

Protein Purification System Unique AutoPure

제조사: Inscinstech





Unique AutoPure Series Protein Purification System







Main Application

The protein purification system is mainly used in the biopharmaceutical fields such as monoclonal antibody, recombinant protein, vaccines, biochemical drug, antibiotics, natural products and polysaccharides. Used for separation and purification of downstream process of biological products.

Product Features and Advantages

- Modular design providing multiple configurations to meet special process requirements
- High-precision double plunger infusion pump with multiple patented technologies to ensure excellent separation reproducibility;
- All parts of the whole system in contact with liquid are made of biocompatible materials, which meet the requirements of FDA, USP VI and other relevant laws and regulations;
- DAD full spectrum direct reading detector to avoid the instability and high failure rate brought by the traditional mechanical switching detector;
- The fixed wavelength detector lamp is a long-life LED lamp with a service life of more than 8,000 hours, which reduces the maintenance cost;
- Patented ultraviolet detector flow cell, with low dead volume and low peak expansion, which improves chromatography resolution;
- High sensitivity on-line pH, conductivity and UV detector, low dead volume and low peak expansion, which improves chromatography resolution;
- Centralized automatic components such as buffer selection valve, automatic sampling valve and column position valve, which improves the automation degree of purification;
- Pre-column, post-column, differential pressure alarm and bubble sensor detection functions, which greatly protect the safety of the system and chromatography column;
- Chromatography workstation software is a chromatography data management system with powerful functions, advanced performance and high stability. It integrates the functions of instrument control, method management, data analysis, standard curve, report editing, user authority management, audit tracking, digital signature, network database, etc., which meets the related regulatory requirements of FDA 21 CFR, Part 11/GLP/GMP, and meets the requirements of pharmaceutical industry on data traceability and security.

Unique AutoPure Series Infusion Pump



Performance Features

- Wide flow range, which provides separation and purification applications from laboratory scale to amplification test.
- High precision bio-inert infusion pump, which adopts pressure compensation technology with low pulsation and high infusion accuracy.
 Ensure high reproducibility of separation and purification.

Unique Technology

The infusion pump adopts pressure compensation technology to reduce pressure pulsation, deliver highly stable liquid for protein purification system, prolong the service life of packing and improve gradient accuracy

Unique AutoPure Series Fraction Collector



Fraction collector (open)

Performance Features

- High running speed and low vibration noise to reduce sample loss
- Unique closed-loop control technology to ensure high positioning accuracy
- Unique motor motion control algorithm to ensure high-speed operation of collector and reduce sample loss



Fraction collector (Temperature control)

Performance Features

- Closed design reduces sample pollution.
- Can be stacked to save space.
- High operating speed, low vibration noise, and reduced sample loss.
- Unique closed- loop control technology ensures high positioning accuracy.



Fraction collector(closed)

Performance Features

- Closed design reduces sample pollution.
- ●Temperature control: 6-20°C.
- •Unique closed- loop control technology ensures high positioning accuracy.
- Effectively avoiding the inactivation or degradation of unstable samples.

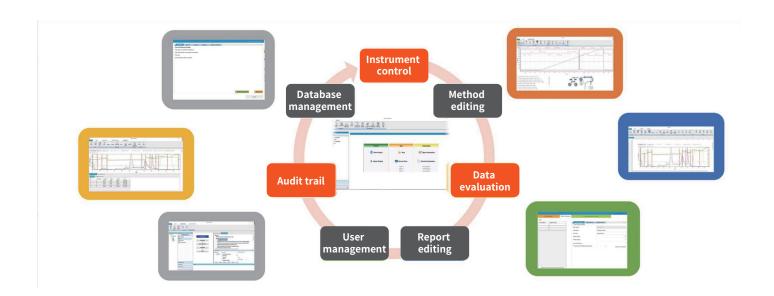
Unique CDSystem Series Chromatography Workstation



Unique CDSystem chromatography workstation is a chromatography data management system with powerful functions, advanced performance and high stability. It integrates the functions of instrument control, method management, data analysis, standard curve, report editing, user authority management, audit tracking, digital signature, network database, etc., which meets the related regulatory requirements of FDA 21 CFR Part 11/GLP/GMP, and meets the requirements of pharmaceutical industry on data traceability and security.

