

Acchrom Products - Represented by OSIS Instrument Solutions

Advanced Liquid Chromatography Solutions

Acchrom Tech is a high-tech enterprise founded 2015, which focusing on Chromatographic solution of LC tech. We provide solution pack of LC including instruments, softwares, consumables as well as tech support & services. We are committed to becoming a leading chromatography supplier, a valuable partner of customers, who truly promotes the progress of chromatography industry chain, and promote new service concept that meets the needs of Local customers.

OSIS is an authorized distributor of Acchrom product in Malaysia

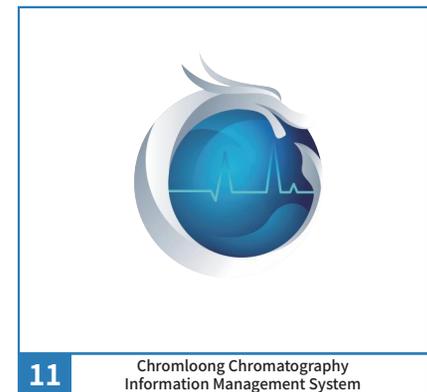
HPLC/UHPLC

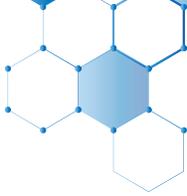


Dedicated Instrument

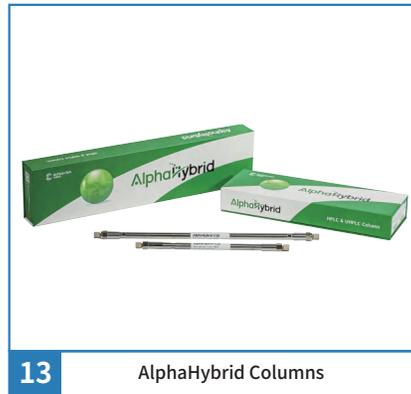


Software





Consumables



HPLC/UHPLC

S3000 HPLC System

Pump

high precision, low pulsation, excellent stability

The pump system realizes the high precision mixing of the four-element gradient system, reduces the infusion pulsation, and ensures the accuracy of infusion and the stability of use.

- ◎ **Special curve-shaped cam design**

Special curve cam drive plunger makes the infusion more stable and lower pulsation.

- ◎ **Double-Ball inlet and outlet check valve design**

Series two-stage pump head infusion is adopted, and the double-ball check valves can ensure the infusion stability to a large extent and reduce the pulsation of the pump system.

Autosampler

low residue, high precision, and excellent reproducibility

The automatic injection system adopts innovative injection system design and advanced direct injection method, with a new fit design, lower residue, stable reproduction, and fast injection to meet the high throughput requirements.

- ◎ **Direct injection approach**

Direct injection, as part of the flow path, ensures that all the samples enter the analysis system, avoids the waste of the samples, reduces carry over, and ensures the reproducibility of high precision injection.

- ◎ **High-precision sample injection control**

The new high-precision syringe drive unit is used to achieve excellent injection volume reproducibility and reliability of analysis results.

Column Oven

Peltier Cooling & Heating, column Pre-heater

The column temperature box adopts the temperature control unit and specially designed preheating function to ensure the sharp, symmetrical and reproducible chromatography peak.

- ◎ **Air circulation + preheating mode**

The mobile phase is pre-heated before entering the column to reduce the interference to the temperature in the column.



The air inside the column temperature box is always circulating to ensure that the ambient temperature around the column is constant.

● **Vertical column temperature box design**

Vertical column temperature box can be placed into a larger column: compatible with 300mm long column, can be put up to 3 long columns.

● **The built-in switching valve can be configured**

Reserved built-in switching valve installation valve position to meet the requirements of column switching or multi-dimensional chromatography application.

UV-detector

One-block Optic Bench, Dual-Beam design

The UV detector, using high-quality optical unit and optimized optical path design, can provide higher sensitivity and meet the analysis of trace and trace samples.

● **Quality optical unit**

The body of the optical bench adopts the overall primary forming process to ensure the stable operation of the optical device under different temperature and humidity environments.

● **Dual beam design**

Using a dual beam design, the reference beam alone can effectively improve the baseline drift due to the aging of the optical components.

