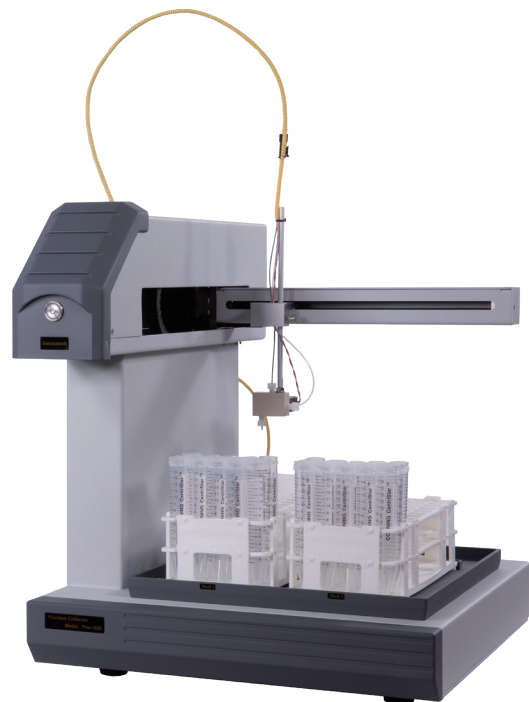


Protein Purification System

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.
- Temperature control: 6-20°C.
- Unique closed-loop control technology ensures high positioning accuracy.
- Effectively avoiding the inactivation or degradation of unstable samples.



Fraction collector(closed)

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.

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

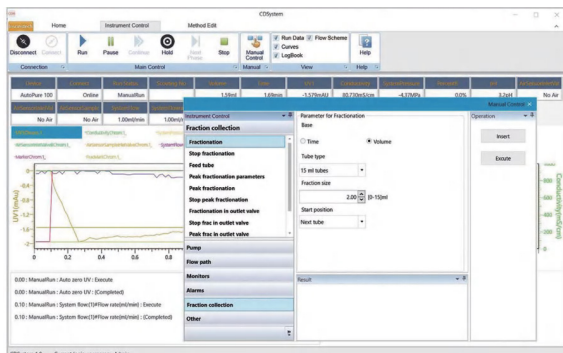
- Collect and display the chromatography detector signal, pressure, flow flowrate, gradient, valve state and other data of the instrument in real time.
- Record manual or method operation, system error, warning and other information in Log, which is convenient for viewing and operation traceability;
- 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



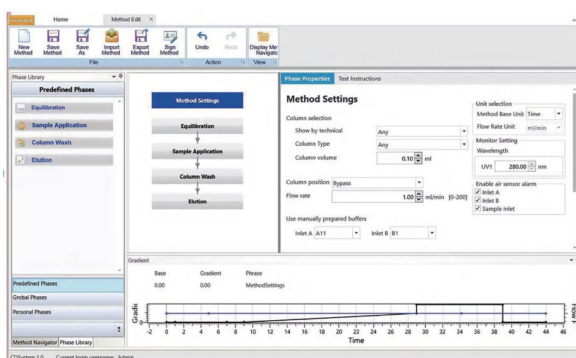
Manual control



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



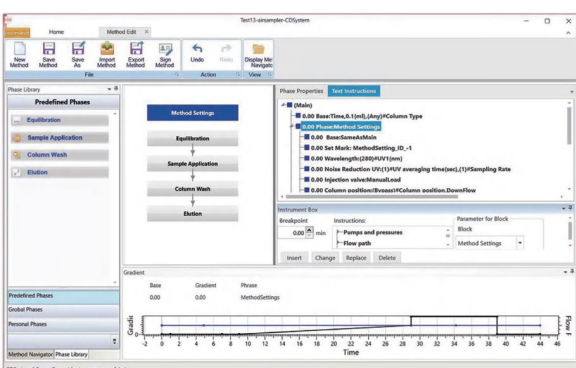
Method editing



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



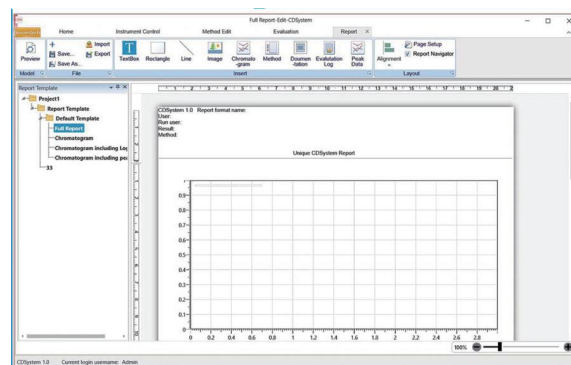
Text method



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.