Performance Features

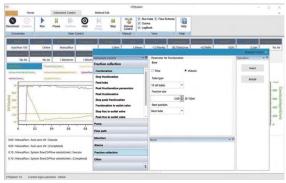
- Collect and display the chromatography detector signal, pressure, flow flowrate, gradient, valve state and other data of the instrument in real time.
- Record manual or method operation, system error, warning and other information in Log, which is convenient for viewing and operation traceability:
- The flow chart can dynamically display the flow state of chromatography in real time.
- During method operation, the instrument can be operated by manual commands in a new way, such as modifying the flowrate, gradient, collection conditions, etc.
- Advanced integration algorithm to minimize the analysis error caused by integration;
- The method editing management module adopts advanced UI+ script mode, which has powerful editing function, so that the method can run while parsing. During the running of the method, the method can be modified and the instrument can execute according to the latest method.
- Report management module protects the standard format of the pharmacopoeia, and has the function of editing report format. Users can edit and save the report format freely.
- Closed system, with user rights management, audit tracking and digital signature, which meets the requirements of FDA 21 CFR, Part 11 /GLP/GMP and other relevant laws and regulations
- Network server database management function, and data can be regularly backed up to ensure the highest data security



Unique CDSystem Chromatography Workstation



Manual control



Manual control allows user to modify the running method in real time, including flowrate modification, gradient modification, collector movement and other related operations



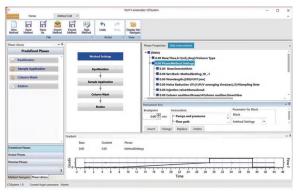
Method editing



Methods editing UI mode generates purification method conveniently and quickly, with friendly and convenient interface



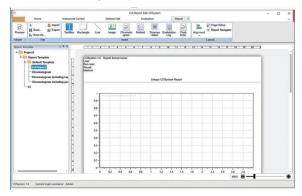
Text method



Script method satisfies advanced purification application, and users can directly insert and modify method instructions, flexibly set purification process, and meet users' needs to the greatest extent.



Report editing



Report editing allows users to customize the report format



Data evaluation

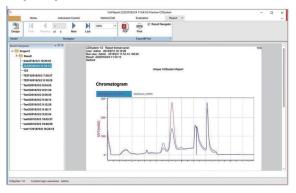


Evaluation has the functions of peak integration, peak data calculation, curves comparison, audit trial, data query,etc.

Unique CDSystem Chromatography Workstation



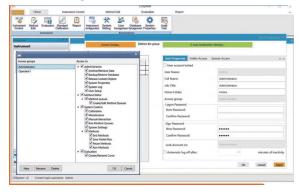
Report preview



Report preview can preview the report and print or output PDF documents



User management



User management allows right management of software operating users and complies with relevant regulatory requirements



Instrument control

The instrument control interface can display the operation data, chromatogram, operation log and system flow path of the instrument in real time.

Unique AutoPure Product Model and Technical Parameters



Chromatography workstation software: Unique CDSystem

Host

Weight: 39-48KG

Size (W \times D \times H):360 \times 450 \times 550mm Power Supply: 100-240V, 50/60HZ

Power: 300VA (MAX)

Collector

Weight: 19KG

Size (W \times D \times H):380 \times 480 \times 460mm Power Supply: 100-240V, 50/60HZ

Power: 60VA (MAX)

System pump (pump type: plunger pump, metering type)

Flowrate range	AutoPure 25 0.001-25ml/min (normal mode) 0.001-50ml/min (Column packing mode)	AutoPure 100 0.001-100ml/min (normal mode) 0.001-200ml/min (Column packing mode)	AutoPure 150 0.001-150ml/min (normal mode) 0.001-300ml/min (Column packing mode)	AutoPure 300 0.01-300ml/min (normal mode) 0.01-600ml/min (Column packing mode)
Flowrate accuracy	±1.2%	±1.2%	±1.2%	±2%
Maximum pump pressure	27.5Mpa	10Мра	5Мра	3.5Mpa
Viscosity range	0.3-10cP	0.3-10cP	0.3-10cP	0.3-5cP