Specifications

Gradient mode:	Quaternary gradient
Flow rate range:	0.001-10.000 ml/min
Maximum pressure:	40MPa
Max Injection volume:	100ul, can be extended to 1000ul
Sampler Temperature:	1-45°C
Sampler capacity:	120-bit 2ml vial, compatible with 96-well plates
Column temperature box temperature:	Room temperature + 5°C – 65°C
Automatic column switching valve:	Built-in type, optional
Column capacity:	Max 300mm long columns, up to 3 columns
UV detector:	Dual beam design
wavelength self-calibration:	Built-in mercury lamp calibration
wavelength coverage:	190nm--700nm
Maximum sampling frequency:	100Hz

S6000 HPLC System

Based on the needs of users, Acchrom Tech analyzed the development process of liquid chromatography in the past 30 years, and built the S6000 HPLC system based on the self-developed patented technology and creative modular design ideas.

Advanced technology

Reliable for use

Stable performance

Flexible configuration



Pump system

- Double ball series check valve**

Pressure is more stable and the solvent is tolerated better.

- HFM high-frequency mixing mode**

Improve the mixing accuracy of the mobile phase by increasing the proportional valve switching frequency.

The solvent is fully mixed without bigger mixer, which greatly reduces the system volume (<700ul) and improves the baseline noise caused by poor mixing.

- High-speed feedback, real-time control & special cam curve design**

Through the pressure monitoring of the system in real time, adjust the motor speed, equipped with the special curve cam drive, to ensure the stable flow, and effectively reduce the infusion pulsation. Stable flow pumping of 0.001-10.000 ml/min.

Sample Management System

- Sample carryover can reach <0.003%**

Innovative inlet design to achieve long life seal and nearly zero dead volume.

Special flush flow path and rinse fluid to adequately flush the entire injection system.

- Temperature-controlled automatic sampler**

The temperature control uses the automatic injection sample detector temperature control module to realize the effective temperature control of 1°C ~45°C. The temperature of the sampler can be accurately stabilized at the set value to ensure the stability of the temperature-sensitive samples.

Column management system

- Creative high-capacity design**

A 300-mm column can be placed

Built-in column switching valve or functional valve is optional

● **Heating / cooling mode: Peltier**

Temperature setting range: 1~90°C

Heating / cooling bidirectional capability by powerful Peltier, temperature control is faster, more accurate, more stable.

● **Mobile Phase preheating function**

The mobile phase is pre-heated before entering the column, which reduces the interference to the temperature environment in the column and ensures excellent peak shape symmetry and sharpness and reproducibility.

Rich variety of excellent performance detector

● **A variety of detectors are available**

Provide complete detection techniques including UV, DAD, FLR, RI, ELS detectors.

Specifications

Mixing Mode:	Quaternary
Flow rate range:	0.001-10.000 ml/min
Max operate pressure:	45MPa / 62MPa
Max Injection volume:	100ul, can be expended to 1000ul
Temp. Range:	1-45°C (Room Temp.-24°C-- Room Temp. +20°C)
Injector Capacity:	120 2ml vials, 96-well plates compatible
Column Oven Temp.:	1-90°C (Room Temp. -24°C--Room Temp. +65°C)
Column Switch:	Optional
Max Column Capacity:	300mm column, 3 columns
DAD detector:	1024 diodes
Wavelength Cal:	Built-in Hg lamp calibrate
Max Sampling rate:	160Hz
Reference Wavelength:	Independent mode, different reference wavelength can be set for each channel

S6000 PLUS UHPLC System

The pump system

- ◎ **Biocompatible and salt-resistant check valve design**
New ceramic check valve is more salt-resistant and can working better under high concentration ACN.
- ◎ **Binary/Quaternary mixing pump available**
Binary gradient pump and Quaternary gradient pump are available, the pump system can be flexibly configured according to the application scenario.
- ◎ **Max Pressure limitation 70MPa**
The Max pressure reaches 70MPa, which can fully adapt to the application of 2.5μm particle size chromatography columns.