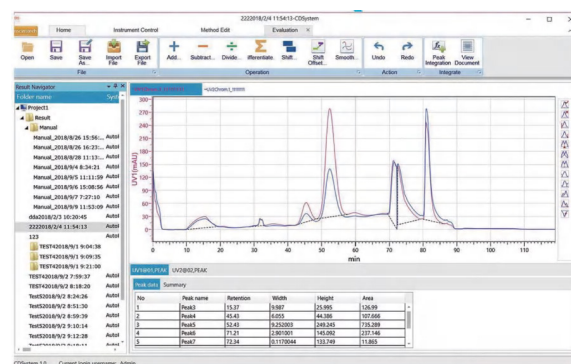
Report editing



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.

[illegible][illegible]

The screenshot displays the LabVIEW front panel for a water analysis system. The top section contains a control panel with buttons for Disconnected, Connect, Run, Pause, Hold, Next, Previous, Stop, Manual Control, Sequence Control, Run Data, Curves, Flow Scheme, RunStatus, Logbook, Method Navigator, and Lock. Below this is a main control area with a Method Navigator on the left and a central display area. The central display area is divided into two parts: a top section showing real-time data for various sensors and a bottom section showing a graph of UV1 (mAU) vs time (min).

The real-time data section includes the following parameters and values:

Device	Connect	Run Status	Volume	System Flow	PercentID	UV1-280	Conductivity	System Pressure	PreColumn Press	PostColumn Press	Delta Column
Autopure-L280	Online	Manual Run	39.37 ml	1.000 ml/min	0.0%	<0.15 mAU	0.000 mS/cm	0.163 MPa	0.000 MPa	0.000 MPa	0.000 MPa

The graph shows UV1 (mAU) on the y-axis (ranging from -10 to 120) and time (min) on the x-axis (ranging from 0 to 19). The graph displays a baseline with several peaks. The first peak is labeled 'High Filter-Stop' at approximately 3.5 minutes. The second peak is labeled 'UV1-280' at approximately 4.5 minutes. The third peak is labeled 'UV1-280' at approximately 7.5 minutes. The fourth peak is labeled 'UV1-280' at approximately 8.5 minutes. The fifth peak is labeled 'UV1-280' at approximately 9.5 minutes. The sixth peak is labeled 'UV1-280' at approximately 10.5 minutes. The seventh peak is labeled 'UV1-280' at approximately 11.5 minutes. The eighth peak is labeled 'UV1-280' at approximately 12.5 minutes. The ninth peak is labeled 'UV1-280' at approximately 13.5 minutes. The tenth peak is labeled 'UV1-280' at approximately 14.5 minutes. The eleventh peak is labeled 'UV1-280' at approximately 15.5 minutes. The twelfth peak is labeled 'UV1-280' at approximately 16.5 minutes. The thirteenth peak is labeled 'UV1-280' at approximately 17.5 minutes. The fourteenth peak is labeled 'UV1-280' at approximately 18.5 minutes. The fifteenth peak is labeled 'UV1-280' at approximately 19.5 minutes.

The bottom section of the interface shows a 'Log' window with the following entries:

Time	Log
8.36	FtValveCtrl(Fraction) Execute at 11:11:14
8.37	Move to Tube 1A(0) System) 11:11:14
8.38	FtValveCtrl(Waste) Execute at 11:11:22
8.54	FtValveCtrl(Fraction) Execute at 11:11:24
8.35	Last System) 11:11:25

The 'System Variable' window shows the following status:

System Variable	Status
UV1 Alarm	High:5000.0mAU, Low:1000.0mAU
System Press Alarm	High:5.50MPa, Low:0.50MPa
Cond Alarm	High:999.00mS/cm, Low:0.00mS/cm
pH Alarm	High:14.0, Low:0.0
Inlet A/B Sensor Alarm	Disabled
Column Volume	1

The right side of the interface shows a schematic diagram of the water analysis system, including a pump, valves, and sensors.