Mixer

Mixing principle: dynamic mixing Mixing pool volume: 0.6mL, 2ml,5ml

Gradient accuracy: $\pm 0.5\%$

(Conditions: 5-95%, flowrate above 2% of full scale)

Valve

Type

Diaphragm valve or rotary valve
Number of valves 8 (maximum)
Including inlet valve, sample injection valve,
column position valve and outlet valve

Inlet valve

Inlet A: 1, 2 or 10 Inlet B: 1, 2 or 10

Column position valve: Single column position, 5-column position or 9-column position

Outlet valve: 1 or 9



UV Detector

Detector type:

LED fixed wavelength or DAD full spectrum direct reading

Wavelength number: 1, 2, 4 or full-wave band

Wavelength range: DF1: 280, 260 or 254nm DF2: 260nm and 280nm

DAD402: 200-400nm, output at any 2 wavelengths

(Software Settings)

DAD604: 200-600nm, output at any 4 wavelengths

(Software Settings)

DAD804: 200-800nm, output at any 4 wavelengths

(Software Settings)

Flow cell:

Optical path 2mm, 2uL dead volume Optical path 5mm, 6uL dead volume Optical path 10mm, 8uL dead volume

pH& conductivity detector PTC01

Reading range:

0.001-999.999mS/cm (conductivity), 0-14 (pH)

Accuracy:

Conductivity: ± 0.02 mS/cm or 2%

(within 0.3 to 300mS/cm)

рН:

 \pm 0.1pH (in the range of 2-12)

Maximum pressure

5Mpa (conductivity)/0.5Mpa (pH) Flow cell volume: 20ul (conductance) Temperature range: 0-100 degrees

Temperature accuracy: ± 0.5 (within 4-45 degrees)

Collector Frac-02

Collection rack: 2

Maximum number of collections:

384 (4 96-well plates)

Collection rack type

1.5ml, 3ml, 5ml, 8mL 15ml or 50ml

Collection volume: 0.1-50 ml

Collector delay volume:

800ul (Autopure 100 standard, UV flow cell-collecting end),

420ul (Autopure25 standard, UV flow cell-collecting end),

* The delay volume may change depending on the choice of configuration.

Bubble sensor

Principle:

Ultrasonic, non-contact detection

Maximum quantity:

3, injection test, pump A test, pump B test or custom



Model	Article No.	Description
Unique AutoPure 25-L1	AP0102501	I. Piston Pump 1.1 Binary gradient biological inert infusion pump *Flowrate:Range: 0.001-25.000ml/min Flowrate accuracy: 1.2% Flowrate precision: 0.5% * Pressure: 0-27.5MPa *Dynamic mixer: 2ml, panel mounted, easy to replace II. Automatic Sampling Valve 2.1 Automatic sampling valve, which can be reversely controlled by software and supports Load/Inject/Waste 2.2 Iml loop III. 280nm Fixed Wavelength Detector 3.1 280 nm imported LED detector, life: 8000 Hr. 3.2 Noise: ±2×10 *Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.000-999.99 mS/cm 4.2 Accuracy: ±0.02mS/cm or ±2% V. Chromatography Workstation (including branded computer, software and communication module, chromatography workstation software)
Unique AutoPure 25-M402	AP0102503	I. Piston Pump 1.1 Binary gradient biological inert infusion pump *Flowrate: Range: 0.001-25.000ml/min Flowrate accuracy: 1.2% Flowrate precision: 0.5% * Pressure: 0-27.5MPa *Dynamic mixer: 2ml, panel mounted, easy to replace II. Automatic Sampling Valve 2.1 Automatic sampling valve, which can be reversely controlled by software and supports Load/Inject/Waste 2.2 1ml loop III. DAD Detector 3.1 200-400nm import dual-channel DAD detector 3.2 Noise: ±1×10-4bs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.001-999.99 mS/cm 4.2 Accuracy: ±0.02mS/cm or ±2% V. Chromatography Workstation (including branded computer, software and communication module, chromatography workstation software)



