

CEP-25RR

Patented (Japan Patent No.4663155)

Spectral response and internal quantum efficiency measurement

By irradiating monochromatic light on the solar cell in constant energy or constant photons that does not have dependency on the wavelength, the model CEP-25RR is capable to measure the spectral response and quantum efficiency of the various kinds of solar cell.

The model CEP-25RR is able to measure not only spectral response but also reflectivity. And then internal quantum efficiency can be obtained. The same surface area on the sample can be measured in spectral response and reflectivity measurement using the same light.

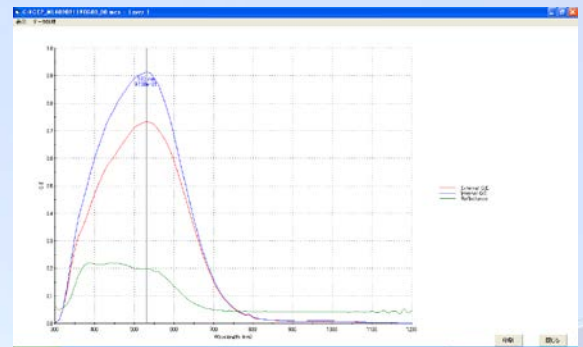
A white bias light source is available as a standard which enables the model CEP-25RR to measure the I-V curve with the AM-1.5G filter as a solar simulator easily in addition to spectral response measurement under the pseudo sunlight.



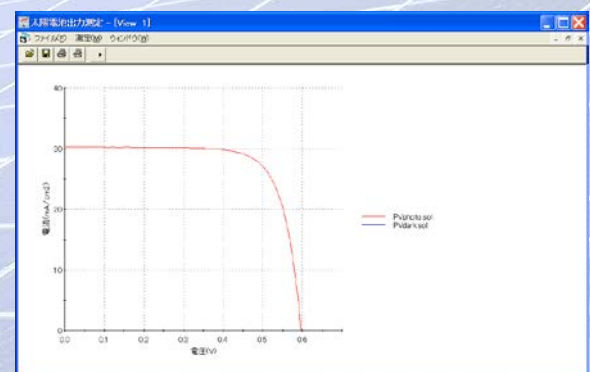
*Actual color of the instrument is black

■ Specifications

Measurement Items	Spectral response, reflectivity I-V curve, quantum efficiency
Wavelength range	300~1700nm(extended up to 2000nm as an option)
Monochromatic light	
Light source	Xe + Halogen lamp(Light blend method)
Irradiation area	20×20mm
Wavelength purity	Variable, Max.. 20nm
Irradiation intensity	5-50 μ W/cm ² (350-1200nm)
In-plane uniformity	\pm 2.5%
Constancy of wavelength intensity	\pm 2%
Irradiation mode	Constant energy, constant photons
Measurement mode	DC and AC(13-100HZ)
White light bias	
Light source	Xe lamp(color bias is available as an option)
Irradiation area	20×20mm
Spectral match	Class A(0.75~1.25) (under Japan Industrial Standard)
Reflectivity measurement	Integrating sphere method



Example of Quantum efficiency and spectral reflectivity



Example of I-V measurement

*The specifications and appearance are subject to change without prior notice.

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