



SAPHIRE 800

UV-VIS VARIABLE WAVELENGTH DETECTOR

P/N 67000000

is a detector with continuously variable wavelength in the range of **190 – 800 nm** and a noise level $\pm 0.5 \times 10^{-5}$ AU. The unit may be used for routine **analytical chromatography** as well as for **preparative chromatography**, according to the selected cell.

The unit is easy to operate, **reference and sample** signals are available for detector **diagnostics** as well as information on **lamp operating hours**.

Output signal is available in both **digital and analogue** form on the output connector. It is possible to **control the unit using the keypad or an RS232 interface**. Connecting capillaries are led from the detector's right side panel.

The detector is equipped with a high standard **deuterium lamp** in a special socket that enables **easy changing**.

For visible part of spectrum is used as **secondary light source a tungsten lamp**. Wavelength can be **programmatically changed** during the performance of an analysis. The detector performs **automatic wavelength calibration** after the lamp has been switched on. A HPLC 04 analytical cell is included as a component of the detector

Specification

Wavelength range	190 - 800 nm
Spectral half-width	6 nm
Accuracy of adjustment	± 1 nm
Reproducibility	± 0.5 nm
Light source	Deuterium discharge lamp
Noise level at empty cell (240 nm, TC 1 s)	$\pm 0,5 \times 10^{-5}$ AU
Drift at empty cell (240 nm after 1 h)	1×10^{-4} AU/hr
Materials in contact with mobile phase	PTFE; fused silica, stainless steel, Vespel, PEEK
Time constant	Fast, middle and slow
Programming	3 change of wavelength during analysis
Adjustable offset	± 50 mV
Output for integrator	1 V/AU
Interface	RS 232
Power supply	100, 115 and 230, 50/ 60 Hz)
Power input	80 VA
Dimensions (W x H x D)	220 x 170 x 450 mm
Weight	11 kg

USED CELLS

HPLC 04 standard analytical measuring cell supplied with the unit

volume 10 μ l / optical path 5 mm ; diameters of capillaries input 1/16" x 0.2mm ; output 1/16" x 0.5 mm

MLCC 02 Microcell (optional)

volume 0.5 μ l / optical path 0.8 mm ; diameters of capillaries input 1/16" x 0.2mm output 1/16" x 0.2 mm

PLCC 04/05 Preparative cell (optional)

volume/optical path
(adjustable)

45 μ l / 0.3 mm
 55 μ l / 1.4 mm
 70 μ l / 2.4 mm

Connecting of PLCC 04 / PLCC 05

SS capillaries 1/16" x 1.1mm / FEP 1/8" x 1/16"