High Performance Liquid Chromatography



1 1 0	

High pressure pump

- The pump has designed with precise flow and low pressure pulsation
- Durable seal ring
- The joints have perfectly interchangeable and avoid the abnormal work caused by the pump pipeline system.
- Seal ring can be replaced without opening the instrument case.
- The function of washing the column back with mobile phase is lunched for the customers using buffer, double seal rings being designed to retard abrasion of thee seal ring and to extend the service life.







UV Detector

Double parallel conical bores are designed in cell that has been dramatically improved the testing effect



D₂ Lamp The lamp has 2000-hours, which have longer service life and better testing sensitivity







Spectrum Scientific

C

www.spectrumscientific.co.uk : info@spectrumscientific.co.uk : 190 Easter Road, Edinburgh, EH7 7QH, UK. Tel: +44 1316 66111856, +44 7501263979

SPECIFICATION

HPLC Pump	Model: P100				
Infusion mode	Dual-piston reciprocating parallel				
Flow rate Range	0.001-9.999 mL/min				
Flow Precision	RSD< 0.06%				
Max Working Pressure	42MPa				
Pressure Pulsation/Fluctuation	<0.1 MPa				
Dimension	450 (L) x 300 (W) x l60 (H)mm				
Power Supply	220V				
	Model :UV100	Model ·UV-VIS 100			
Elow cell Volume	8.0	8ul			
Light Source	Dalamn	Delamn + W lamn			
Wavelength Pango	190.680pm	100 000nm			
Wavelength Accuracy	190-0001111 +1nm	190-9001111			
Wavelength Drasisian	111111 0.1nm				
Wavelength Precision	U.IIIII				
wavelength Repeatability	$+0.25\times10^{-5}$ (1/(Static)/+1×10 ⁻⁵ (1)/(dynamic under specified requirements)				
Baseline Noise	$\pm 0.25 \times 10^{-4}$ AU(b(Static)/ $\pm 1 \times 10^{-4}$ AU(b) (dynamic, under specified requirements)				
Baseline Drift	$\leq 0.4 \times 10^{-9}$ and $\Delta U/h$ (Static) 2×10 AU/h (dynamic, under specified requirements)				
Minimum Detection	5×10°g/mL				
Column Oven Model :CO100					
Temperature Control Range	≥ RM + 5°C ≤80°C				
Temperature specification error	±0.2 °C				
Temperature Precision	emperature Precision ±0.1 °C				
Power source	220V				
Gradient System					
Model	LC-100HP (Dual high pressure	2)	LC-100LP (Quaternary low pressure)		
Mixing principal	Gradient proportion of double	e pump control	Gradient proportion of switching time		
	with different flow velocity		control of proportional valve		
Mixing Liquid	2 kinds of liquid		2 to 4 kinds of liquid		
Mixing Accuracy	±1%		±2%		
Mixing Precision	±0.2%		±0.3%		
Test Qualitative Repeatability	RSD6≤0.1% ((Naphthalene/Methyl Standard Sample)				
Qualitative Repeatability	Qualitative Repeatability RSD6≤0.3% ((Naphthalene/Methyl Standard Sample)				
RI Detector	Model :RI100				
Refractive Index Range	1.00-1.75				
Flow Range	0.2-3.0mL/min				
Measuring Range	0.25~512µRIU				
Noise Level	$\leq 2.5 \text{ µRIU}$ (full of water, sensibility 1.5sec)				
Flow Cell Volume	8μL				
Drift	$\leq 0.2 \ \mu RIU$ (full of water)				
Linearity range	≥600 μRIU				
Offset	10 μRIU				
Offset Resolution	50uRIU				
Diode Array Detector	Model :DAD100				
Wavelength Range	190-990nm with D ₂ and W wit	h max strength			
Diode Array Detector Wavelength Range Adjustable Slit	Model :DAD100 190-990nm with D ₂ and W wit 1-16nm	h max strength			
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit	Model :DAD100 190-990nm with D ₂ and W wit 1-16nm 1024 lattices	h max strength			
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler ARCUS 100	Model :DAD100 190-990nm with D ₂ and W with 1-16nm 1024 lattices	h max strength			
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler ARCUS 100 Auto sampler	Model :DAD100 190-990nm with D ₂ and W wit 1-16nm 1024 lattices 1~5000µL with increment o	th max strength			
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler Auto sampler Syringe Volume/ Sample Volume	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000μL with increment o 500μL (2500μL, optional)/ 2	h max strength f 1μL 2 × 48 Sample plate	e (2mL sample vial)		