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 CDSsystem

Host

Weight: 39-48KG
Size (W×D×H): 360×450×550mm
Power Supply: 100-240V, 50/60HZ
Power: 300VA (MAX)

Collector

Weight: 19KG
Size (W×D×H): 380×480×460mm
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	10Mpa	5Mpa	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: ±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: 2, 8 or 10
Inlet B: 2, 8 or 10
Column position valve: Single column position,
3-column position or 6-column position
Outlet valve: 2, 8 or 10 channels



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:
0.001-999.99mS/cm (conductivity), 0-14 (pH)
Accuracy:
Conductivity: ± 0.02 mS/cm or 2%
(within 0.1 to 300mS/cm)
pH:
 ± 0.1 pH (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: $\pm 1^\circ\text{C}$ (within 5-45°C)

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 1ml loop III. 280nm Fixed Wavelength Detector 3.1 280 nm imported LED detector, life: 8000 Hr. 3.2 Noise: $\pm 2 \times 10^{-5}$ Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.000-999.99 mS/cm 4.2 Accuracy: ± 0.02 mS/cm or $\pm 2\%$ 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: $\pm 1 \times 10^{-4}$ Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.001-999.99 mS/cm 4.2 Accuracy: ± 0.02 mS/cm or $\pm 2\%$ 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 0.001-25ml/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: $\pm 2 \times 10^{-5}$ Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.000-999.99 mS/cm 4.2 Accuracy: ± 0.02 mS/cm or $\pm 2\%$ 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: $\pm 1 \times 10^{-4}$ Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.001-999.99 mS/cm 4.2 Accuracy: ± 0.02 mS/cm or $\pm 2\%$ 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

Unique AutoPure 150



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: $\pm 2 \times 10^{-5}$ Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.000-999.99 mS/cm 4.2 Accuracy: ± 0.02 mS/cm or $\pm 2\%$ 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: $\pm 1 \times 10^{-4}$ Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.001-999.99 mS/cm 4.2 Accuracy: ± 0.02 mS/cm or $\pm 2\%$ 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 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

Unique AutoPure 300



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: $\pm 2 \times 10^{-5}$ Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.000-999.99 mS/cm 4.2 Accuracy: ± 0.02 mS/cm or $\pm 2\%$ 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: $\pm 1 \times 10^{-4}$ Abs 3.3 2mm flow cell IV. Conductivity Detector 4.1 Range: 0.001-999.99 mS/cm 4.2 Accuracy: ± 0.02 mS/cm or $\pm 2\%$ 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: 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 processes, with a wide range of working flow, pressure resistance and detection range for process development, pilot-scale purification and small-scale 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

Application Fields

Protein Purification

Nucleic Acid Purification

Vaccine Purification

Polysaccharide Purification

Blood Products

Peptide Purification

Unique AutoPure Pilot600 System Parameters



System basic parameters

Main system size	L*W*H 600x500x850mm
Main system weight	65 kg
Control system	Unique CDSsystem
Enclosure rating	IP23
Electricity supply	100 ~ 240 V, 50 ~ 60 Hz
Working environment	Temperature: 5°C-35°C, Relative Humidity: 20%-80%, no condensation

