



VUV-24 Variable Single Wavelength UV-Vis Absorbance Monitor

The VUV-24, is one of the most versatile, reliable and sensitive visible ultraviolet absorbance monitors on the market today and is particularly well suited to the demands of Countercurrent Chromatography. The VUV-24 uses state of the art photodiode design with complimentary high-photon throughput optics. Supported by an adjustable preparative sample cell (standard), this unit is more than capable of handling the high concentrations typical of CCC.

The VUV-24 is capable of detecting wavelengths from 190 to 940 nm. The working wavelength range using the standard deuterium lamp is 190-400 and can be adjusted using the front panel by simple up/down arrows or through the standard serial interface.

The VUV-24 has one of the lowest noise and drift specifications in the industry. Extremely high signal to noise ratios are obtained with our standard flow cells and the sensitivity is substantially below the normal "chromatographic drift" that is routinely found in most separations.

The VUV-24 is designed for the highest linearity in absorbance possible.

The VUV-24 is designed to allow in field modifications to any of our sample cells, and sample cells can be changed by the user. This allows the detector to be easily configured for use with a variety of other chromatographic systems, such as HPLC.

All lamps for the VUV-24 are pre-aligned and readily accessible for in field service. The unit comes with a high quality long life (>2000 hrs) Deuterium lamp and is ready to be used at wavelengths as high as 400 nm with an increase in band pass in the visible region.

The VUV-24 is ready to go anywhere in the world. The universal power supply has an AC input voltage of 100 to 240 Volts at 50 or 60 Hz. A rear barrier strip provides easy access to event, auto-zero and high-resolution analog Input/Output. The analog output is suitable for interface to integrators, chart recorders, or commonly used computer interface boards. Computer control and data acquisition can also be performed via the standard feature serial interface (RS-232) on the rear panel.



Light Source(s): Deuterium lamp, typical lifetime of >2000 hours, easily changed, prealigned

Optical design: Prism monochromator (patented) with dual beam silicon photodiodes

Wavelength selection: 190nm to 400nm in increments of 1 nm; user selected from front panel via push button input or selected from computer via RS-232 input/output

Wavelength accuracy: better than +/- 2nm range

Wavelength precision: better than +/- 0.2nm

Wavelength band-pass: <8.0 nm (typical) at half-height at 25 nm

Noise and Drift: < +/- 1 X 10⁻⁵ AU (over 30 sec period peak to peak, 1.0 sec rise time); < +/- 1 X 10⁻⁴ AU (over 30 min. period peak to peak, 1.0 sec rise time) with STD sample cell at constant temperature

Input/Output connections: RS-232 computer I/O; auto-injection input (event or run); auto-zero input; one analog integrator or chart recorder output, (voltage range default 1.0 V/AU); selectable analog range outputs of 4.0, 2.0, 1.0, 0.5, 0.2, 0.1, 0.05, 0.01, 0.005, 0.002, 0.001, 0.0005 AU/V with voltage range of +/- 4 V at any scale

Displays: Absorbance (5 digit LED); wavelength (3 digits LED); analog output range (momentarily from absorbance display by pressing range switch); reference light level; sample light level

Size: 6.6" (height) X 9.4" (width) X 15" (depth with sample cell cover); Approx. 7.3 kg (16 lb. shipping weight)

Sample cells: Standard CCC flow cell with 0-3mm variable (1mm preset) pathlength. Many other configurations available, including: Standard HPLC flow cell with 10 mm pathlength, total dead volume of 18.0 ul (illuminated volume); on column capillary cell, micro cell (1.0 ul), 5 mm path length HPLC cell (10 ul volume), high pressure/high volume preparative, cuvette holder. Please note all cells are can be changed by the user. Other cells are available; not all are listed.