Model	Article No.	Description (optional)	
AirS01-H	01.004.00097.01	Bubble sensor for monitoring sample loading	
CPV02RX	03.014.00002.01	Column position valve, supporting Forward/Reverse/Bypass	
CPV03RX	03.014.00005.01	3-column position valve, supporting Forward/Reverse/Bypass	
MSV02	03.017.00031.01	Mobile phase selection module, 2-channel	
MSV10	03.017.00003.01	Mobile phase selection module, 10-channel	
DAD604	01.004.00004.01	200-600nm, DAD detector, 4-channel	
DAD804	01.004.00005.01	200-800nm, DAD detector, 4-channel	
pH Detector	03.003.00011.01	pH detector, 0-14 (Best for pH2-12), temperature compensation, dead volume of flow cell: 76ul	
OV02	03.017.00023.01	Outlet valve (large volume collection valve), 1 collection channel and 1 waste liquid	
OV10	03.017.00059.01	Outlet valve (large volume collection valve), 9 collection channel and 1 waste liquid	
SP25	03.002.00035.01	Sample pump SP25 0.01-25ml/min, Flowrate accuracy: 1.2% Maximum pressure 27.5Mpa	
SIV-09	03.017.00020.01	Sample inlet valve, 10-channel, 9 sample inlets and 1 buffer inlet	
PCP02	03.018.00004.01	Pre-column and post-column pressure monitoring module	
PCP01	03.018.00005.01	Pre-column pressure monitoring module	
Frac-02	03.009.00003.01	Component collector, supporting 2 collection racks 1. 3×7, 30mm, 21 tubes, 2 2. 5×12, 16mm, 60 tubes, 2 3. 6×15, 13mm, 90 tubes, 2 4. 96-well plates, 4	



Model	Article No.	Description
Unique AutoPure 100-L1	AP0110001	I. Piston Pump 1.1 Binary gradient biological inert infusion pump *Flowrate: Range: 0.001-100.000ml/min Flowrate accuracy: 1.2% Flowrate precision: 0.5% * Pressure: 0-10MPa *Dynamic mixer: 2ml, panel mounted, easy to replace II. Automatic Sampling Valve 2.1 Automatic sampling valve, which can be reversely controlled by software and supports Load/Inject/Waste 2.2 1ml loop III. 280nm Fixed Wavelength Detector 3.1 280 nm imported LED detector, life: >8000 Hr 3.2 Noise: ±2×10 Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.000-999.99 mS/cm 4.2 Accuracy: ±0.02mS/cm or ±2% V. Chromatography Workstation (including branded computer, software and communication module, chromatography workstation software)
Unique AutoPure 100-M402	AP0110003	I. Piston Pump 1.1 Binary gradient biological inert infusion pump * Flowrate: range: 0.001-100.000ml/min Flowrate accuracy: 1.2% Flowrate precision: 0.5% * Pressure: 0-10MPa *Dynamic mixer: 2ml, panel mounted, easy to replace II. Automatic Sampling Valve 2.1 Automatic sampling valve, which can be reversely controlled by software and supports Load/Inject/Waste 2.2 1ml loop III. DAD Detector 3.1 200-400nm import dual-channel DAD detector 3.2 Noise: ±1×10+Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.001-999.99 mS/cm 4.2 Accuracy: ±0.02mS/cm or ±2% V. Chromatography Workstation (including branded computer, software and communication module, chromatography workstation software)



Model	Article No.	Description (optional)
AirS01-H	01.004.00097.01	Bubble sensor for monitoring sample loading
CPV02RX	03.014.00002.01	Column position valve, supporting Forward/Reverse/Bypass
CPV03RX	03.014.00005.01	3-column position valve, supporting Forward/Reverse/Bypass
MSV02	03.017.00031.01	Mobile phase selection module, 2-channel
MSV10	03.017.00003.01	Mobile phase selection module, 10-channel
DAD604	01.004.00004.01	200-600nm, DAD detector, 4-channel
DAD804	01.004.00005.01	200-800nm, DAD detector, 4-channel
pH Detector	03.003.00011.01	pH detector, 0-14 (Best for pH2-12), temperature compensation, dead volume of flow cell: 76ul
OV02	03.017.00023.01	Outlet valve (large volume collection valve), 1 collection channel and 1 waste liquid
OV10	03.017.00059.01	Outlet valve (large volume collection valve), 9 collection channel and 1 waste liquid
SP100	03.002.00032.01	Sample pump SP100 0.01-100ml/min, Flowrate accuracy: 1.2% Maximum pressure 10Mpa
SIV-09	03.017.00020.01	Sample inlet valve, 10-channel, 9 sample inlets and 1 buffer inlet
PCP02	03.018.00004.01	Pre-column and post-column pressure sensor module
PCP01	03.018.00005.01	Pre-column pressure monitoring module
Frac-02	03.009.00003.01	Component collector, supporting 2 collection racks 1. 3×7, 30mm, 21 tubes, 2 2. 5×12, 16mm, 60 tubes, 2 3. 6×15, 13mm, 90 tubes, 2 4. 96-well plates, 4



