

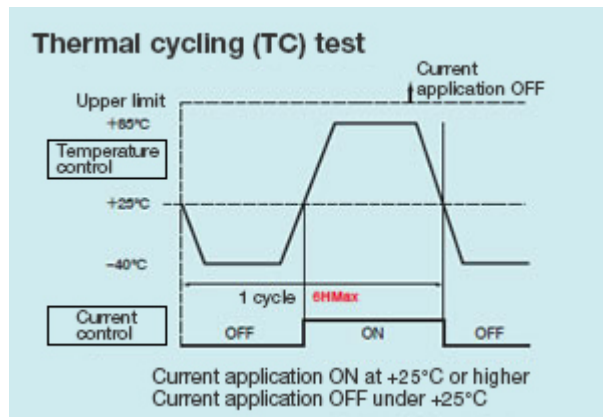
PV Thermal-Bias Combo Test System



Thermal cycling (TC) test system that enables application of STC peak output current

Under the solar cell module standard JIS C 8990 2009, an STC peak output current must be applied at +25°C or higher during thermal cycling (TC) testing.

The solar cell module thermal cycling (TC) test system combines a large capacity temperature and humidity chamber, which ensures testing safety and ease of panel setting, and a current load measurement system, which applies an STC peak output current equivalent and controls the entire system, thereby enabling easy thermal cycling (TC) testing.



Features

- Equipped with a fixed rack inside the chamber that can load 10 PV modules (max. size 1,800 × 1,200 × 70 mm), and enables application of a current load equivalent to the STC peak output current at a temperature exposure of 25°C or higher.
- Load a constant current and monitor the output voltage and current value. In addition, when the output voltage exceeds the preset determination threshold voltage, the current application stops only for that sample.

- Equipped with 10 temperature sensors for measurement of the surface temperature of each module, this system measures and records the module surface temperature in addition to the control temperature inside the test area.
- Comes with 3 test modes.
 - When one module reaches 25°C, current is applied to all modules.
 - When all modules reach 25°C, current is applied to all modules.
 - Current is applied separately to modules when the temperature of each module reaches 25°C.
- Equipped with a voltage application override function that operates when the door is opened and closed. It uses a door with locking function and interlock, which prevent accidental opening of the door during current load testing.

Standard test

- JIS C 8990: 2009
Thermal cycle testing (IEC 61215 10.11)

Specifications

Measurement system part

Model	AMIK-2000
Application current range	Current range 0 to 10 A Voltage range 0 to 100 V
Current output precision	±12 mA
Monitor value	Voltage, output current, surface temperature
Number of channels	10 channels (power supply specifications per 10 units)
External dimensions	570 (W) × 1832 (H) × 700 (D) mm (Excluding computer rack)

Temperature and humidity chamber (representative example FMS-3600)

Model	FMS-3600
Temperature and humidity control range	-40°C to +100 °C / 40% to 95%rh
Temperature and humidity distribution	±1.5°C / ±5%rh
Inside dimensions	1200 (W) × 1500 (H) × 2000 (D) mm



Use the following options if there is a possibility that acetic acid or phthalic acid may be generated from the specimen during operation at high temperature and humidity.

Options

- Stainless steel evaporator
- Drain pipe stainless steel specifications

Recommended products for customers viewing this product

PV I-V Evaluation System (PV Thermal-Light Combo Test System)



Low Temperature (& Humidity): FM Chamber

