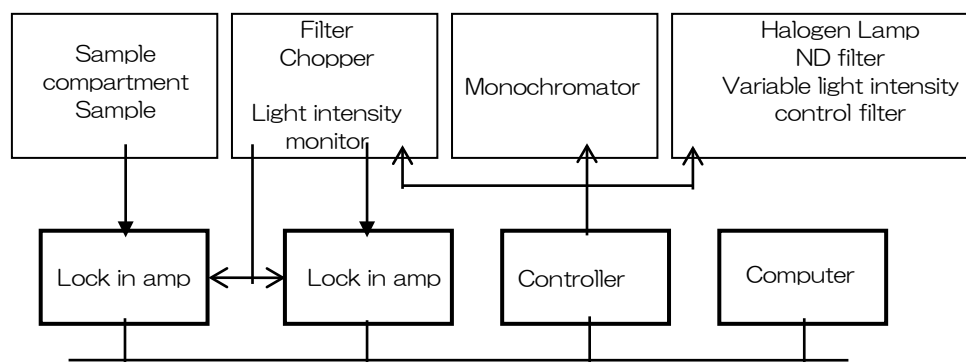
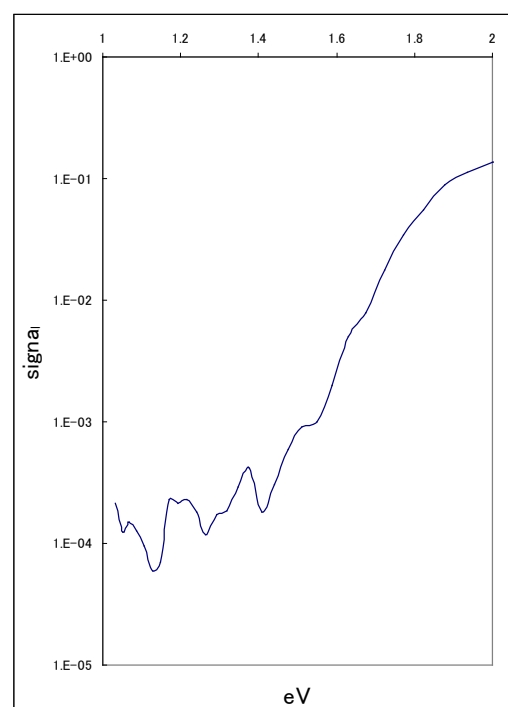


Model SBA-25 Subgap Optical Absorption Measurement System Constant Photocurrent Method (CPM) System

The model SBA-25 Subgap Absorption Measurement System, consisting of a halogen lamp, a monochromator, and a chopper, is able to irradiate the monochromatic light in the alternate current light which has the smaller energy than that of the band gap. The amount of the light is amplified by a lock-in amp and then monitored and controlled to keep the light intensity at constant at each wavelength by the ND filter.

The light intensity monitor which is placed in this system has made it possible to control the light intensity at real time. Then change between the light intensity and sample measurement and variation of the light intensity can be also maintained minimal so that excellent reproducible data can be obtained.



Specifications

Wavelength range	500~2100nm (2.5~0.6eV)
Irradiation area	6×6mm
Irradiation intensity precision	±5%
Irradiation uniformity in plane	within ±10%
Light amount stability	within ±5%
Irradiation intensity range	100nW/cm ² ~5mW/cm ²
	By simultaneous monitoring irradiation light intensity and servo mechanism, light intensity is automatically controlled in real time
Wavelength purity	approx. 24nm (Slit width of monochromator: 4mm)
Optical system	Asymmetrical Czerny-Turner mount Aperture ration F=4.3 Reciprocal linear dispersion 6nm/mm (600 lines/mm) wavelength accuracy±0.2nm
Irradiation light	Direct current and Intermittent light, manual control switching
Chopper	0.1~100Hz
Irradiation direction	Downward
Light intensity monitor	Measuring by a lock in amp
Sample current measurement	by connecting a current amp to the sample, its output voltage is to be measured by a lock in amp
Minimum detection current	100fA(1 e ⁻¹³ A)
Absorption coefficient measurement range	6 digit number
Bias power supply	9V, 18V, 27V a layer-built cell
Dimensions	1650(W)X700(D)×1530(H)mm (without a rack)
Power supply	220V, 8A (using the step down transformer to be supplied with the system)

Configuration

Main unit	
Computer	OS: Widows 7
Measurement software	English
Manual	English

**Specifications and appearance of the system in this catalog are subject to change without a prior notice.*

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