System performance parameters

System pump (Dual pump system)	A/B pump Flow rate range: 1-600ml/min (2 - pump packing mode: 1-1200ml/min) Eligibility range: 5%-95% Pressure range: 0-2MPa (20bar, 290 psi) Viscosity: 0.7-10 cp	
UV detector	280nm fixed wavelength detector LED light source, lifespan>8000h Detection range: -6 - +6AU Linearity: between $\pm 2\%$ @0-2AU Wavelength Accuracy: ± 1 nm Wavelength Repeatability: ± 0.1 nm Noise: $\pm 2 \times 10^{-5}$ AU	DAD full spectrum direct reading detector 200- 400nm variable dual wavelength Wavelength Accuracy: ± 1 nm Wavelength Repeatability: ± 1 nm Noise: $\pm 4 \times 10^{-5}$ AU (@254nm, $^{-5}$ 1S)
	Optical fiber conduction, external flow cell, avoid light source temperature affecting the activity of protein samples, double beam design with high stability. Standard flow cell: 2mm optical diameter, 50 μ l flow cell volume, maximum pressure resistance 2Mpa	
Conductivity detector	Detection range: 0.1-999.9ms/cm Detection cell volume: 20 μ l Accuracy: $\pm 2\%$ or 0.2ms/cm built-in temperature sensor, automatic compensation calibration	
Temperature detector	Temperature range: 0 - 99°C; Temperature Accuracy: $\pm 1^\circ$ C between 5°C-45°C	
pH detector	Display range: 0 - 14, measuring range: 2 - 12; Accuracy: ± 0.1	
Inlet options	4 inlets for single pump A total of 8 inlets of double pumps Expandable to 12 inlets	
Outlets options	Maximum 8 outlets	
Column valve	Single column	
Bubble trap	Effectively remove air bubbles in flowpath, optional online or offline	
Mixer	Mixing chamber volume: 12ml	
Bubble sensor	Support up to 3	
Pressure sensor	One system pressure sensor (standard); pre-column and post-column sensors optional, detection range is 0-2MPa	

Inscinstech IMC Manual Chromatography Column



Product Introduction

IMC manual chromatography columns are pressure-resistant axial-compression columns for gel filtration (SEC), affinity, ion exchange and hydrophobic interaction chromatography resins. They are used with pilot- and production-scale purification systems such as Unique AutoPure Pilot600 and AutoPure Process.

Features

- High-precision SCHOTT glass tube
- Seals made of USP Class VI materials (manufacturer statement)
- Snap-in screens and a flow path without dead zones
- 5 inner diameters × 3 tube heights = 15 sizes



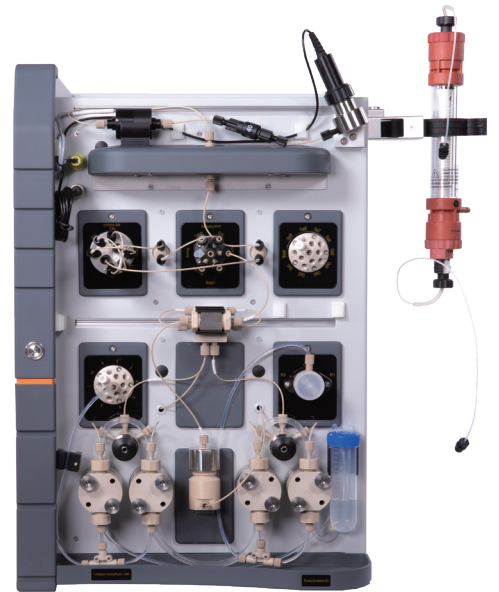
Specifications

Inner diameter	Model (tube height 500 / 750 / 950 mm)	Packing height	Max. pressure
72 mm	IMC70/500 · IMC70/750 · IMC70/950	0-350 / 200-600 / 400-800 mm	7 bar
100 mm	IMC100/500 · IMC100/750 · IMC100/950	0-350 / 200-600 / 400-800 mm	6.5 bar
140 mm	IMC140/500 · IMC140/750 · IMC140/950	0-350 / 200-600 / 400-800 mm	6 bar
200 mm	IMC200/500 · IMC200/750 · IMC200/950	0-350 / 200-600 / 400-800 mm	5 bar
296 mm	IMC300/500 · IMC300/750 · IMC300/950	0-350 / 200-600 / 400-800 mm	4 bar

Packing height ranges are for tube heights of 500, 750 and 950 mm respectively. The model IMC300 has an inner diameter of 296 mm. Connection type and column packing support: please contact B2BIO. Source: Inscinstech IMC leaflet (2025-01) and official product page.

Column Packing Service

- 컬럼 패킹 지원 여부는 레진 · 컬럼 크기 · 용도에 따라 건별로 상담해 드립니다
- 사용하실 레진과 원하시는 컬럼 직경 · 길이를 알려 주세요
- 기존에 사용하던 컬럼의 re-packing도 문의하실 수 있습니다
- 레진과 컬럼을 보유하신 경우 packing만 요청하실 수 있습니다
- 진행 시 패킹 결과(HETP · As 등) 제공 범위를 함께 안내합니다
- 가능 여부 · 일정 · 비용은 상담 후 안내합니다



비투바이오(주) | B2BIO Inc.

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