Model	Article No.	Description
Unique AutoPure 150-L1	AP0115001	I. Piston Pump 1.1 Binary gradient biological inert infusion pump *Flowrate: Range: 0.01-150.000ml/min Flowrate accuracy: 1.2% Flowrate precision: 0.5% *Pressure: 0-5MPa *Dynamic mixer: 2ml, panel mounted, easy to replace II. Automatic Sampling Valve 2.1 Automatic sampling valve, which can be reversely controlled by software and supports Load/Inject/Waste 2.2 5ml loop III. 280nm Fixed Wavelength Detector 3.1 280 nm imported LED detector, life: >8000 Hr 3.2 Noise: ±2×10*Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.000-999.99 mS/cm 4.2 Accuracy: ±0.02mS/cm or ±2% V. Chromatography Workstation (including branded computer, software and communication module, chromatography workstation software)
Unique AutoPure 150-M402	AP0115003	I. Piston Pump 1.1 Binary gradient biological inert infusion pump *Flowrate: Range: 0.01-150.000ml/min Flowrate accuracy: 1.2% Flowrate precision: 0.5% * Pressure: 0-5MPa *Dynamic mixer: 2ml, panel mounted, easy to replace II. Automatic Sampling Valve 2.1 Automatic sampling valve, which can be reversely controlled by software and supports Load/Inject/Waste 2.2 1ml loop III. DAD Detector 3.1 200-400nm import dual-channel DAD detector 3.2 Noise: ±1×10+Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.001-999.99 mS/cm 4.2 Accuracy: ±0.02mS/cm or ±2% V. Chromatography Workstation (including branded computer, software and communication module, chromatography workstation software)



Model	Article No.	Description (optional)	
AirS01-H	01.004.00097.01	Bubble sensor for monitoring sample loading	
CPV02RX-HS	03.014.00002.01	Column position valve, supporting Forward/Reverse/Bypass	
CPV03RX	03.014.00005.01	3-column position valve, supporting Forward/Reverse/Bypass	
MSV02	03.017.00031.01	Mobile phase selection module, 2-channel	
MSV10-HS	03.017.00003.01	Mobile phase selection module, 10-channel	
DAD604	01.004.00004.01	200-600nm, DAD detector, 4-channel	
DAD804	01.004.00005.01	200-800nm, DAD detector, 4-channel	
pH Detector	03.003.00011.01	pH detector, 0-14 (Best for pH2-12), temperature compensation, dead volume of flow cell: 76ul	
OV02	03.017.00023.01	Outlet valve (large volume collection valve), 1 collection channel and 1 waste liquid	
OV10	03.017.00059.01	Outlet valve (large volume collection valve), 9 collection channel and 1 waste liquid	
SP150	03.002.00033.01	Sample pump SP150 0.01-150ml/min, Flowrate accuracy: 1.2% Maximum pressure 10Mpa	
SIV-09	03.017.00020.01	Sample inlet valve, 10-channel, 9 sample inlets and 1 buffer inlet	
PCP02	03.018.00004.01	Pre-column and post-column pressure monitoring module	
PCP01	03.018.00005.01	Pre-column pressure monitoring module	
Frac-02	03.009.00003.01	Component collector, supporting 2 collection racks 1. 3×7, 30mm, 21 tubes, 2 2. 5×12, 16mm, 60 tubes, 2 3. 6×15, 13mm, 90 tubes, 2 4. 96-well plates, 4	



