

## Smartline HPLC UV Detector 2500

### Overview

The Smartline HPLC Detector 2500 is a programmable variable wavelength detector for HPLC and has been developed specially for use in routine analytical work.

#### Programmable Wavelength

The measuring wavelength is programmable and can be modified during a run. In "Stop Flow" mode spectra can also be acquired.

#### GLP Functions

The detector provides GLP functions such as: detailed reports, displaying the total hours of lamp operation, total number of lamp ignitions, and more.

#### Fiber-Optic Options

The use of fiber-optic guides permits the spatial separation of the HPLC Detector 2500 and flow cell, which makes operation with externally thermostatted cells or in hazardous areas possible. Fiber-optic guides are available in standard or customised lengths.

#### Large Selection of Flow Cells

A large range of flow cells, from nano-HPLC cells for flowrates above 100 nL/minute to preparative cells for flowrates up to 10000 ml/minute, offers maximum flexibility and permits use of the HPLC Detector 2500 for practically all HPLC applications.

#### Service Friendly

The entire optical unit slides out of the detector for easy exchange of lamps etc. The housing does not need to be removed thus making system servicing fast and easy.

#### Compact

The HPLC Detector 2500 has been designed to fit directly into the Smartline instrument family as part of a system tower. The modular design of the detector means that it can also be used as a completely separate HPLC module and its small size allows it to be installed practically anywhere.



### Specifications

Wavelength range	190 - 740 nm, 2 <sup>nd</sup> order cut-off filter at 370 nm
Light source	Deuterium lamp as standard, optional Tungsten-Halogen lamp
Bandwidth	8 nm
Wavelength accuracy	± 2 nm
Wavelength verification	Holmium oxide filter cell
Baseline drift	< 1.5 × 10 <sup>-4</sup> AU/h, ASTM E1657-94
Noise	< 1 × 10 <sup>-5</sup> AU, ASTM E1657-94
Scan function	In "Stop Flow" mode only
Integrator output	±1 V adjustable in 16 ranges
Data acquisition	Analogue via Integrator output
Display	LCD, 2 × 24 characters
Time constant	0.1; 0.2; 0.5; 1.0; 2.0; 5.0; 10.0 seconds
Remote control	Remote via RS-232 interfaces, analogue inputs for autozero, start program and lamp off, analogue outputs for error conditions (The detector can be controlled via Geminix Software.)
Local control	Touchpad
GLP	Recording of total running time and number of lamp ignitions.
Features	Programmable in Stand-alone mode

Dimensions	226 x 135 x 390 mm (W x H x D)
Weight	6 kg
All specifications may be subject to change for technical reasons.	

## Ordering Information

A5140	Smartline UV Detector 2500 without flow cell, with accessories for operation without fiber-optics
A5141	Smartline UV Detector 2500 without flow cell, with accessories for operation with fiber-optics
<b>Analytical Flow Cells</b>	
A4061	10 mm path, 1/16" connections, 10 µL, stainless steel, max. flow 20, max. pressure 300 bar
A4042	3 mm path, 1/16" connections, 2 µL, stainless steel, max. flow 50, max. pressure 300 bar
A4045	3 mm path, 1/16" connections, 2 µL, PEEK, max. flow 50, max. pressure 30 bar
<b>Preparative Flow Cells</b>	
A4066	0.5 / 1.25 / 2 mm path, 1/8" connections, stainless steel, max. flow 1000, max. pressure 200 bar (Cell volumes for adjustable cells are: 0.50 mm = 1.7 µL; 1.25 mm = 4.3 µL; 2.00 mm = 6.8 µL.)
A4068	0.5 / 1.25 / 2 mm path, 1/4" connections, stainless steel, max. flow 10000, max. pressure 200 bar (Cell volumes for adjustable cells are: 0.50 mm = 1.7 µL; 1.25 mm = 4.3 µL; 2.00 mm = 6.8 µL.)
A4067	0.5 / 1.25 / 2 mm path, 1/8" connections, PEEK, max. flow 1000, max. pressure 100 bar (Cell volumes for adjustable cells are: 0.50 mm = 1.7 µL; 1.25 mm = 4.3 µL; 2.00 mm = 6.8 µL.)
A4069	0.5 mm path, 1/16" connections, stainless steel, max. flow 250, max. pressure 200 bar
A4095	0.5 mm path, 1/16" connections, PEEK, max. flow 250, max. pressure 100 bar
<b>Analytical flow cells with double fiber optical connection</b>	
A4074	10 mm path, 1/16" connections, 10 µL, stainless steel, max. flow 20, max. pressure 300 bar
A4044	3 mm path, 1/16" connections, 2 µL, stainless steel, max. flow 50, max. pressure 300 bar
A4047	3 mm path, 1/16" connections, 2 µL, PEEK, max. flow 50, max. pressure 30 bar
A4077	3 mm path, 1/16" connections, 0.7 µL, PEEK, max. flow 10, max. pressure 30 bar
<b>Preparative flow cells with double fiber optical connection</b>	
A4078	0.5 / 1.25 / 2 mm path, 1/8" connections, stainless steel, max. flow 1000, max. pressure 200 bar (Cell volumes for adjustable cells are: 0.50 mm = 1.7 µL; 1.25 mm = 4.3 µL; 2.00 mm = 6.8 µL.)
A4079	0.5 / 1.25 / 2 mm path, 1/8" connections, PEEK, max. flow 1000, max. pressure 100 bar (Cell volumes for adjustable cells are: 0.50 mm = 1.7 µL; 1.25 mm = 4.3 µL; 2.00 mm = 6.8 µL.)
A4081	0.5 / 1.25 / 2 mm path, 1/4" connections, stainless steel, max. flow 10000, max. pressure 200 bar (Cell volumes for adjustable cells are: 0.50 mm = 1.7 µL; 1.25 mm = 4.3 µL; 2.00 mm = 6.8 µL.)

	mm = 6.8 µL.)
A4089	0.5 mm path, 1/16" connections, stainless steel, max. flow 250, max. pressure 200 bar
A4096	0.5 mm path, 1/16" connections, PEEK, max. flow 250, max. pressure 100 bar
<b>U-Z View™ Micro Flow Cells</b> (not available with fiber optics)	
A4091	8 mm path, 1/16" connections, 0.140 µL, fused silica, max. flow 0.1, max. pressure 500 bar
A4092	8 mm path, 280 µm connections, 0.035 µL, fused silica, max. flow 0.01, max. pressure 500 bar
<b>Spares and Accessories</b>	
A0895	RS232 cable for serial PC-interface
A4071-1	Deuterium lamp (35W)
A4072	Tungsten-Halogen lamp
A4073	Tungsten-Halogen lamp with base (required for first time installation)
A0911	Fiber-optic connector, length 400mm
A0742	Fiber-optic connector, length 750mm
A0740	Fiber-optic connectors, length 750mm, pack of 2 items
A0743	Fiber-optic connector (individual length to be specified with order)
A0857	Extension Kit for coupling of two fiber-optic connectors
A4126	Test cell, holmium oxide filter for detectors without fiber-optics
A4128	Test cell, holmium oxide filter for detectors with fiber-optics
A1447	1 lens, 1 seal for analytical flow cells
A1448	1 lens, 1 seal for preparative flow cells
A1449	1 lens, 1 seal for flow cells using fiber optics
A1131	Repair kit for analytical flow cells, 10mm
A1475	Repair kit for analytical flow cells, 3mm
A1132	Repair kit for preparative flow cells