Sample Management system

- ◎ **Sample carryover can reach <0.003%**
Innovative inlet design to achieve long life seal and nearly zero carryover. Special flush flow path and flush solution, are designed to adequately flush the entire injection system.
- ◎ **Temperature-controlled automatic sampler**
The automatic sampler temperature control system uses the peltier temperature control module to accurately stabilize the temperature of the sampler at the set value and ensure the stability of the temperature sensitive sample.
- ◎ **Flow-through needle injection mode, no sample waste**
The autosampler uses a flow-through needle injection mode to avoid the problem of wasting sample, which caused by sample loop injection mode's necessary part --- "sample overflow", allowing for "as much injecting, as much sampling".

Column management system

- ◎ **Peltier heating / refrigeration, temperature control is more stable**
Temperature setting range: 1~90°C (minimum unit is 1°C).
A 300-mm column can be placed
- ◎ **Passive preheating function**
The mobile phase is pre-heated before entering the column, which reduces the interference to the temperature environment in the column and ensures excellent peak shape symmetry and sharpness and reproducibility.

Rich variety of excellent performance detector

- ◎ A variety of detectors, to meet the different needs of users

Specifications

Mixing Mode:	Binary/Quaternary
Flow rate range:	0.001-10.000 ml/min
Max operate pressure:	70MPa
Max Injection volume:	30ul, can be expended to 100ul
Temp. Range:	1-45°C (Room Temp.-24°C-- Room Temp. +20°C)
Injector Capacity:	120 2ml vials, 96-well plates compatible
Column Oven Temp:	1-90°C (Room Temp. -24°C--Room Temp. +65°C)
Column Switch:	Optional
Max Column Capacity:	300mm column, 3 columns
DAD detector:	1024 diodes
Wavelength Cal:	Built-in Hg lamp calibrate
Max Sampling rate:	160Hz
Reference Wavelength:	Independent mode, different reference wavelength can be set for each channel

Dedicated Instrument

S6000 2D HPLC System

A separation system composed of two chromatography columns with different but independent separation mechanisms connected in series.

Used for separation and analysis of target components, purification and concentration of target samples, and desalination treatment.



Pump system

- ④ Two dimensional pump system based on S6000 system

- ④ Double ball series check valve

Pressure is more stable and the solvent is tolerated better.

- ④ HFM high-frequency mixing mode

Improve the mixing accuracy of the mobile phase by increasing the proportional valve switching frequency. The solvent is fully mixed without bigger mixer, which greatly reduces the system volume (<700ul) and improves the baseline noise caused by poor mixing.

- ④ High-speed feedback, real-time control & special cam curve design

Through the pressure monitoring of the system in real time, adjust the motor speed, equipped with the special curve cam drive, to ensure the stable flow, and effectively reduce the infusion pulsation. Stable flow pumping of 0.001-10.000 ml/min.

Sample Management System

- ④ Sample carryover can reach <0.003%

Innovative inlet design to achieve long life seal and nearly zero dead volume. Special flush flow path and rinse fluid to adequately flush the entire injection system.

- ④ Temperature-controlled automatic sampler

The temperature control uses the automatic injection sample detector temperature control module to realize the effective temperature control of 1°C ~45°C. The temperature of the sampler can be accurately stabilized at the set value to ensure the stability of the temperature-sensitive samples.

Column management system

- ④ Creative high-capacity design

A 300-mm column can be placed
Built-in column switching valve or functional valve is optional

● **Heating / cooling mode: Peltier**

Temperature setting range: 1~90°C

Heating / cooling bidirectional capability by powerful Peltier, temperature control is faster, more accurate, more stable.

● **Mobile Phase preheating function**

The mobile phase is pre-heated before entering the column, which reduces the interference to the temperature environment in the column and ensures excellent peak shape symmetry and sharpness and reproducibility.

Rich variety of excellent performance detector

● **A variety of detectors are available**

Provide complete detection techniques including UV, DAD, FLR, RI, ELS detectors.

Specifications

Mixing Mode:	Quaternary
Flow rate range:	0.001-10.000 ml/min
Max operate pressure:	45MPa / 62MPa
Max Injection volume:	100ul, can be expended to 1000ul
Temp. Range:	1-45°C (Room Temp.-24°C-- Room Temp. +20°C)
Injector Capacity:	120 2ml vials, 96-well plates compatible
Column Oven Temp:	1-90°C (Room Temp. -24°C--Room Temp. +65°C)
Column Switch:	Optional
Max Column Capacity:	300mm column, 3 columns
DAD detector:	1024 diodes
Wavelength Cal:	Built-in Hg lamp calibrate
Max Sampling rate:	160Hz
Reference Wavelength:	Independent mode, different reference wavelength can be set for each channel

S6000 On-line SPE/2D HPLC System

Can achieve direct injection analysis of water samples.

