



Semi-preparative preparative

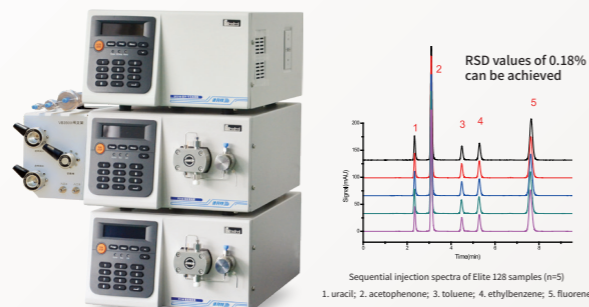
High Performance Liquid Chromatography

From semi-preparation of samples, laboratory grade preparation to industrial preparation, all your needs are met

EClassical 3140

Analytical-semi-preparative Integrated Liquid Chromatography System

Meeting the needs of sample analysis and semi preparative separation with good accuracy and repeatability.



Performance indicators

P3140 high pressure constant flow pump	
Flow range	0.01-40.00 mL/min (Setting step: 0.01 mL/min)
Flow accuracy	≤ ±1.0%
Flow stability	RSD ≤ 0.2%
Maximum pressure	30.0 MPa (0.10-20.00 mL/min) 20.0 MPa (20.01-40.00 mL/min)
Power supply/power	AC220 V±10%, 50 Hz/200 W
Dimensions (L x W x H)	420 x 300 x 175 mm

Performance indicators

UV3100 UV-Visible detector	
Linear range	2.0 AU
Wavelength range	190 to 700 nm
Wavelength Accuracy	≤ ±1.0 nm
Wavelength repeatability	≤ 0.1 nm
Baseline noise	± 0.5x10 ⁻⁵ AU
Baseline drift	≤ 1.0 x 10 ⁻⁴ AU/h
Power supply/power	AC220 V±10%, 50 Hz/100 W
Dimensions (L x W x H)	420 x 300 x 175 mm

EClassical 3500/3700

Semi-preparative Liquid Chromatography System

Meeting the needs of sample analysis and semi preparative separation.

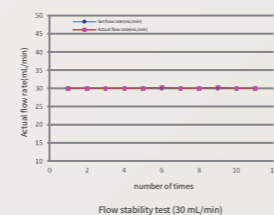
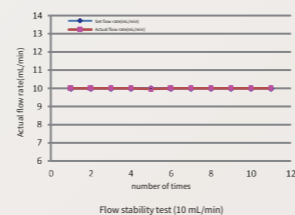
Excellent flow rate stability and Accuracy.

Can be combined with S3320 to form a fully automatic preparation liquid chromatography system.



Performance indicators

	EClassical 3500	EClassical 3700
Flow range	0.01-50.00 mL/min	0.01-100.00 mL/min
Flow accuracy	≤ ±1.0%	≤ ±1.5%
Flow stability	RSD ≤ 0.3%	RSD ≤ 1%
Maximum working pressure	30 MPa	
Power supply/power	AC220 V±10%, 50 Hz/200 W	AC220 V±10%, 50 Hz±1 Hz/300 W
Wavelength range	190 to 700 nm	
Baseline noise	≤ ± 0.5 x 10 ⁻⁵ AU	
Baseline drift	≤ 1.0 x 10 ⁻⁴ AU/h	
Power supply/power	AC220 V±10%, 50 Hz/100 W	
External dimensions (unit modules)	420×300×175 mm(L×W×H)	



S3320

Integrated Module For Automatic Sampling And Fraction Collection

A fully automatic module that provides both sampling and fraction collection for a wide range of applications such as gel clean-up systems, HPLC systems, chromatography systems, biochemical product preparation and product purification.



Performance indicators

P3140 high pressure constant flow pump			
Injection volume	1.0-10.0 mL (Max 20.0 mL by customization)		
Injection step	10 μL		
Injection precision	1.0 μL		
Flow range	1 - 100 mL/min		
Injection stability	1.0-5.0 mL	Partial loop	RSD ≤ 1.0%
	10.0 mL	Full loop	RSD ≤ 0.5%
Cross contamination	≤ 0.01%		
Max pressure	21 MPa		
Sample tube size	Φ12*150 mm (standard configuration includes 250 tubes)		
Sample rack capacity	Holds 96 tubes (standard configuration)		
Max number of sample racks	6		
Max fraction collection speed	100 mL/min		

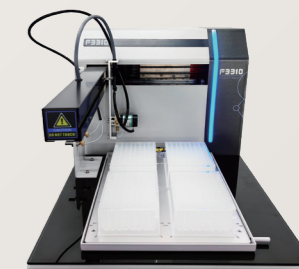
Sample/Collection tube specification

Tube size	Sample capacity
Φ12*150 mm	96
Φ16*100 mm	75
Φ16*150 mm	75
Φ18*150 mm	70
Φ18*160 mm (stoppered test tube)	70
Φ25*150 mm	30
2*96 well plate	192

F3310

Automatic Fraction Collector

A device that can perform automatic fraction collection, while meeting the collection of analysis and preparation grade samples. It can be combined with analytical HPLC systems, chromatography purification systems, biochemical product preparation and purification applications.



