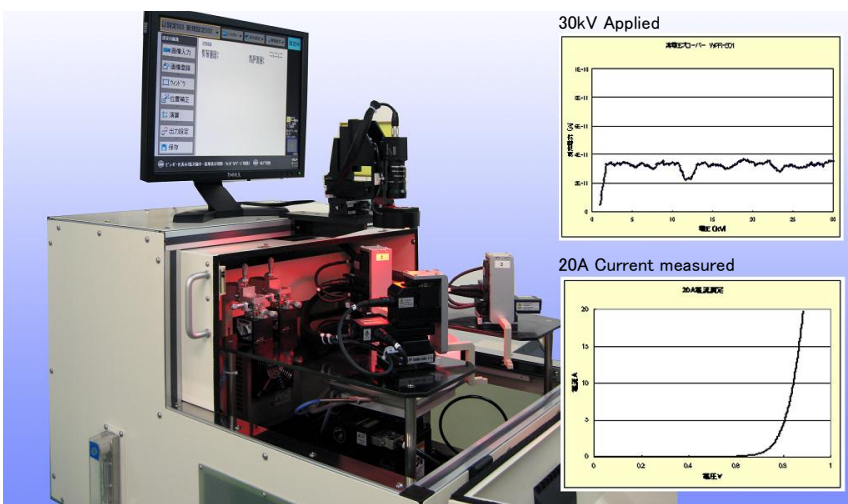
- IV measurement of 3 inch wafer with 4 or 2 terminals measurement.
- 4 units of 3 axes (XYZ) prober and 4 axes (XYZθ) sample stage.
- Heating up to 400 degrees C in the N2 gas purge environment.
- With high power telescope, observation of 10 um terminal or pattern is possible.
- Lighting for measurement of photo detectors is possible.



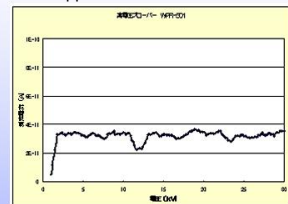
Prober for power devices

Characterization of power device

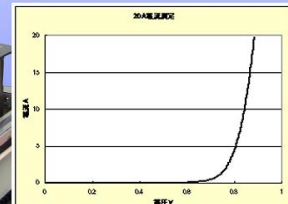
- High voltage as 30 kV IV measurement of 6 inch wafer is possible at 100pA sensitive.
- Characterization and reliability test of FET.
- The best tool of evaluation of high resistive materials.
- Avalanche breakdown can be measured more accurately curve tracers.
- Maximum current: DC20A, Pulse 200A .
- Mapping option and temperature control option are available.



30kV Applied



20A Current measured



High Sensitive Current Amplifier

Analyzing current of organic FET

- True current amplifier (input impedance lower than 10k ohm).
- Measurement secondary electron of SEM.
- Amplifier for photomultiplier tube (PMT).
- Measurement of current of nano devices.
- μ s rise time (Faster rise time option available).
- Low noise as 2pA rms.
- Gain: $10^3 - 10^{10}$ V/A.
- Emulation mode of Keithley 428 is available.

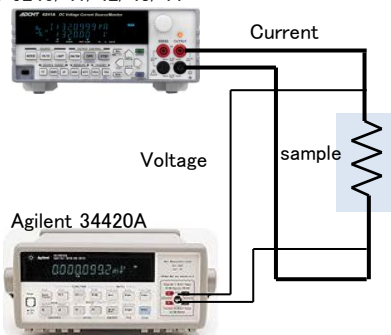


Ultra-low resistance measurement system

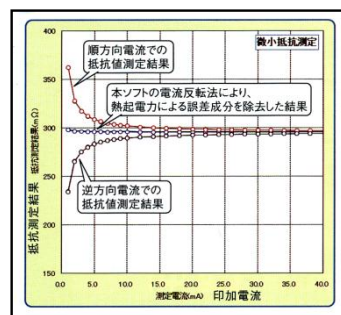
Evaluation battery electrode

- True ultra-low resistance measurement by canceling thermal effect with reversing current source..
- High speed and accurate measurement by high-sensitivity voltmeter .
- Ultra-low resistance measurement at programmed current.
- Pressure control for highly accuracy and repeatability is available.

ADC 6240/41/42/43/44



Block Diagram



Current reversing method

Rechargeable battery test system

Charge/discharge test for Li ion batteries

- Endurance test for up to 1024 batteries.
- Measurement of voltage, charging current and discharging current, internal resistance.
- Provide the data management system with customized software .



Company Profile

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AXISNET was certified as an authorized Solution Partner of Agilent Technologies in 2008.

We are willing to integrate electronic measurement systems using Agilent Technologies' products.

AXIS NET
Systems & Batteries

Agilent Technologies
Solutions Partner