

## Smartline

### ▶ UV Detector 2500



## Sensitive variable wavelength detector

The Smartline UV Detector 2500 is a competitively priced HPLC spectrophotometer for routine laboratory work. Besides offering excellent technical specifications, this robust UV detector features a highly flexible and compact design.

**Sensitive detection** – High quality optical components and electronics designed and manufactured in Germany guarantee optimal performance and high sensitivity.

**Practical features** – The detector can be equipped with either a deuterium or tungsten-halogen lamp and offers a wavelength range of 190–740 nm. The built-in “stop-flow” spectra recording function is very useful for method development.

**Clever design** – Positioned behind the side-swinging front panel, the flow cell is protected from external influences yet remains easily accessible. Its compact footprint makes the Smartline UV Detector one of the smallest detectors on the market.

**Wide applicability** – A wide range of flow cells is available for practically any LC application, including micro flow cells for flow rates up to 10 µl/min, flow cells for preparative HPLC up to 10 l/min, as well as flow cells equipped with fiber optic connections for remote positioning of the measurement cell.

**Flexible control** – The Smartline UV Detector 2500 can be controlled with KNAUER ChromGate® or ClarityChrom® software, as well as from the front panel touchpad (stand-alone operation), via RS-232, or through analog input/output.

## Technical data

<b>Detector type</b>	monochromator spectrophotometer
<b>Light source</b>	deuterium; tungsten halogen is optional
<b>Number of signals</b>	1
<b>Wavelength range</b>	190–740 nm
<b>Bandwidth</b>	$\Delta\lambda \leq 8$ nm
<b>Wavelength accuracy</b>	$\pm 2$ nm
<b>Cutoff filter</b>	370 nm
<b>Spectral scan</b>	"stop-flow"
<b>Sensitivity</b>	$2 \times 10^{-5}$ AU at 240 nm, 1.0 s
<b>Noise*</b>	$< 1 \times 10^{-5}$ AU
<b>Drift*</b>	$< 1.5 \times 10^{-4}$ AU/h
<b>Time constants</b>	0.1/0.2/0.5/1.0/2.0/5.0/10.0 s
<b>Versions with fiber optics</b>	external flow cell optionally available
<b>Analog output (integrator)</b>	$\pm 1$ V (scalable in 16 increments from $10^{-4}$ to 10 AU)
<b>Analog input (wavelength control)</b>	10 mV/nm (0 to 10 V)
<b>Control</b>	RS-232, remote control strip, touchpad
<b>Programming</b>	1 program (10 steps)
<b>GLP report</b>	e.g. total lamp operation time, lamp ignitions
<b>Wavelength verification</b>	holmium oxide filter cell
<b>Display</b>	LCD, 2 lines, 24 characters each
<b>Power supply</b>	voltage range: 90–260 V, 47–63 Hz, 70 W
<b>Dimensions</b>	226 x 135 x 410 mm (W x H x D)
<b>Weight</b>	6.0 kg

\*according to ASTM E1657-94

## Ordering information

Order no.	Photometric detection system	Order no.	U-Z View™ micro flow cells
A5140	Smartline UV Detector 2500, flow cell excluded	A4091	8 mm, fused silica, 1/16"
A5141	Smartline UV Detector 2500 with fiber optics, flow cell excluded	A4092	8 mm, fused silica, 280 $\mu$ m
	<b>Analytical flow cells</b>		<b>Capillary electrophoresis cell</b>
A4061	10 mm, 10 $\mu$ l, stainless steel	A4097	1 mm, stainless steel, 280 $\mu$ m
A4042	3 mm, 2 $\mu$ l, stainless steel		<b>Wavelength verification cell</b>
	<b>Preparative flow cells</b>	A4126	test cell with holmium oxide filter
A4069	0.5 mm, stainless steel, 1/16"		
A4066	0.5/1.25/2 mm, stainless steel, 1/8"		
A4068	0.5/1.25/2 mm, stainless steel, 1/4"		

All flow cells mentioned above are also available in PEEK (except models with 10 mm path length, 1/4" connectors, and micro flow cells). A version with fiber optics connectors is available for all flow cells (except micro flow cells). Technical data are subject to change without notice.

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