Performance indicators

Items	Specifications
Flow range	0.5 mL/min-50.0 mL/min
Max pressure	0.5 bar
Sample rack capacity	2×21 tubes (Φ30 mm 50 mL)
	2×40 tubes (Φ20 mm 20 mL)
	2×60 tubes (Φ16 mm 15 mL)
	2×90 tubes (Φ13 mm 8 mL)
Collection method	2×2×96 well plate (0.5-2 mL)
	By time
	By threshold
Position precision	By peak (time, threshold, slope combination collection)
	0.1 mm

Elite IPC

Industrial Preparative Chromatography System

Meeting the purification and preparation requirements of industrial grade samples.





Elite IPC-50/80 Series Industrial Preparative Chromatography Systems

It is suitable for small-scale preparative process scale-up studies, easy to use and cost-effective

Recommended configurations

Name	Number	Remarks
Elite DAC-50 Dynamic Axial Compression Column	1 unit	Elite DAC-50 or Elite DAC-80
Elite DAC-80 Dynamic Axial Compression Column	1 unit	
P500+ High pressure constant flow pumps	2 units	Feed pump, choose one
UV3100 UV-Visible detector (preparation cell)	1 unit	
Rheodyne 3725i-038 High Pressure Six-Way Inlet Valve	1 piece	
P3700 high pressure constant flow pump	1 unit	
P500+ High pressure constant flow pumps	1 unit	
W5100 Chromatography Data Workstation	1 set	
DT-1 Dynamic Mixer	1 unit	

Note: The above configurations are for customer reference only when selecting system configurations

Elite IPC-100 Series Industrial Preparative Chromatography Systems

It is a rugged, cost effective system that can prepare samples in the ten gram range.

Recommended configurations

Name	Number	Remarks
Elite DAC-100 Dynamic Axial Compression Column	1 unit	Injection pumps
P1000+ High pressure constant flow pumps	2 units	
UV3100 UV-Visible detector (preparation cell)	1 unit	
Rheodyne 3725i-038 High Pressure Six-Way Inlet Valve	1 piece	
P1000+ High pressure constant flow pumps	1 unit	
W5100 Chromatography Data Workstation	1 set	
DT-1 Dynamic Mixer	1 unit	

Note: The above configurations are for customer reference only when selecting system configurations

Elite IPC-150 Series Industrial Preparative Chromatography Systems

It is a good choice for large purification laboratories.

Recommended configurations

Name	Number	Remarks
Elite DAC-150 Dynamic Axial Compression Column	1 unit	Injection pumps
P2000+ High pressure constant flow pumps	2 units	
UV3100 UV-Visible detector (preparation cell)	1 unit	
Rheodyne 3725i-038 High Pressure Six-Way Inlet Valve	1 piece	
P2000+ High pressure constant flow pumps	1 unit	
W5100 Chromatography Data Workstation	1 set	
DT-1 Dynamic Mixer	1 unit	

Note: The above configurations are for customer reference only when selecting system configurations

Elite P-Series Preparatory High Pressure Constant Flow Pumps Performance Specification

Model	Flow rate range	Maximum working pressure	Flow accuracy	Flow stability	Pump sealability	Temperature / Humidity	Power consumption
P500*	1-500	20 MPa	≤3% (5 MPa, water, room temperature, 250 mL/min)				
P1000*	1-1000	1-500 mL/min, 20 MPa; 501-1000 mL/min, 10 MPa	≤3% (5 MPa, water, room temperature, 500 mL/min)	RSD ≤0.5%	Pressure drop not greater than 1.5 MPa	0-40°C/ ≤80%	800 W
P2000*	1-2000	1-1000 mL/min, 10 MPa; 1001-2000 mL/min, 5 MPa	≤3% (5 MPa, water, room temperature, 1000 mL/min)				
P3000*	1-3000	1-2000 mL/min, 10 MPa; 2001-3000 mL/min, 7 MPa	≤3% (5 MPa, water, room temperature, 2000 mL/min)				

Elite DAC

Semi-Preparative Columns

Internal Diameter: 50 mm, 80 mm, 100 mm, 150 mm, 200 mm, 300 mm, 600 mm, 800 mm



Supersil® fillers

- Unique surface treatment technology to ensure uniformity of the silicone surface
- Very low metal ion content
- Multi-seal technology for maximum elimination of silicone hydroxyl residues

Fixed phase	Particle size (μm)	Specific surface area (m ² /g)	Pore size (Å)	Carbon content (C%)	Ending
Supersil ODS2	5	330	120	15.50	Yes
Supersil ODS-B	5	330	120	18.50	Yes
Supersil AQ-C18	5	300	120	14.50	Yes
Supersil C8	5	330	120	11.50	Yes
Supersil C4	5	330	120	7.50	Yes
Supersil C4	5	130	300	3.00	Yes
Supersil Phenyl	5	330	120	9.50	Yes
Supersil NH2	5	330	120	-	Yes
Supersil NH2 Plus	5	330	120	-	No
Supersil CN	5	330	120	-	Yes
Supersil SiO2	5	330	120	-	No
Supersil SCX	5	330	120	-	Yes
Supersil SCX	5	80	300	-	Yes
Supersil SAX	5	330	120	-	Yes