Model	Article No.	Description
UniqueAutoPure 300-L1	AP0130001	I. Piston Pump 1.1 Binary gradient biological inert infusion pump *Flowrate: Range: 0.01-300.000ml/min Flowrate accuracy: 2% Flowrate precision: 0.5% * Pressure: 0-500Psi *Dynamic mixer: 5ml, panel mounted, easy to replace. II. Automatic Sampling Valve 2.1 Automatic sampling valve, which can be reversely controlled by software and supports Load/Inject/Waste 2.2 5ml loop III. 280nm Fixed Wavelength Detector 3.1 280 nm imported LED detector, life: >8000 Hr 3.2 Noise: ±2×10 hbs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.000-999.99 mS/cm 4.2 Accuracy: ±0.02mS/cm or ±2% V. Chromatography Workstation (including branded computer, software and communication module, chromatography workstation software)
UniqueAutoPure 300-M402	AP0130003	I. Piston Pump 1.1 Binary gradient biological inert infusion pump *Flowrate: Range: 0.01-300.000ml/min Flowrate accuracy: 2% Flowrate precision: 0.5% * Pressure: 0-500Psi *Dynamic mixer: 5ml, panel mounted, easy to replace. II. Automatic Sampling Valve 2.1 Automatic sampling valve, which can be reversely controlled by software and supports Load/Inject/Waste 2.2 5ml loop III. DAD Detector 3.1 200-400nm import dual-channel DAD detector 3.2 Noise: ±1×10*Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.001-999.99 mS/cm 4.2 Accuracy: ±0.02mS/cm or ±2% V. Chromatography Workstation (including branded computer, software and communication module, chromatography workstation software)



Model	Article No.	Description (optional)	
AirS01-HS	01.004.00098.01	Bubble sensor for monitoring sample loading	
CPV02RX-HS	03.014.00001.01	Column position valve, supporting Forward/Reverse/Bypass	
CPV03RX	03.014.00005.01	3-column position valve, supporting Forward/Reverse/Bypass	
SMV02	03.017.00031.01	Mobile phase selection module, 2-channel	
MSV06-HS	03.017.00006.01	6-Channel inlet valve	
DAD604	01.004.00004.01	200-600nm, DAD detector, 4-channel	
DAD804	01.004.00005.01	200-800nm, DAD detector, 4-channel	
pH Detector	03.003.00011.01	pH detector, 0-14 (Best for pH2-12), temperature compensation, dead volume of flow cell: 76ul	
OV02	03.017.00023.01	Outlet valve (large volume collection valve), 1 collection channel and 1 waste liquid	
OV10	03.017.00059.01	Outlet valve (large volume collection valve), 9 collection channel and 1 waste liquid	
SP300	03.002.00034.01	Sample pump SP300 0.1-300ml/min, accuracy: 1.2% Maximum pressure 500Psi	
SIV-09	03.017.00020.01	Sample inlet valve, 10-channel, 9 sample inlets and 1 buffer inlet	
PCP02	03.018.00004.01	Pre-column and post-column pressure monitoring module	
PCP01	03.018.00005.01	Pre-column pressure monitoring module	
Frac-02	03.009.00003.01	Component collector, supporting 2 collection racks 1. 3×7, 30mm, 21 tubes, 2 2. 5×12, 16mm, 60 tubes, 2 3. 6×15, 13mm, 90 tubes, 2 4. 96-well plates, 4	

Unique AutoPure Pilot600 Product Introduction



Unique AutoPure Pilot600 is a benchtop chromatography system for pilot scale chromatography process. GMP or non-GMP configurations are available. The system has a wide range of working flow, pressure resistance and detection range, which can meet the requirements of process scale-up and small-scale GMP production.



System Overview

- ●Unique AutoPure Pilot600 has flexible configuration options, supports chromatography column of 26mm-200mm in diameter.
- Compact and easy to move. Easy to operate with all functional components located on the front of the device.
- User-friendly intuitive software design, easy to operate and method editing.
- High-precision and large-flow plunger pump ensures a stable flow rate and gradient, which can cover a variety of small-scale, pilot-scale and small-scale production chromatography process.
- •Accurate online detectors-fixed or variable wavelength UV detector, conductivity and pH, monitor and record various data of each run.
- •Software with audit trail, user management, e-signature, data analysis and report functions to meet the 21 CFR Part11 requirements.

