

## Smartline

### ▶ UV Detector 2550



## Multiple wavelength detector

This spectrophotometric detector offers high sensitivity and baseline stability for HPLC applications including fast LC methods. With its high speed scanning design, up to four different wavelengths can be monitored simultaneously while acquiring spectral data from 190 to 900 nm. Best-in-its-class values for noise, drift, and linearity are achieved through smart optical bench technology and the use of optimized components. Enhanced GLP features include automatic wavelength verification and lamp recognition.

The **Smartline UV Detector 2550** offers...

- highly sensitive analysis
- up to four wavelengths
- narrow optical bandwidth for high spectral resolution
- lowest drift values
- up to 80 Hz data rate
- automatic wavelength verification (built-in holmium oxide filter)

#### Features

**A remarkable linear range** of greater than 3 AU allows for simultaneous determination of main analytes and impurities

**Automatic selection** of optimal integration time

**Wide wavelength range:** The standard deuterium lamp can be exchanged by a tungsten-halogen lamp for the Vis wavelength range. The detector is also available in a dual-lamp version (possible configurations: UV, Vis, UV-Vis)

**Flexible control** through touch pad or via RS-232 or LAN by PC with KNAUER ChromGate® or ClarityChrom® software

## Technical Data

<b>Detector Type</b>	Fast scanning monochromator spectrophotometer, double beam
<b>Light Source</b>	Standard: deuterium lamp; optionally available: tungsten-halogen or dual-lamp upgrade
<b>Number of Signals</b>	1 – 4
<b>Maximum Data Rate</b>	80 Hz
<b>Wavelength Range</b>	190 – 900 nm, depending on lamp type
<b>Optical Bandwidth</b>	< 5 nm
<b>Wavelength Accuracy</b>	±1 nm, auto-calibration with deuterium lines, verification with holmium oxide filter
<b>Wavelength Precision</b>	0.4 nm RSD
<b>Noise*</b>	± 0.5 × 10 <sup>-5</sup> AU at 254 nm
<b>Drift*</b>	0.5 × 10 <sup>-4</sup> AU/h at 254 nm
<b>Linearity*</b>	> 3 AU
<b>Wavelength Scan</b>	Fast scan, depending on set resolution and number of signals
<b>Integration Time</b>	500 μs – 1.0 s, automatic selection
<b>Analog Output (integrator)</b>	2 signals, 0 to 5 V, 20-bit
<b>Level/Event Outputs</b>	e.g. for stand-alone solvent recycling with optional solenoid valve
<b>Control</b>	Digital: RS-232, LAN; analog: remote control strip, touch pad
<b>Programming</b>	Timed: wavelength, events, switching valves, program links, wake-up program (lamp); 20 programs, 99 lines max.
<b>GLP Function</b>	Detailed report incl. lamp recognition, lamp operation time, and lamp ignitions
<b>Display</b>	LCD, 2 lines, 24 characters each
<b>Power Supply</b>	90 – 260 V, 47 – 63 Hz, max. 70 VA
<b>Dimensions (W x H x D)</b>	226 x 135 x 410 mm
<b>Weight</b>	6.0 kg

\*according to ASTM E1657-98

## Ordering Information

<b>Order No.</b>	<b>Detector</b>
A5190	Smartline UV Detector 2550, incl. deuterium lamp, flow cell excluded
upon request	tungsten-halogen lamp upgrade (incl. socket, pre-adjusted) or dual-lamp upgrade
<b>Order No.</b>	<b>Analytical Flow Cells<sup>1)</sup></b>
A4061	10 mm, 10 μl, 1/16", stainless steel/quartz/PFA, with heat exchanger, < 20 ml/min, < 300 bar (4350 psi)
A4042	3 mm path length, 2 μl, 1/16" connector, stainless steel/quartz/PTFE, < 50 ml/min, < 300 bar (4350 psi)
<b>Order No.</b>	<b>Preparative Flow Cells<sup>1)</sup></b>
A4069	0.5 mm, 1.7 μl, 1/16", stainless steel/quartz/PTFE, < 250 ml/min, < 200 bar (2900 psi)
A4066	0.5/1.25/2 mm selectable, 1.7/4.3/6.8 μl, 1/8", stainless steel, < 1,000 ml/min, < 200 bar (2900 psi)
A4068	0.5/1.25/2 mm selectable, 1.7/4.3/6.8 μl, 1/4", stainless steel, < 10,000 ml/min, < 200 bar (2900 psi)
<b>Order No.</b>	<b>U-Z View™ Micro Flow Cells</b>
A4091	8 mm path length, 0.14 μl, 1/16" connector, fused silica, < 0.1 ml/min, < 500 bar (7250 psi)
A4092	8 mm path length, 0.035 μl, 280 μm connector, fused silica, < 0.01 ml/min, < 500 bar (7250 psi)
<b>Order No.</b>	<b>Capillary Electrophoresis Cell</b>
A4097	1 mm path length, 280 μm connector, stainless steel

<sup>1)</sup> Specifications: path length, volume, capillary connection, wetted materials, max. flow rate, max. pressure. These flow cells are also available in PEEK except models with heat exchanger and 1/4" connectors. Please ask for details.

Technical data are subject to change without notice.

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