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler ARCUS 100 Auto sampler Syringe Volume/ Sample Volume Switching Time of Sampling Valve	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000μL with increment o 500μL (2500μL, optional)/ 2 <100ms	h max strength f 1μL 2 × 48 Sample plate	e (2mL sample vial)		
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler Akto sampler Syringe Volume/ Sample Volume Switching Time of Sampling Valve Location Precision of Sampling	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000µL with increment o 500µL (2500µL, optional)/ 2 <100ms	h max strength f 1μL 2 × 48 Sample plate	e (2mL sample vial)		
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler ARCUS 100 Auto sampler Syringe Volume/ Sample Volume Switching Time of Sampling Valve Location Precision of Sampling Sampling Circulation Time	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000μL with increment o 500μL (2500μL, optional)/ 2 <100ms	h max strength f 1μL 2 × 48 Sample plate	e (2mL sample vial)		
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler ARCUS 100 Auto sampler Syringe Volume/ Sample Volume Switching Time of Sampling Valve Location Precision of Sampling Sampling Circulation Time Sampling Method	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000μL with increment o 500μL (2500μL, optional)/ 2 <100ms	h max strength f 1μL 2 × 48 Sample plate artial sample loop	e (2mL sample vial) injection, and carrying injection		
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler Acto sampler Acto sampler Syringe Volume/ Sample Volume Switching Time of Sampling Valve Location Precision of Sampling Sampling Circulation Time Sampling Method Sampling Repeatability	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000µL with increment o 500µL (2500µL, optional)/ 2 <100ms	h max strength f 1μL 2 × 48 Sample plate artial sample loop ; partial sample loop	e (2mL sample vial) injection, and carrying injection op RSD<0.5%; carrying injection		
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler Auto sampler Syringe Volume/ Sample Volume Switching Time of Sampling Valve Location Precision of Sampling Sampling Circulation Time Sampling Method Sampling Repeatability	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000µL with increment o 500µL (2500µL, optional)/ 2 <100ms	h max strength f 1μL 2 × 48 Sample plate artial sample loop ; partial sample loop	e (2mL sample vial) injection, and carrying injection op RSD<0.5%; carrying injection		
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler Auto sampler Syringe Volume/ Sample Volume Switching Time of Sampling Valve Location Precision of Sampling Sampling Circulation Time Sampling Repeatability Sampling Residue	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000µL with increment o 500µL (2500µL, optional)/ 2 <100ms	h max strength f 1μL 2 × 48 Sample plate artial sample loop ; partial sample loop	e (2mL sample vial) injection, and carrying injection pp RSD<0.5%; carrying injection		
Diode Array Detector Wavelength Range Adjustable Slit Minimum detection limit Auto sampler Auto sampler Syringe Volume/ Sample Volume Switching Time of Sampling Valve Location Precision of Sampling Sampling Circulation Time Sampling Repeatability Sampling Residue Cooling Range	Model :DAD100 190-990nm with D₂ and W with 1-16nm 1024 lattices 1~5000µL with increment o 500µL (2500µL, optional)/ 2 <100ms	h max strength f 1μL 2 × 48 Sample plate artial sample loop ; partial sample loop	e (2mL sample vial) injection, and carrying injection op RSD<0.5%; carrying injection		

Spectrum Scientific

www.spectrumscientific.co.uk : info@spectrumscientific.co.uk : sales@spectrumscientific.co.uk 190 Easter Road, Edinburgh, EH7 7QH, UK. Tel: +44 1316 66111856, +44 7501263979