

■ Specifications

Model	BQE-100 Spectral Response/Quantum Efficiency Measurement System
Measurement mode	Spectral Response/Quantum Efficiency Measurement
Wavelength range	300~1100nm
Wavelength purity	Approx. 20nm
Irradiation area	10mm x 10mm
Irradiation intensity	More than 100 μ W/cm ² (around 470nm)
Current acquisition	DC 10pA~ 1 A *AC is available as an option
Voltage source	0~ \pm 20V
Light intensity detector	Si-PD supplied with calibration data for spectral response
Lamp	Xenon lamp 150W Ozone free type
Software	Display of light intensity, spectral response and quantum efficiency Calculation of short-circuit current density (Jsc=mA/cm ²) OS: Windows 7

Option

- AC measurement unit

AC optical response measurement using a lock-in amplifier

- ND filtere

Irradiation of the light whose irradiation intensity is attenuated (ND50% and etc.,)

- Various sample stages

Stage for back electrode type solar cells, stage for DSC and etc.,

Dimensions (unit:mm)



Approx. W700xD550xH450mm (excluding the ammeter and PC)

*Dimensions of the instrument will be different depending on the optional accessories.

**Specifications are subject to be changed without prior notice.

BUNKOUKEIKI CO., LTD.

URL [http:// www.bunkoukeiki.co.jp/](http://www.bunkoukeiki.co.jp/)

Headquarters: 4-8 Takakura-cho, Hachioji-shi, Tokyo 192-0033,
Japan Tel: +81-42-646-4123 Fax: +81-42-644-3881



Agent:

312, Sai Chambers, Near Santacruz Bus Depot,
Santacruz (East), Mumbai – 400 055
Telephone: +91-22-6697 6816/ 67
Fax: +91-22-2610 9608
Email: sales@suntek-services.com
Website: <http://www.suntek-services.com>

Model BQE-100

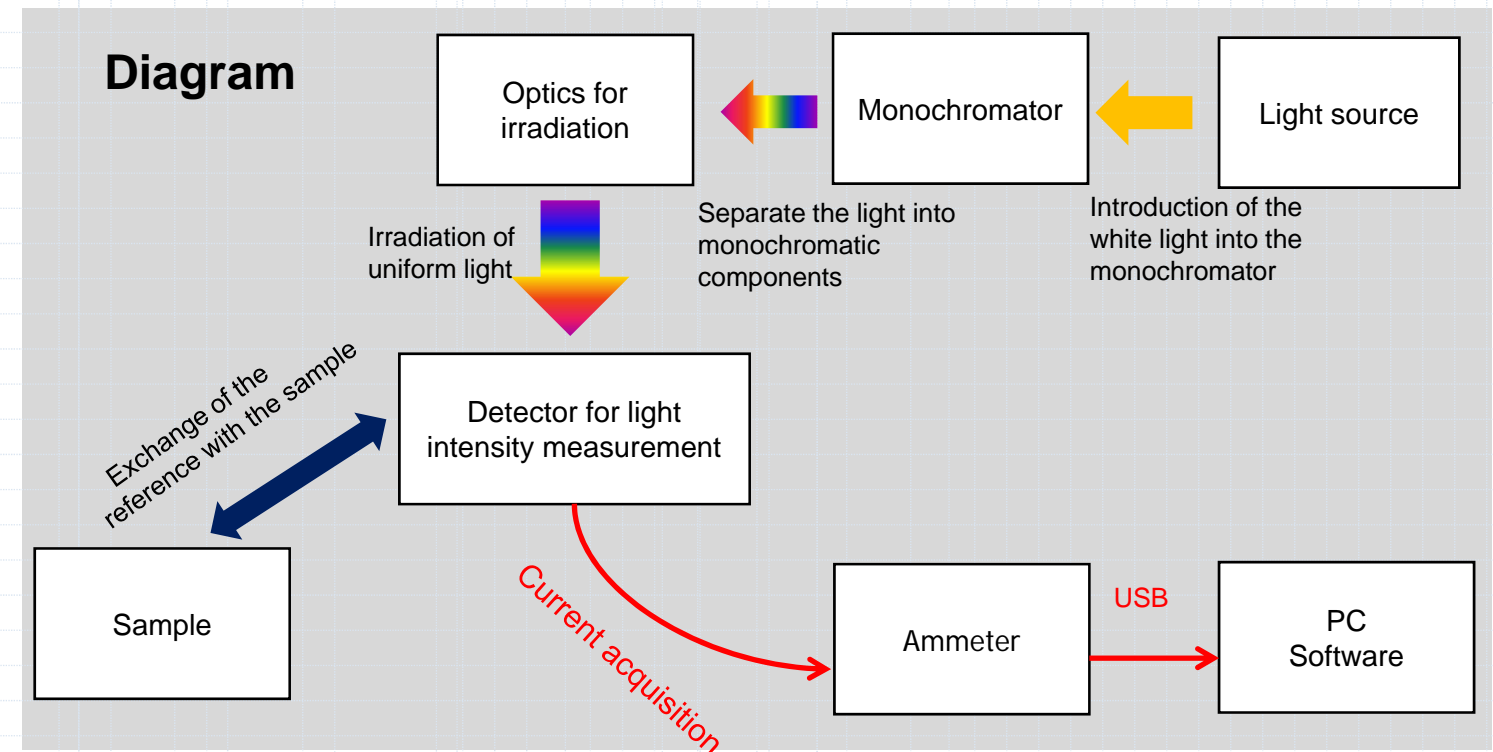
Spectral Response/Quantum Efficiency Measurement