Application Fields

Protein Purification Nucleic Acid Purification

Vaccine Purification

Polysaccharide Purification

Blood Products

Peptide Purification

Unique AutoPure Pilot600 Systen Parameters



System basic parameters

Main system size	L*W*H 600x500x850mm
Main system weight	65 kg
Control system	Unique CDSystem
Enclosure rating	IP54
Electricity supply	100 ~ 240 V, 50 ~ 60 Hz
Working environment	Temperature: 4°C-35°C, Relative Humidity: 20%-95%, no condensation

System performance parameters

System pump (Dual pump system)	A/B pump Flow rate range: 0.1-600ml/min (2 - pump packing mode: 0.1- Eligibility range: 5%-95% Pressure range: 0-2MPa (20bar, 290 psi) Viscosity: 0.7-10 cp	1200ml/min)
UV detector	280nm fixed wavelength detector LED light source, lifespan>8000h Detection range: -6 - +6AU Linearity: between±2%@0-2AU Wavelength Accuracy: ±1nm Wavelength Repeatability: ±0.1nm Noise:±2*10-5AU	DAD full spectrum direct reading detector 200- 400nm variable dual wavelength Wavelength Accuracy: ±1nm Wavelength Repeatability: ±1 nm Noise: ±4*10 AU (@254nm, 51S)
	of protein samples, double beam design wit	avoid light source temperature affecting the a h high stability. Oµl flow cell volume, maximum pressure resis
	Detection range: 0.01-999.9ms/cm Detection cell volume: 20μl Accuracy: ±3% or 0.02ms/cm built-in temperature sensor, automatic compensation calibration	
Conductivity detector	Accuracy: ±3% or 0.02ms/cm	•
	Accuracy: ±3% or 0.02ms/cm	pensation calibration
detector	Accuracy: $\pm 3\%$ or 0.02ms/cm built-in temperature sensor, automatic com	pensation calibration
detector Temperature detector	Accuracy: ±3% or 0.02ms/cm built-in temperature sensor, automatic com Temperature range: 0 - 99°C; Temperature	pensation calibration
Temperature detector pH detector	Accuracy: ±3% or 0.02ms/cm built-in temperature sensor, automatic com Temperature range: 0 - 99°C; Temperature Detection range: 2 - 12; Accuracy: ±0.15 4 inlets for single pump A total of 8 inlets of double pumps	pensation calibration
Temperature detector pH detector Inlet options	Accuracy: ±3% or 0.02ms/cm built-in temperature sensor, automatic com Temperature range: 0 - 99°C; Temperature Detection range: 2 - 12; Accuracy: ±0.15 4 inlets for single pump A total of 8 inlets of double pumps Expandable to 12 inlets	pensation calibration
Temperature detector pH detector Inlet options Outlets options	Accuracy: ±3% or 0.02ms/cm built-in temperature sensor, automatic com Temperature range: 0 - 99°C; Temperature Detection range: 2 - 12; Accuracy: ±0.15 4 inlets for single pump A total of 8 inlets of double pumps Expandable to 12 inlets Maximum 8 outlets	pensation calibration Accuracy: ± 2°C between 2°C-50°C
Temperature detector pH detector Inlet options Outlets options Column valve	Accuracy: ±3% or 0.02ms/cm built-in temperature sensor, automatic com Temperature range: 0 - 99°C; Temperature Detection range: 2 - 12; Accuracy: ±0.15 4 inlets for single pump A total of 8 inlets of double pumps Expandable to 12 inlets Maximum 8 outlets Single column	pensation calibration Accuracy: ± 2°C between 2°C-50°C
detector Temperature detector pH detector Inlet options Outlets options Column valve Bubble trap	Accuracy: ±3% or 0.02ms/cm built-in temperature sensor, automatic com Temperature range: 0 - 99°C; Temperature Detection range: 2 - 12; Accuracy: ±0.15 4 inlets for single pump A total of 8 inlets of double pumps Expandable to 12 inlets Maximum 8 outlets Single column Effectively remove air bubbles in flowpath, or	pensation calibration Accuracy: ± 2°C between 2°C-50°C

Jizhouauto Empty Column

Ordering Information for PCC Columns

PCC Columns are low-pressure purification columns specially designed for the laboratory. It is applicable to the separation of small-scale biopharmaceuticals and natural substances.

