



## CHROMATOGRAPHY BCHR-103

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## ION CHROMATOGRAPHY

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 a 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.



### Leakage alarm:

When there is liquid leakage in the pipeline, the liquid leakage detector will send out an alarm sound to remind in time when it detects the liquid, and automatically stop the pump and shut down after 5 minutes if there is no human intervention.

### Automatic range:

The operation of ion chromatograph does not need to set the range, so it is easy to realize the simultaneous determination of a 5ppb-100ppm concentration sample, and the signal is displayed by digital signal  $\mu s / cm$ .

### Gas-liquid separator:

The presence of bubbles in the eluent will increase the baseline noise and reduce the sensitivity. A micro gas-liquid separator is set up in the pipeline between

## SPECIFICATIONS

Model	BCHR-103
Ion Chromatographic Pump	
- Maximum Pressure	35 MPa (PEEK)
- 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
- Flow Precision	$\leq 0.1\%$
- Pressure Pulse	$\leq 0.5\%$
- Flow Stability	$\leq 0.1\%$
- Numerical-control and Electromagnetic Sample Injector	
- Contact Material of the Rotor	PEEK
- Control Mode	By Stepper motor
- Power Supply	24 V (DC)
Conduction Detection System	
- Cell Volume	$\leq 0.8\mu L$
- Detection Mode	Bipolar conductivity detection
- Detection Range	0~45000 $\mu S/cm$
- Detection Resolution	$\leq 0.0020nS/cm$
- Output Voltage	-6000~+6000 mV (adjustable)
- Electronic Noise	0.02 nS
- Baseline Noise	$\leq 0.001 \mu S/cm$
- Baseline Drift	$\leq 0.01\mu S$
- Operating Temperature Range	Room temperature +5°C~60°C $\pm 0.01^\circ C$
- Controlling Temperature Accuracy	$\pm 0.01^\circ C$
- Linear Range	$\geq 10^3$
- Instrument Linearity	$\geq 0.999$
- Quantitative Repeatability	$\leq 0.5\%$

- Qualitative Repeatability	≤0.5%
- Minimum Detectable Concentration	Cl <sup>-</sup> ≤0.0002 µg/mL; Li <sup>+</sup> ≤0.002 µg/mL
Flow System	
- Six-way Valve	PEEK material, pressure 5000 psi; Independent automatic collecting and flow function.
Suppressor	
- Dead Volume	< 50 µL
Other Specifications	
- Dimension (LxWxH)	350x470x510 mm
- Net Weight	26 kg
- Gross Weight	32 kg
- Power	150 W
Alt Name	Ion Chromatography

## FEATURES

### Leakage alarm:

When there is liquid leakage in the pipeline, the liquid leakage detector will send out an alarm sound to remind in time when it detects the liquid, and automatically stop the pump and shut down after 5 minutes if there is no human intervention.

### Automatic range:

The operation of ion chromatograph does not need to set the range, so it is easy to realize the simultaneous determination of a 5ppb-100ppm concentration sample, and the signal is displayed by digital signal µs / cm.

### Gas-liquid separator:

The presence of bubbles in the eluent will increase the baseline noise and reduce the sensitivity. A micro gas-liquid separator is set up in the pipeline between the infusion pump and the eluent bottle to separate the bubbles from the eluent.

### Timing startup preheating:

It usually takes about 1 hour for the ion chromatograph to balance the system from start-up to sample injection analysis. When the user has prepared the eluent (or pure water for eluent generator), you can set the start-up running time of the instrument in advance (24 hours at most), complete the start-up operation, and set all parameters.

### Intelligent maintenance:

Set to "intelligent maintenance", the instrument can complete the flow path switch to the pure water path, the flow rate is set to 0.5ml/min, running for 1 hour.

### Mobile phone app:

The mobile app has a friendly interface and easy operation.

App monitoring: Put the device in the pocket, no matter where you are, you can turn on the mobile phone to view and control the field device. The mobile app can remotely control the instrument on / off and observe the operation performance index of the instrument.

### Intelligent touch screen:

The large screen displays the operation parameters and status of the instrument, which is convenient for the operator to check the equipment status on site, and to complete the operation of instrument on-off, instrument maintenance, etc.

## APPLICATIONS

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



**Biolab Scientific Ltd.**

Trillium Executive Center, East Tower, 675 Cochrane Dr, Markham, Ontario L3R 0B8, Canada

Email: [info@biolabscientific.com](mailto:info@biolabscientific.com) | Website: [www.biolabscientific.com](http://www.biolabscientific.com)