

**WINCOM COMPANY LTD.**

Honorary Present



[www.chinawincom.com](http://www.chinawincom.com)

*Reputable & Reliable*



*Reliable & steady infusion and detection system*

*Convenient & accessible appearance, humanized design*

*Visible & tangible high quality, leading craft among domestic peers*



LC-100

## LC-100 liquid chromatography system

### Domestic leading processing techniques make every detail crafted, manifesting high quality from inside out

Appearance designed by famous foreign industrial design company best fits our aesthetic taste with more humanized panel design.

The case is made of corrosion-resistant material to avoid corrosion caused by solvent leakage during long-term usage.

### Wider varieties of liquid phase configurations provide multiple choices

The new LC-100 adds semi-prepared, prepared and quaternary low pressure gradient systems to the original isocratic and gradient configurations. Apart from UV detectors, UV-visible detectors, differential detectors, fluorescent detectors and evaporative light-scattering detectors are also available now.

Liquid phase configuration of the automatic sample injector is further improved to offer both simplified and professional versions of workstations, providing customers with more space for diverse options.

### Real-time display of unit operation & comprehensively humanized consumable replacement

The workstation reversely controls each unit operation (except for certain special detectors) and displays the performance of each component in real time. Replacement of consumables is comprehensively humanized. The deuterium lamp is equipped with an orientation module and can now be replaced without adjusting the light path. The plunger rod is self-retracted to avoid damage during change of seal rings.

# Software system of the chromatography workstation

Two versions of software are available for selection to meet the needs of different users.

## Workstation software—the Professional Version

This workstation is customized for Wufeng by a world famous chromatography professional software company. The company has supplied multiple internationally known chromatography manufacturers with professional chromatography software. The software is possessed with a variety of 24-bit signal acquisition patterns of high precision and has digital control over the chromatographic instrument as well as the automatic sample injector.

The workstation is in accordance with the data GMP certification and FDA certification. It also meets the requirements of data validity and safety, the system certification tool (I/Q/OQ) and system suitability test (SST). The highly efficient batch processing function enables the ongoing processing of instrument control, sequence collection by the automatic sample injector, automatic integral calibration and output report. Functions including robust post-processing, chromatogram comparison, recalibration, data input and output, and 3D chromatogram processing are all readily available.

The interface featured with multiple functions satisfies various analytical needs. The workstation makes the complex functions graphic and arranges the icons in the management window according to the instrument combination sequence in reality to make them clear and transparent.

The software is compatible to control instruments of more than 400 models and can acquire signals from one to four independent detectors simultaneously. It is a multi-channel, multi-user general chromatography workstation of high performance.



## Workstation software—the Simplified Version

The WS100 chromatography workstation adopts the RS232 serial port or USB connection. It uses all-digital signal output to reversely control each part of the instrument comprehensively realizing automation and integration of the system. Functions on the interface are simplified. Besides those serving routine analysis, there are also common advanced functions including spectrum scanning and variable wavelength scanning. Professional integral processing can still be done to the chromatograph during post-processing. The simplified interface design is more accessible to users while satisfying the needs of the majority of them.

### Gradient elution

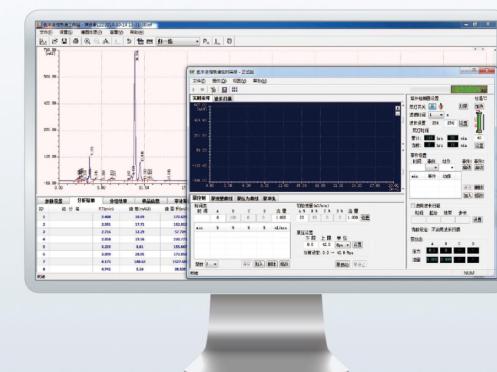
Users can perform gradient elution simply and accurately by entering mobile phase ratios, flow and transformation time into related lists. The software also provides corresponding pump flow curves to help users set the gradients and acquire more visualized gradient running progress.

### Spectrum scanning

The software provides the function of spectrum scanning in order to test the deuterium lamp. Users can intuitively detect light intensities of the deuterium lamp under different wavelengths and determine whether replacement of the lamp is necessary. They can also judge the indication error of wavelength through positions of the 486nm and 656nm points.

### Event relay

The event relay which adopts programmed control in time enables various functions users need, including shifting the conversion valve to isolate and recycle the mobile phase. These functions are not realized by any popular workstation at present.



## Brand new PIOO high pressure constant flow pump

The PIOO high pressure constant flow pump is a product widely praised by its users.



