

# PROTEIN PURIFICATION CHROMATOGRAPHY SYSTEM

## -Lab-Scale FPLC



### Introduction:

FPLC (Fast Protein Liquid Chromatography) on a minimum footprint: Unique AutoPure FPLC systems combine flexibility and reliability. The biocompatible/ metal free Unique AutoPure FPLC is the perfect choice for your protein purification task.

Unique AutoPure systems have different flow rate/pressure specifications, With flow rates up to 25 ml/min, Unique AutoPure25 system is designed for media screening and method optimization.

Unique AutoPure100 system, with flow rates up to 100 ml/min, is designed for scaling up to larger columns.

### Unique AutoPure Series

#### Key Features And Benefits:

- Dual Piston pump, Provides continuous and accurate flow rates, to give reproducible isocratic or gradient elution.
- Wetted material: Biocompatibility.
- DAD UV detector, Provides real-time measurements of absorbance over the UV and visible range , from 200nm up to 800nm,the UV monitor has a Full-spectrum direct reading mode that allows monitoring of up to three wavelengths simultaneously.
- Unique Fix wavelength detector : use the Led lamp, The life of the lamp exceeds 8000 hours.
- The pH and conductivity detectors Integrated into the system.
- Customizable system that is easy to upgrade as your research needs develop.
- Unique CDS system software provides simple, intuitive, and flexible preprogrammed method templates and total system control to simplify your job, Meet the requirements of FDA CFR21 Part 11.

## Unique AutoPure 25 –L1

### Pump

Biocompatibility gradient Piston pump  
 Flow Rate:  
 Range: 0.001-25.000ml/min  
 Accuracy: 1.2%  
 Precision: 0.5%  
 Pressure Range: 0-27.5Mpa

### Sampling Valve

Auto Inject valve  
 Model: load/inject/waste  
 Sample loop: 1ml

### UV Detector

280nm Fix wavelength detector  
 Life: >8000Hr  
 Noise:  $\pm 2 \times 10^{-5}$  Abs  
 Optical path length: 2mm (standard)

### DAD detector

Up to 800nm  
 Noise:  $\pm 2 \times 10^{-4}$  Abs  
 Optical path length: 2mm (standard)

### Conductivity Detector

Range: 0.01-999.99 mS/cm  
 Accuracy: 0.02 mS/cm or 2%

### pH Detector

Range: 0-14  
 Accuracy:  $\pm 0.1$  pH unit within pH 2 to 12  
 Flow cell volume: 75ul

## Unique AutoPure 100 –L1

### Pump

Biocompatibility gradient Piston pump  
 Flow Rate:  
 Range: 0.001-100.000ml/min  
 Accuracy: 1.2%  
 Precision: 0.5%  
 Pressure Range: 0-10Mpa

### Sampling Valve

Auto Inject valve  
 Model: load/inject/waste  
 Sample loop: 1ml

### UV Detector

280nm Fix wavelength detector  
 Life: >8000Hr  
 Noise:  $\pm 2 \times 10^{-5}$  Abs  
 Optical path length: 2mm (standard)

### DAD detector

Up to 800nm  
 Noise:  $\pm 2 \times 10^{-4}$  Abs  
 Optical path length: 2mm (standard)

### Conductivity Detector

Range: 0.01-999.99 mS/cm  
 Accuracy: 0.02 mS/cm or 2%

### pH Detector

Range: 0-14  
 Accuracy:  $\pm 0.1$  pH unit within pH 2 to 12  
 Flow cell volume: 75ul

## OPTIONS

AirS01	Air sensor
CPV02RX	Position valve, up flow/down flow/bypass
MSV04	Buffer valve, 4 inlets, for 1/8" OD tubing
MSV10	Buffer valve, 10 inlets, for 1/8" OD tubing
DAD402	200-400nm, DAD detector, 2 wavelengths simultaneously
DAD604	200-600nm, DAD detector, 4 wavelengths simultaneously
DAD804	200-800nm, DAD detector, 4 wavelengths simultaneously
OV02	Outlet valve, one for frac, one for waste
OV10	Outlet valve, one for frac, nine for waste
	Fraction collector, 2 racks
Frac-02	3X7, 30mm OD tubing, number of fractions: 21
	5X12, 16mm OD tubing, number of fractions: 60
	6X15, 13mm OD tubing, number of fractions: 90