

ProStar 340/345 UV-Vis Detectors

Great Performance at Both Ends of the Spectrum

The ProStar 340 and 345 detectors are designed for single or dual wavelength UV-Vis measurements. Both detectors are guaranteed to meet tough performance and reliability requirements. Plus, the menu driven prompts make operations intuitively simple. Combine all this with a small footprint, and the 340/345 detectors make the most of your tight budget.

ProStar 340

- Small, compact design
- Precision optics
- Multiple flow cell choices

A deuterium or optional tungsten lamp is pre-aligned for convenience.



Easy connections make for seamless integration with all HPLC systems.

There's no fuss with easy-to-operate controls.

The ProStar 340 is a variable wavelength UV-Vis absorbance detector for true high-performance liquid chromatography. With various combinations of available flow cells and lamps, the 340 can be adapted for applications ranging from capillary to preparative scale. The precision-designed optics use a dual-beam, reference diode to ensure stable, flat baselines at sensitivities down to 0.005 AU.

A pre-aligned deuterium lamp gives excellent results in the UV wavelength range (190 to 380 nm), while the optional tungsten lamp efficiently covers the visible range (380 to 800 nm).

ProStar 345

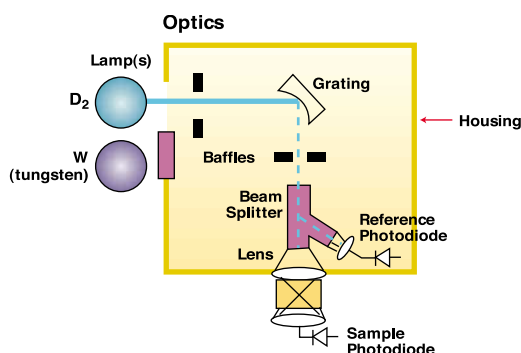
- Simultaneous dual wavelength measurements
- Full spectral scanning capabilities
- Flow cells from microbore to preparative

Cartridge type flow cells are easily removed without tools.



ProStar 345 covers the full 190-800 nm wavelength range.

The ProStar 345 UV-Vis detector delivers the highest performance and reliability in both dual wavelength and single wavelength use. With its high-speed stepper and concave holographic grating, the 345 delivers fast and reproducible wavelength changes and low-noise dual wavelength operation as well as on-the-fly spectral acquisition. The ProStar 345 uncovers a new dimension of detection possibilities at an affordable price.



The high quality dual-beam optics guarantee the highest sensitivities, lowest noise, and minimal drift with a high linear dynamic range.

ProStar 340/345 UV-Vis Detectors

Selective Flow cells

The multifaceted ProStar 340/345 detectors adapt to your specific application needs. Choose from nine different flow cell configurations, including microbore for LC/MS, bio/inert, analytical, or preparative.

GLP features

An optional cuvette holder for the 345 model conveniently converts your UV-Vis detector into a spectrophotometer, enabling easy validation and calibration tests. Pre-aligned deuterium and tungsten lamps are easy to replace and produce consistent results every time. Start-up checks further enhance the detectors' GLP and maintenance features.

Technical Data

	340	345
Deuterium (D2) lamp	190 – 380 nm	190 – 365 nm
Tungsten (W) lamp:	380 – 800 nm	366 – 800 nm
Bandwidth:	6 nm	6 nm
Wavelength accuracy:	± 1 nm	± 1 nm
Wavelength precision:	± 0.1 nm	± 0.1 nm
Range selections:	2.0, 1.0, 0.5, 0.2, 0.1, 0.05, 0.02, 0.01, 0.005, 0.002, 0.001, and 0.0005 AUFS	0.0005 – 3.0 AU
Absorbance linearity:	@ 254 nm; better than 1% to 1.5 AU	@ 254 nm; better than 1% to 2.0 AU
Noise (single-wavelength):	< ±2 x 10 ⁻⁵ AU from 220 – 280 nm	< ±1.0 x 10 ⁻⁵ AU @ 254 nm
Noise (dual-wavelength):	N/A	< ±2.5 x 10 ⁻⁵ AU @ 254 nm and 280 nm
Drift (after 1 hr. warm-up):	< 2.0 x 10 ⁻⁴ AU/hour	< 2.0 x 10 ⁻⁴ AU/hour
Display:	LED absorbance and lamp energy	2 x 24 character, high-contrast LCD
Communications	340	345
Remote inputs:	Auto-zero, event marker, lamp shut-off	Run/start, stop, and auto-zero
Remote outputs:	N/A	Ready, accessory relay
Analog outputs:		
Integrator:	1.0V/AU	CH 1 & 2 selectable over entire range
Recorder:	10 mV, 100 mV or 1.0V	10 mV, 100 mV or 1.0V
Power requirements:	100/120/220/240 Vac nominal; 200 VA; 50/60 Hz	
Dimensions:	11.4 in. (w) x 6.25 in. (h) x 13.25 in. (d) 29 cm (w) x 15.9 cm (h) x 33.7 cm (d)	11.4 in. (w) x 6.7 in. (h) x 16.1 in. (d) 29 cm (w) x 17 cm (h) x 40.9 cm (d)
Weight:	9.1 kg (20 lbs.)	14 kg (30.8 lbs.)

Cat. No.

0393638302

0393638402

Description

340 UV-Vis detector without flow cell

345 UV-Vis detector without flow cell

Flow Cells

R000088506

Conventional 6 mm path, 9 µL volume, SS

R000088507

Microbore 3 mm path, 1.2 µL volume, SS

R000088508

Semiprep/glass column, 3 mm path, 4.5 µL volume, SS

R000088509

Bio/inert 6 mm path, 9 µL volume, Kel-F, max. pressure 500 psi (35 bar)

R000088510

Variable path preparative, 0 – 3 mm path, 0 – 4.6 µL volume, SS 1/8 in. fittings, max. back pressure 2000 psi (137 bar)

R000088511

Conventional 10 mm path, 15 µL volume, SS

R000088512

Capillary HPLC and SFC: 240 µm path, 35 nL volume, max. pressure 5000 psi (340 bar)

R000088513

Preparative biocompatible: variable 0 – 3 mm path, 0 – 4.6 µL volume, titanium, max. back pressure 2000 psi (137 bar)

R000088514

High-pressure microbore for packed cell SFC and LC-MS: 2 mm path, 250 nL volume, SS, max. back pressure 7000 psi (480 bar)

R000088522

Cuvette holder (model 345 only)

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