SinoPak® fillers

- Perfectly spherical silica with a narrow particle size distribution
- Excellent peak shape
- Excellent selectivity and separation
- Excellent batch repeatability
- Extremely strong mechanical strength, long column life
- Excellent acid and alkali resistance

SinoPak packing parameters

Fixed phase	Particle size (μm)	Specific surface area (m ² /g)	Pore size (Å)	Carbon content (C%)	Ending
SinoPak C18	10	300	120	21	Yes
SinoPak AQ-C18	10	300	100	14	No
SinoPak C8	10	300	120	11	Yes
SinoPak Phenyl	10	300	120	5	Yes
SinoPak SiO2	10	300	120	-	-

Preparative Columns And Consumables

It can be filled with various types and series of chromatographic packing such as normal phase, reversed phase and ion exchange, which can meet the preparation and separation of various samples such as proteins, peptides, traditional Chinese medicine and natural products.



- Inner diameter range: 30 mm-100 mm
- Length range: 150 mm - 1000 mm

Fillers

SinoChrom ODS-AP

- High bonding rates and complete closure
- Excellent batch-to-batch repeatability
- Excellent mechanical stability

SinoChrom ODS-BP

- Suitable for the separation of hydrophilic samples
- Good retention in mobile phase conditions with a high proportion of water
- Longer column life in aqueous mobile phases
- Different selectivity compared to SinoChrom ODS-AP

SinoChrom packing parameters

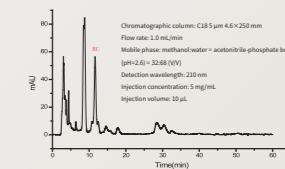
Fixed phase	Particle size (μm)	Pore size (Å)	Specific surface area (m ² /g)	Carbon content (%)
SinoChrom ODS-BP	10,15,20,50	120	300	15
	10,15,20,50	200	200	10
SinoChrom ODS-AP	10,15,20,50	60	450	19
	10,15,20,50	120	300	17
SinoChrom C8	10,15,20,50	300	100	7
	10,15,20,50	120	300	10
SinoChrom C4	10,15,20,50	300	100	4
	10,15,20,50	120	300	7
SinoChrom NH2	10,15,20,50	300	100	3
	10,15,20,50	120	300	4
SinoChrom NH2	10,15,20,50	300	100	2
	10,15,20,50	120	300	4

Note: Other bonding phases are available on request.

Preparation Application Examples

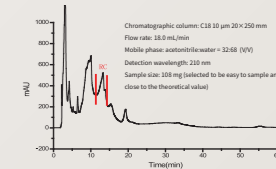
Stevioside

Analytical spectra



Analytical spectrum of stevia on a 10 μm analytical column

Semi-preparative level spectra

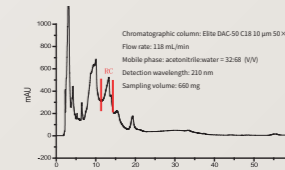


Analytical spectrum of stevia on a semi-preparative column

Name	Size	Magnification factor	Flow Rate	Sample (mg)
Analysis systems	4.6 x 250		1.0	6
Semi-preparation systems	20.0 x 250	18.9	18.9	113.4
Preparation systems	50.0 x 250	118.1	118.1	708.9

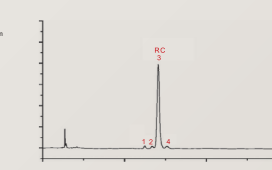
Linear scaling of stevia from analysis to preparation of each factor

DAC-50 preparative grade spectra



Analytical spectrum of stevia on a DAC-50 column

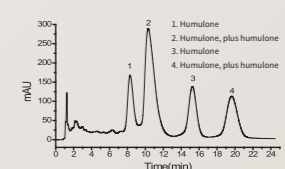
DAC-50 preparative grade spectra



Analytical spectrum of stevia RC collected on a DAC-50 column for sample purity analysis

Hops infusion

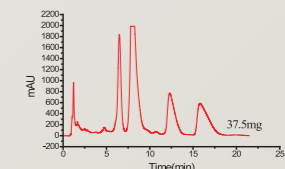
Analytical spectra



Analytical spectrum of hops extracts

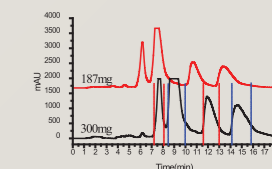
Note: Humulone and plus humulone, serpenitnone and plus serpenitnone are two pairs of isomers with the same peak times under these chromatographic conditions, and these two pairs were collected separately in the experiment.

Semi-preparative level spectra



Hops infusion semi-preparative spectrum

DAC-50 preparative grade spectra



Determination of the sample size for the preparation of hops infusion and collection and analysis

About Elite

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