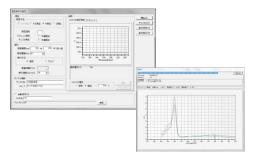


# Model KV-202 Bench Top Vacuum Ultraviolet Spectrometer





Sample holder for transmission measurement



The Model KV-202 Bench Top VUV Spectrometer with our unique purge type monochromator (KV200) has achieved higher resolution and higher stability even with a compact body compared with the conventional models in the market. The light from the deuterium lamp which emits ultra violet light enters into the monochromator (KV200) through the light condensing system where the light is separated into the monochromatic light. Then using the semi double beam method by splitting the light into two light paths, one of which goes to the monitor to compensate the fluctuation of the light source while another irradiates the sample, the system is capable to perform high stable transmission spectrum measurement.

- Transmission spectrum measurement in the range of 120 to 300nm (vacuum ultra violet range)
- Achieving high resolution and stability with Nitrogen purge monochromator
- Suitable for evaluation of special films and special substrates

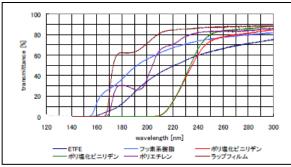


Model	KV-202 Bench Top Vacuum Ultraviolet Spectrometer
Light source	Deuterium lamp 30W
Wavelength range	120~300nm
Measurement reproducibility	±0.3%T
Wavelength reproducibility	Within 0.1nm
Sample shape	Size (min.3×3mm~max12×12mm) Thickness (min.1mm~ max.3mm) <sub>*2</sub>
Measurement method	Semi double beam
Detector	PMT with a salicylic acid soda window
Setting of display	Scale(Y axis, X axis), Trace( moving cursor) Overlay of the spectrum, Delete of spectrum display
Data processing	Smoothing, Arithmetic, 1st ~ 3rd Derivatives, Peak processing (Peak Find Peak Height, Peak Area, Data Dump)

- \*1 Under the following conditions: wavelength 120~300nm, Scanning speed 60nm/min, 100% flatness
- \*2 Specifications of the holder shape and sample numbers to be placed can be customized as option.

### Measurement data

#### Transmittance of the film



It is possible to measure the transmittance characteristic of the polymer, which was made in film-like, and to compare the difference depending the thickness. The measurement result of the transmittance of such wrap film, which is commercially available showed that light was transmitted up to the short wavelength fairly. Though they are the same type of the wrap film, it was found that transmittance was different depending on the thickness.

## Standard configurations

- 1. Deuterium lamp 30W
- 2. Power supply
- 3. KV-200(nitrogen purge) monochromator
- Sample compartment (for nitrogen purge and vacuum )
- 5. Transmission measurement sample holder
- 6. PMT(photomultiplier tube) with a salicylic acid soda window
- 7. Power supply for PMT
- 8. Controller (wavelength drive, filter switching)
- 9. Software (compatible with Windows 7)
- 10. PC for controlling the system

## Dimensions(unit:mm)

Dimensions: W800×D630×H500

Weight : approx. 70kg

\* excluding a controller and computer

- The dimensions in the above are approximate ones. The appearance and dimensions are changed depending on the options and improvement.
- The specifications and appearance in this leaflet are subject to change without prior notice.



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