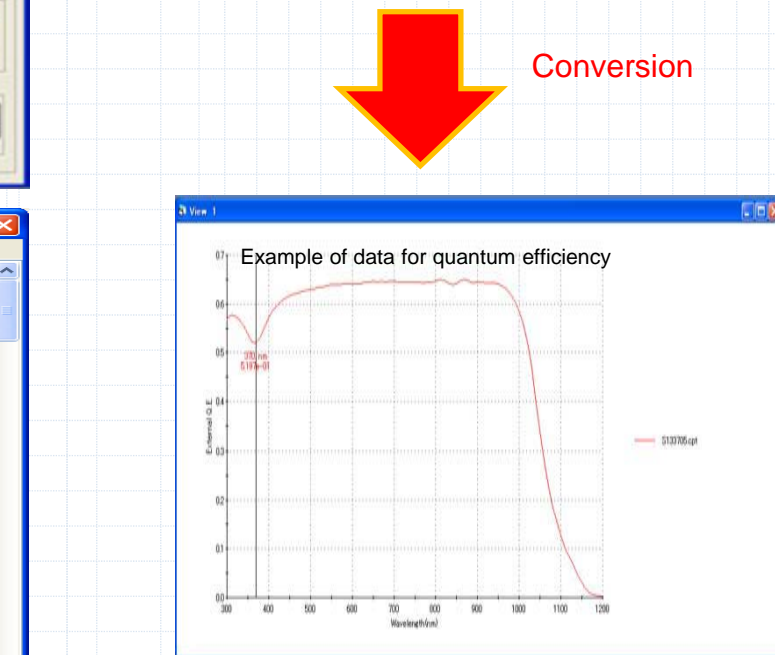
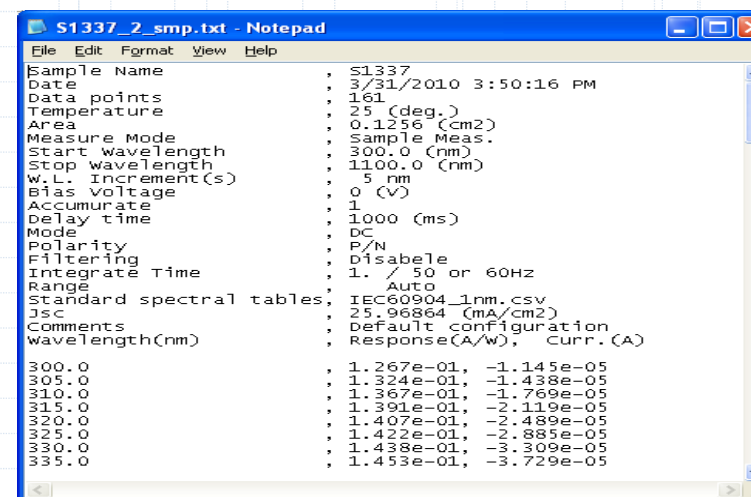
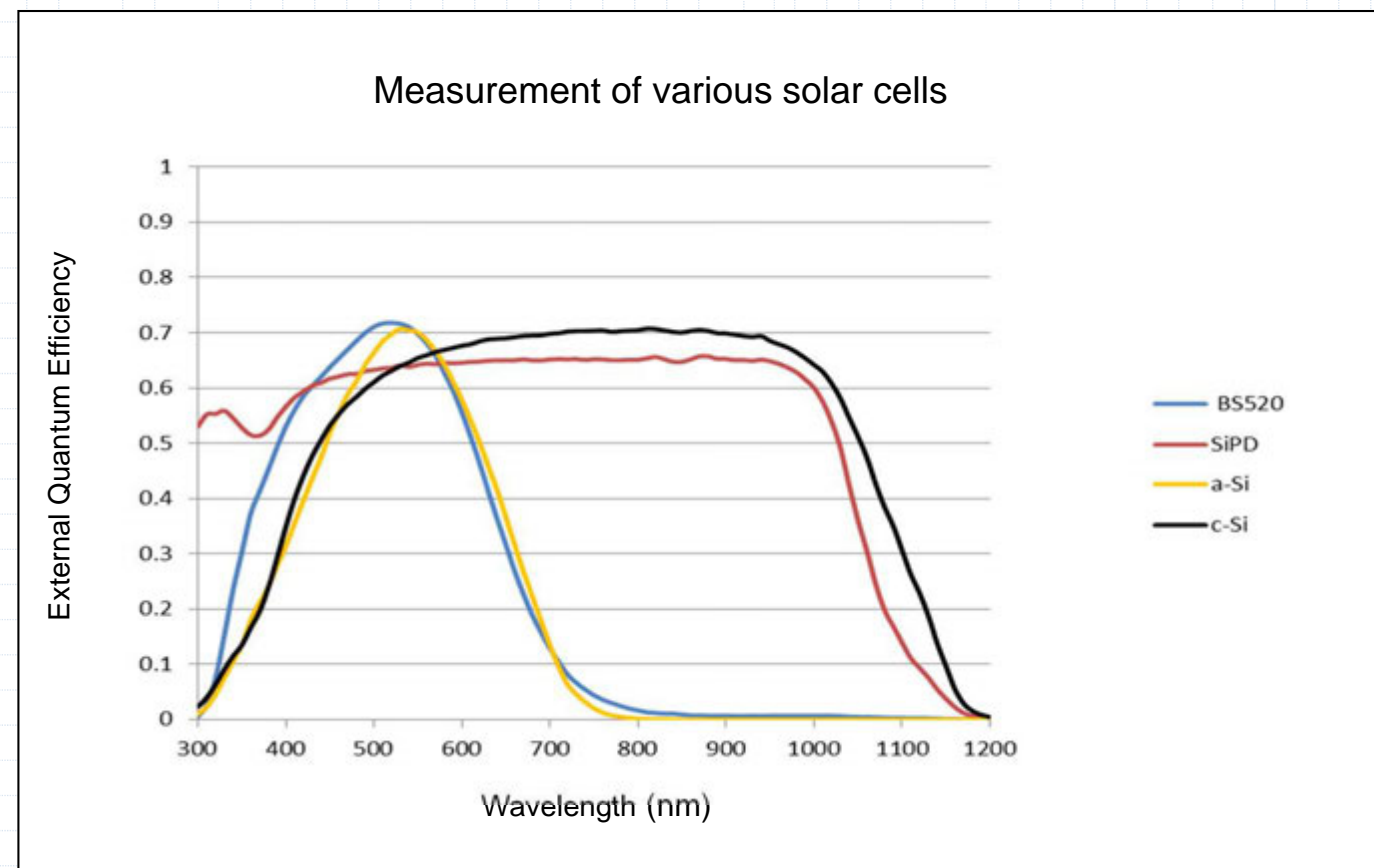
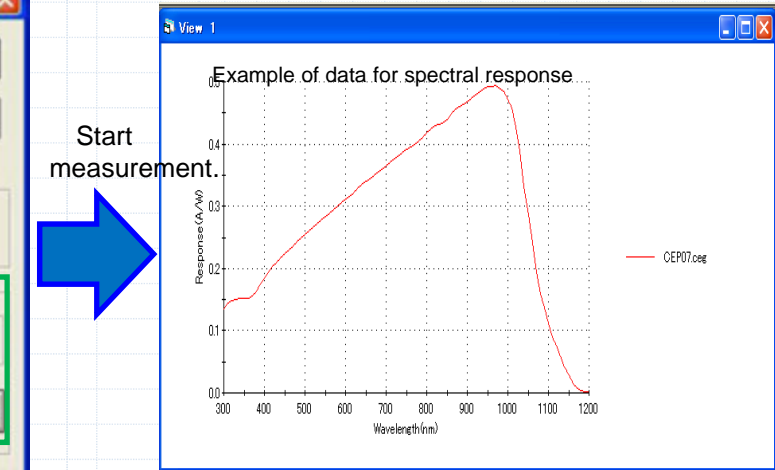
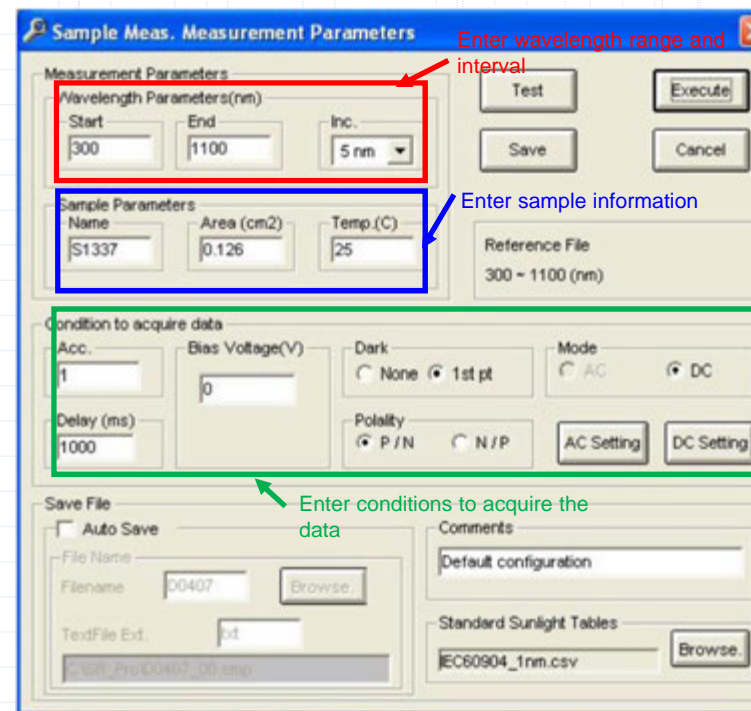
- Spectral Response and Quantum Efficiency Measurement System conforming to Japanese Industrial Standard (JIS)
- Automatic calculation of short-circuit current density (Jsc)
- Capable to measure spectral response while applying bias voltage
- Low-cost compact design employing unique optics while maintaining excellent performance



QE Measurement of Solar Cells



Generally I-V measurement by the solar simulators is considered one of the most suitable methods to evaluate solar cells. However, it is very difficult to judge accurately which materials are contributed to the data if the multiple materials are contained in the solar cells since the light source of the irradiation light is white light. The BQE-100 Spectral Response/Quantum Efficiency Measurement System is capable to evaluate output performance at each wavelength, which is very suitable for the research and development of the materials for the solar cells. Further, short-circuit current density (J_{sc}) can be obtained from the calculation of the spectral response spectra and reference sun light to make the measurement more accurate.



Conversion