Cat.No.	Name	Compression type	Packing height(cm)	Pressure (MPa)
JZ-0101	PCC16/200	One	2-15	0.6MPa
JZ-0102	PCC16/400	One	22-35	0.6MPa
JZ-0103	PCC16/1000	One	82-95	0.6MPa
JZ-0104	PCC 26/200	One	2-15	0.6MPa
JZ-0105	PCC 26/400	One	22-35	0.6MPa
JZ-0106	PCC 26/1000	One	82-95	0.6MPa
JZ-0107	PCC16/200	Both	0-15	0.6MPa
JZ-0108	PCC16/400	Both	9-35	0.6MPa
JZ-0109	PCC16/1000	Both	69-95	0.6MPa
JZ-0110	PCC 26/200	Both	0-15	0.6MPa
JZ-0111	PCC 26/400	Both	9-35	0.6MPa
JZ-0112	PCC 26/1000	Both	69-95	0.6MPa



Ordering Information for HCC Columns

HCC Columns are medium and low-pressure purification columns specially designed for the laboratory. It is applicable to the separation of small-scale biopharmaceuticals and natural substances.

Cat.No.	Name	Compression type	ID (mm)	L (cm)	Packing height (cm)	Pressure (MPa)
JZ-0214	HCC 10/200 Column	Both ends	10	20	0-16	2MPa
JZ-0215	HCC 10/400 Column	Both ends	10	40	21-36	2MPa
JZ-0217	HCC 10/1000 Column	Both ends	10	100	81-96	2MPa
JZ-0201	HCC 16/200 Column	One end	16	20	3-17	2MPa
JZ-0202	HCC 16/400 Column	One end	16	40	23-37	2MPa
JZ-0203	HCC 16/700 Column	One end	16	70	43-57	2MPa
JZ-0204	HCC 16/1000 Column	One end	16	100	83-97	2MPa
JZ-0205	HCC 26/200 Column	One end	26	20	3-17	1MPa
JZ-0206	HCC 26/400 Column	One end	26	40	23-37	1MPa
JZ-0207	HCC 26/700 Column	One end	26	70	43-57	1MPa
JZ-0208	HCC 26/1000 Column	One end	26	100	83-97	1MPa
JZ-0209	HCC 50/200 Column	One end	50	20	3-15	0.7MPa
JZ-0210	HCC 50/300 Column	One end	50	30	13-25	0.7MPa
JZ-0211	HCC 50/600 Column	One end	50	60	42-55	0.7MPa
JZ-0212	HCC50/1000 Column	One end	50	100	83-95	0.7MPa
JZ-0218	HCC 16/200 Column	Both ends	16	20	0-16	2MPa
JZ-0219	HCC 16/400 Column	Both ends	16	40	10-36	2MPa
JZ-0220	HCC 16/700 Column	Both ends	16	70	40-66	2MPa
JZ-0221	HCC 16/1000 Column	Both ends	16	100	70-96	2MPa
JZ-0222	HCC 26/200 Column	Both ends	26	20	0-16	1MPa
JZ-0223	HCC 26/400 Column	Both ends	26	40	10-36	1MPa
JZ-0224	HCC 26/700 Column	Both ends	26	70	40-66	1MPa
JZ-0225	HCC 26/1000 Column	Both ends	26	100	70-96	1MPa
JZ-0226	HCC 50/200 Column	Both ends	50	20	0-15	0.7MPa
JZ-0227	HCC 50/300 Column	Both ends	50	30	0-25	0.7MPa
JZ-0228	HCC 50/600 Column	Both ends	50	60	29-55	0.7MPa
JZ-0229	HCC50/1000 Column	Both ends	50	100	69-95	0.7MPa

Column Packing Service

- 원하시는 레진으로 제작(Cytiva Superdex, Sephacryl Resin 등)
- 원하시는 컬럼 직경과 길이로 제작
- 우수한 품질(제작된 컬럼의 HETP 및 As 값 제공)
- 기존에 사용하던 pre-pack column에 re-packing 가능
- 저렴한 가격으로 pre-pack column 제작
- 레진 및 컬럼 보유 시 packing service만 제공





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