



## ION CHROMATOGRAPHY BCHR-101

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Chromatography is a technique that enables the separation, identification, and purification of the components of a mixture for qualitative and quantitative analysis. Our extensive range offers variety of products like Gas, Ion and Portable Ion chromatography products to meet all separation needs, including improved resolution, enhanced sensitivity, faster analysis and consistent performance.

Used in Food Testing, Chemical Industry, Beverage Testing, Drug testing, Forensic Science, Pharmaceutical, Molecular Biology, Medical, Research, Laboratory.

Also known as Laboratory Chromatography.

## BCHR-101 ION CHROMATOGRAPHY



Built-in circulating 3D constant temperature technology:

Temperature stability time is less than 30 mins, ensuring the accuracy and reliability of test data.

The world's leading full-range series of ion chromatographic columns:

High efficiency, large capacity of the columns for detecting ions of varied compositions.

Self-Regenerating Electrolytic Micro-membrane Suppressor:

High pressure resistance, small dead volume, highly responsive to signals.

Auto-range Conductivity Detector:

It can directly detect the signal from ppb to ppm without adjusting the range. Only one conductivity detector can detect anions and cations.

Observatory intelligent workstation:

Integrated control, intelligent start-up, shutdown and maintenance functions.

Compatible with a variety of instruments.

## SPECIFICATIONS

Model	BCHR-101
Ion Chromatographic Pump	
Maximum Pressure	42 Mpa (Stainless steel)
Type	High-pressure and low-pulse two-piston tandem advection pump
Pressure Display Accuracy	$\leq 0.1$ MPa
Flow Range	0.001 ~ 9.999 mL/min
Pressure Fluctuation	$\leq 0.5\%$
Flow Stability	(0.2-0.5) mL/min $\leq 2\%$ ; (0.5-1.0) mL/min $\leq 1\%$ ; > 1.0 mL/min $\leq 1\%$
Manual Sample Injector	
Contact Material of the Rotor	PEEK
Contact Material of Medium	PEEK/Ceramics
Column Heater	
Operating Temperature Range	20°C~60°C (68~140°F)
Controlling Temperature Accuracy	$\pm 0.01^\circ\text{C}$
Allowable Deviation of Column Heater's Temperature	$\pm 1^\circ\text{C}$
Temperature Stability	$\leq 0.05^\circ\text{C/h}$
Conduction Detection System	
Type	Constant temperature auto-range conductivity detector
Cell Volume	$\leq 0.8\mu\text{L}$
Detection Range	0~35000 $\mu\text{S/cm}$

Detection Resolution	$\leq 0.0020 \text{ nS/cm}$
Output Voltage	-6000~+6000 mv (adjustable)
Electronic Noise	0.02 nS
Baseline Noise	$\leq 0.001 \text{ } \mu\text{S/cm}$
Baseline Drift	$\leq 0.02 \text{ } \mu\text{S}$
Operating Temperature Range	Room temperature +5°C~60°C(41~140°F)
Controlling Temperature Accuracy	$\pm 0.01 \text{ } ^\circ\text{C}$
Temperature Compensation	1.7 %/ $^\circ\text{C}$
Maximum Pressure	10.0 Mpa
Linear Range	$\geq 10^3$
Instrument Linearity	$\geq 0.999$
Quantitative Repeatability	$\leq 1.0\%$
Qualitative Repeatability	$\leq 0.5\%$
Minimum Detectable Concentration	Cl <sup>-</sup> $\leq 0.0005 \text{ } \mu\text{g/mL}$ ; Li <sup>+</sup> $\leq 0.001 \text{ } \mu\text{g/mL}$ ; BrO <sub>3</sub> <sup>-</sup> $\leq 0.001 \text{ } \mu\text{g/mL}$
Flow System	
Six-way Valve	PEEK material, pressure 5000 psi; Independent automatic collecting and flow function.
Suppressor	
Type	Self-Regenerating electrolytic micro-membrane suppressor
Maximum Pressure	6.0 Mpa
Dead Volume	<50 $\mu\text{L}$
Other Specifications	
Dimension (LxWxH)	350x470x510 mm
Net Weight	26 kg
Gross Weight	32 kg
Power	150 W



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