



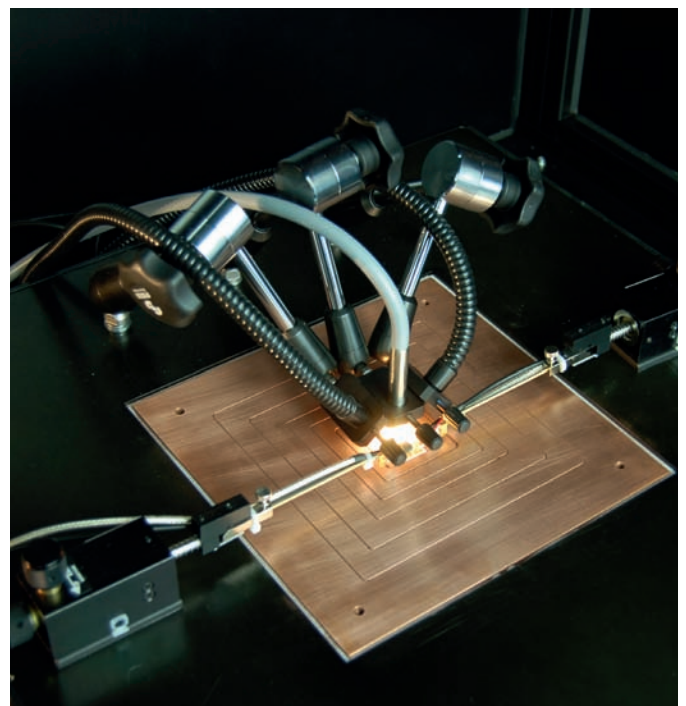
Opaque housing for monochromator and sample stage unit

GiMo™ Grating Monochromator

Technical Specification

- > Characterization of samples from 1x1 mm up to 10x10 mm.
- > Wavelength 300-1100 nm (Si solar cells); 290-1850 nm (III-V solar cells).
- > Step width down to 1 nm.
- > Mismatch factor calculation.
- > Small spot monochromatic light for Si and III-V solar cells with high homogeneity.
- > Additional monitor cell for IR range up to 1850 nm.
- > Measurement of currents with custom designed preamplifiers and two dual phase digital lock-in amplifiers.
- > Xe short arc high stability light source.
- > Temperature controlled sample stage (STC).
- > Light beam chopper with digital control.
- > Software for measurement control, data visualization and analysis.

High Resolution Spectral Response Scanning System



Sample stage with bias light and monochromatic light coupled by fibre optics

contact

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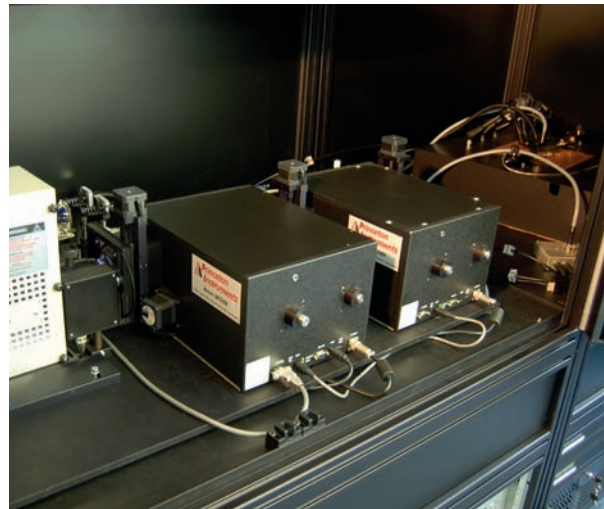
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GiMo™ Grating Monochromator SR-EQE High Resolution Spectral Response Scanning System

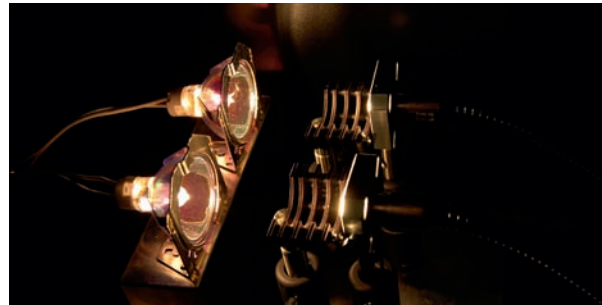
Application Area and Benefits

GiMo is a system for Spectral Response (SR) and External Quantum Efficiency (EQE) measurement of silicon solar cells and III-V solar cells. Up to three different bias light spectra can be applied. Monochromatic light is generated by fully automated scanning double monochromator with up to three gratings, selected for optimum usage with multijunction cells, automated scanning, grating changer and order filter wheel under GPIB control.



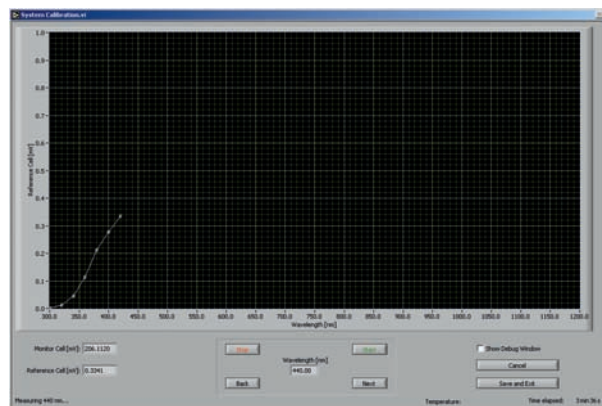
Xe arc lamp and double monochromator unit

GiMo uses a dual bias light source equipped with individual filters controlled by high stability power source. Filters for bias light sources are selected to match the requirements of measuring individual junctions of dual and triple junction solar cells.



Bias light coupling, filter stacks and fibre optics

GiMo comes with a monitor cell assembly including automated cell changer and two monitor cells, covering the full spectral range.



Measurement of spectral response and EQE

marketing

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