- This upgrade reserves the classic design of reciprocating parallel pumps. It has the features of high flow precision and small pressure pulsation.
- Our original design of a one-way valve is an integral structure comprising a valve core, a gem ball seat and a gem ball. It is advantageous in its simple structure and good air-tightness.
- The upgraded plunger rod is self-retracted. The seal ring can now be changed easily without opening the instrument case.
- Pumps with the function of post-column cleaning are specially introduced to users using buffer salt systems. The design adopts two seal rings.
- The seal rings of the plunger rod and the core of the one-way valve can both be examined and repaired conveniently, which facilitates maintenance of the product.
- We provide our customers with more convenient service, smaller noise and higher reliability.
- Extended warranty periods and more comprehensive after-sales service facilitate your tests.



独创的单向阀设计



往复式双柱塞并联泵

### Parameter

Model:	P100 liquid delivery unit
Liquid delivery system:	Double-plunger parallel reciprocating transfusion; autopulse suppression system
Flow rate:	0.001~9.999mL/min
Maximum working pressure:	42MPa
Flow rate accuracy:	<±0.3%(water, 20℃, 1mL/min, 10MPa)
Qualitative reproducibility:	<0.1 %( 1mL/min, 10MPa)
Quantitative reproducibility:	<0.3 %( 1mL/min, 10MPa)

## Wider varieties of liquid phase configurations provide multiple choices

### Semi-prepared pumps, high-pressure semi-prepared and prepared pumps

The semi-prepared LC systems are compatible with the requirements of both analysis and preparation, while high-pressure prepared LC systems are mainly used for preparation purification and refinement of relatively small flow in laboratories.



LC systems

### Parameter of semi-prepared LC systems

Model:	LC-100HP(40mL)semi-prepared
Flow rate:	0.01~40mL/min
Maximum working pressure:	0~25MPa
Flow accuracy:	±2%
Flow rate accuracy:	RSD<0.1%

### Parameter of high-pressure semi-prepared and prepared LC systems

Model	high-pressure semi-prepared system high-pressure prepared system
Flow rate	0.01~120mL/min 0.01~50mL/min
Maximum working pressure	0~40MPa
Flow accuracy	±2%
Flow rate accuracy	RSD<0.2%

## Binary high-pressure system & quaternary low-pressure system

### Applicable for gradient mixture of different types

The binary high-pressure system equipped with parallel pumps of high precision fully ensures infusion steadiness and meets the precision requirements of high-pressure gradient analysis.

The quaternary low-pressure system is equipped with all-imported four-channel online degasification and a proportional electromagnetic valve. It enables the replacement, mixture and washing of various mobile phases in a simple manner and makes the operation even more convenient.



Binary high-pressure system



Quaternary low-pressure system

### Binary system Parameter

Model	LC100HP Binary
Mixed number	2 solvent
Flow rate accuracy	<±1% (water, 20℃ 1ml/min, 10MPa)
Flow rate reproducibility	<0.2 % ( 1ml/min, 10MPa)
Qualitative reproducibility	<0.1 % ( 1ml/min, 10MPa)
Quantitative reproducibility	<0.3 % ( 1ml/min, 10MPa)

### Quaternary low pressure system Parameter

Model	LC100HP Quaternary
Mixed number	2~4 solvent
Flow rate accuracy	<±2% (water, 20℃,1ml/min, 10MPa)
Flow rate reproducibility	<0.3 % ( 1ml/min, 10MPa)
Qualitative reproducibility	<0.2 % ( 1ml/min, 10MPa)
Quantitative reproducibility	<0.4 % ( 1ml/min, 10MPa)

## UV-100 UV detector / UV-VIS100 UV-visible detector

This upgrade to the UV100 UV detector incorporates the design concept of Wufeng ultrahigh-pressure ultrafast LC instruments, avoiding distortion caused by system errors to the greatest extent.



- The all-digital exchange system avoids the signal distortion and interference associated with general UV detector signals caused by multiple analog-to-digital conversions.
- The deuterium lamps are fully upgraded to 2000h original imported deuterium lamps with longer service life and better detection sensitivity. The wavelength ranges from 190 to 680nm.
- The tungsten lamps are newly introduced as optional light sources. The wavelength ranges from 190 to 900nm, covering the entire range of visible light.
- The minimum detection concentration is as low as  $3 \times 10^{-9}$  g/ml. Superior detection sensitivity has been demonstrated.



### Parameter

Model	UV-100 UV detector	UV-VIS100 UV detector	UV-100S UV detector
Flow cell volume	8μL	8μL	6μL
Light source	D2 lamp	D2 lamp+ W lamp	D2 lamp
Wavelength Range	190nm~680nm	190nm~900nm	190nm~680nm
Spectral Bandwidth		8nm	
Noise		0.25×10 <sup>-5</sup> AU *	
Drift		0.4×10 <sup>-4</sup> AU/hr. *	
Wavelength Accuracy		±1nm	
Wavelength precision		<0.1nm	