

112 UV Detector



Fixed-Wavelength UV Detector

Feature

- Wavelengths available: 254 nm or 280 nm
- Wide range of flow cells
- Easy-to-change lamp and filter assemblies
- Dual-beam, filter-based optics
- One-step baseline and event-marking functions

Benefit

- Allow detection of a wide range of compounds that absorb in the UV range
- Allows for analysis at microbore, analytical, semi-prep and preparative flows
- Minimize downtime during wavelength changeover or lamp replacement
- Ensure equal illumination of both the sample cell and the reference aperture to maintain baseline stability at high sensitivity
- Automatically zero the baseline and mark chromatographic events for viewing—with the push of a button

Applications

- Analytical HPLC
- Preparative HPLC
- Drug discovery
- Drug metabolism
- Protein and peptide separations

Technical Specifications

Flow Cells	Flow Cell	Path (mm)	Volume (µL)	psi
	HPLC	10.0	11.0	1000
	LC	10.0	40.0	1000
	Microbore	5.0	1.3	1000
	Preparative	2.0	10.0	1000
	Preparative	0.5	2.5	1000
	Preparative	0.1	0.3	1000
Flow Cell Sensitivity	<4 x 10 ⁻⁴ AU for flow step of 0.5–2 mL/min with methanol			
Sensitivity Range	0.0001 to 1.0 AU with standard flow cell installed. Up to 100 AU when 0.1 mm flow cell is used. Selectable on front panel.			
Detector Type	UV silicon photodiode			
Monochromator	Dual beam with interference filter, to monitor at a single wavelength Range: 254 and 280 nm standard (selectable on front panel) Spectral bandwidth: 0.2 nm at 254 nm, 12 nm at 280 nm			
Autozero Range	–0.5 to +1 AU, to within 5 x 10 ⁻⁵ AU; front panel or remote activation			
Drift	3 x 10 ⁻⁴ AU/hr			
Event Marker	Negative deflection on trace; front panel or remote activation			
Noise	254 nm, short term, peak-to-peak, 4 x 10 ⁻⁵ AU/cm; long term, peak-to-peak, 6 x 10 ⁻⁵ AU 280 nm, short term, peak-to-peak, 6 x 10 ⁻⁵ AU/cm; long term, peak-to-peak, 6 x 10 ⁻⁵ AU			
Reference Chamber	Air			
Temperature Sensitivity	3.0 x 10 ⁻⁴ /°C for temperature change from 21° to 24°C			
Lamps	Standard: Mercury (254 nm), life of 2000 hours; Phosphor-coated Mercury (280 nm), life of 500 hours			
Time Constant	0.1, 0.2, 0.5, 1, 2 or 5 seconds; selectable on front panel			
Communication Interface	Event and autozero inputs; three channels output data to a recorder			
Display Panel	LCD indicator shows percent of full-scale output			
Power Requirements	Frequency: 50–60 Hz Voltage: 100–120 or 220–240V; mains voltage fluctuations not to exceed ±10% of the nominal voltage Current rating: 1.0A for 100–120V, or 0.5A for 220–240V			
Manufacturing Standards	Meets applicable Safety and EMC certification standards; UL and CE certified			
Dimensions (w x d x h)	32 x 32 x 13 cm (12.6 x 12.6 x 5.2 in.)			
Instrument Weight	7 kg (16 lbs.)			
Shipping Weight	10 kg (23 lbs.)			

For applications or additional information, contact your local Gilson Technical Sales Representative or visit www.gilson.com.

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