



High Performance Liquid Chromatography

LHLC-B1 Series

HPLC system

HPLC system LHLC-B10

This HPLC system is incorporated with advanced high pressure injection technique. The detector is equipped with 24 bits AD transducer to assure low noise, low drift and high sensibility. This HPLC system can conveniently change the sample input volume. It comes with dual piston reciprocating and series pump for consistent and stable flow.

Features

- ✓ Inclusion of high performance patent gradient mixer
- ✓ Intelligent anti-control software with powerful control function
- ✓ Stand-alone TFT colour screen with touch control
- ✓ High pressure gradient pump

Applications

This gradient HPLC system has multiple applications in medicine analysis, detection of protein content of food, environmental analysis, oil and chemical analysis and in scientific research studies.

Specifications

Model no.	LHLC-B10
High pressure gradient pump	
Peak operating pressure	45MPa, Stainless steel pump
Pressure error	±0.02MPa
Flow rate range	0.001-9.999mL/min
Flow rate precision	±5%
Flow rate repeatability	RSD≤0.1%
Power	220V±10%, 50Hz, 250W
Size (W*H*D)	520×420×160mm
UV Detector	
Wavelength	190-680nm
Wavelength error	±1nm
Baseline noise	≤±2×10 ⁻⁵ AU (Methyl alcohol, 1mL/min, 254nm, 20°C)
Wavelength repeatability	0.2nm
Flow cell	8μL

HPLC system

Drift	$\leq 5 \times 10^{-4}$ AU/h (Methyl alcohol, 1mL/min, 254nm, 20°C)
Limit of detection	$\leq 2 \times 10^{-9}$ g/mL (Naphthalene methyl alcohol solvent)
Automatic Injector	
Sample value	Maximum 2mL, 6×25=150 units
Sample volume	0-1mL, adjustable
Sample residual	<0.02%
Column oven	
Temperature control	Room temperature $\pm 5^{\circ}\text{C}$ -80°C
Constant temperature accuracy	$\pm 1^{\circ}\text{C}$
Constant temperature precision	$\leq 0.1^{\circ}\text{C}$
Temperature setting resolution ratio	0.1°C
Overall Instrument	
Quantitative analysis	RDS6 $\leq 0.2\%$
Quantitative repeatability	RDS6 $\leq 0.2\%$
Sample residual	$\leq 0.01\%$
Gradient error	$\leq 0.01\%$

HPLC system

HPLC system LHLC-B11

This HPLC system delivers high quality performance and reliable results in order to meet the stringent requirements of the customer. To meet GMP/GLP requirements of the instrument, this HPLC system has hardware with VP function which records maintenance information and operations.

Features

- ✓ High pressure constant-current infusion pump
- ✓ Even mixing of the injections using mixers
- ✓ Supreme appearance to meet the customer's visual requirements
- ✓ Simple, easy to use operations
- ✓ UV detector unit consists of dual beam monochromator, light battery, deuterium lamp

Applications

This HPLC has applications in the scientific research studies, detection of residual amount in medicine, food, alcohol and in chemical analysis.

Specifications

Model no.	LHLC-B11
High pressure constant-current infusion pump	
Infusion Way	Micro volume series dual-piston
Infusion pressure	0-9999Psi
Flow rate error	≤0.5%
Flow rate range	0.001-9.999mL/min (in 0.001mL/min increments)
Stability error for the flow rate	≤0.2%RSD
Gradient error	±1% (0-100% water/acetone solvent)
Pressure pulsation	<15Psi (flow rate 1mL/min, pressure 600-1600Psi)
Air tightness	Pressure 5400Psi, 10min time, pressure drop<400Psi
Time program function	Yes
Size (W*H*D)mm	260×130×420
Weight	11kg
Operation temperature	4-40°C

HPLC system

UV detector	
Wavelength range	190-700nm
Wavelength error	≤1nm
Wavelength repeatability error	≤±0.1nm
Dynamic noise	≤±0.75×10 ⁻⁵ AU (methyl alcohol 1mL/min, 254nm, 20°C)
Static noise	≤±0.5×10 ⁻⁵ A (empty cell, response time, 1second, 20°C)
Dynamic baseline Drift	≤±1×10 ⁻⁴ AU/h (methyl alcohol 1mL/min, 254nm, 20°C)
Static baseline Drift	≤0.5×10 ⁻⁴ (empty cell, response time, 1second, 20°C)
Linear range	≥10 ⁴
Limit of detection	≤1×10 ⁻⁹ g/ml (Naphthalene methyl alcohol solvent)
Quantitative repeatability	RSD6≤0.1%
Qualitative repeatability	RSD6≤0.5%
Spectrum band width	6nm
Flow cell volume	8μL
Optical path	10nm
Time program function	Yes
Size (W*H*D) mm	260×130×420
Weight	11kg
Operation Temperature	4-40°C



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