All modules of the system are products of the same manufacturer.

Real time monitoring of body fluids and hair, simple extraction, filtration, and direct injectionries.

Pump system

- ◎ Pump system based on S6000
- ◎ SPE pump (one-dimensional): 45MPa/62MPa optional
- ◎ Analysis pump (2D): 45MPa/62MPa/70MPa optional

Sample Management System

- ◎ Sample injector cooling function
- ◎ Large volume injection component: up to 1mL

Column management system

- ◎ Creative high-capacity design
A 300-mm column can be placed
Built-in column switching valve or functional valve is optional
- ◎ Heating / cooling mode: Peltier
Temperature setting range: 1~90°C
Heating / cooling bidirectional capability by powerful Peltier, temperature control is faster, more accurate, more stable.
- ◎ Mobile Phase preheating function
The mobile phase is pre-heated before entering the column, which reduces the interference to the temperature environment in the column and ensures excellent peak shape symmetry and sharpness and reproducibility.

Rich variety of excellent performance detector

- ◎ A variety of detectors are available
Provide complete detection techniques including UV, DAD, FLR, RI, ELS detectors.
- ◎ Can access mass spectrometry solutions
Huapu's own mass spectrometer
External third-party mass spectrometer



Specifications

Mixing Mode:	Quaternary
Flow rate range:	0.001-10.000 ml/min
Max operate pressure:	45MPa / 62MPa / 70MPa
Max Injection volume:	100ul, can be expended to 1000ul
Temp. Range:	1-45°C (Room Temp.-24°C-- Room Temp. +20°C)
Injector Capacity:	120 2ml vials, 96-well plates compatible
Column Oven Temp:	1-90°C (Room Temp. -24°C--Room Temp. +65°C)
Column Switch:	Optional
Max Column Capacity:	300mm column, 3 columns
DAD detector:	1024 diodes
Wavelength Cal:	Built-in Hg lamp calibrate
Max Sampling rate:	160Hz
Reference Wavelength:	Independent mode, different reference wavelength can be set for each channel

Software

Chromloong Chromatography Information Management System

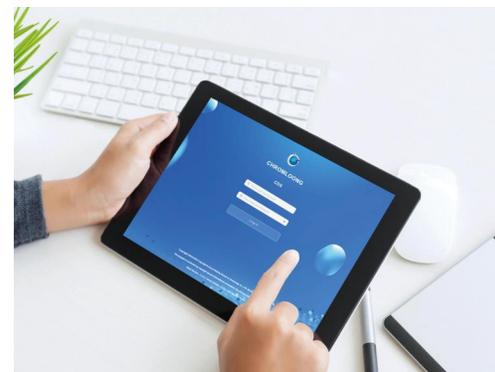


A domestically produced chromatographic information management system with completely independent intellectual property rights, independently developed by Huapu Instrument.

Adopting distributed storage and standard network deployment architecture.

Simultaneously possessing full chain auditing and intelligent data analysis capabilities.

Can provide users with a more secure, compliant, convenient, and intelligent chromatographic information management solution.



Compliance

④ Distributed Data Storage

Adopting distributed database storage, supporting multi node data backup, effectively ensuring the security of user data storage.

④ Detailed permission design

Provide over 120 types of management and business-related permissions, scientifically classified for users to perform highly flexible permission management to meet different business needs. At the same time, there are 4 built-in basic roles, providing an out of the box basic compliance experience.

④ Design of Full Link Audit Tracking

Including system audit tracking and project audit tracking, stored in the database, each audit is unique and unchangeable, ensuring data reliability, completeness, and traceability.

④ A comprehensive data backup and restoration mechanism

Multiple data backup and restoration methods are available, including single item backup, scheduled automatic backup, and full library backup, to ensure the integrity and security of user data during the backup and restoration process.

④ Optimized electronic signature function

Supports up to 5 levels of signing, providing more convenient electronic signature functionality. Equivalent legal effect to paper signatures, with clear and defined responsibilities.

Powerful function

◎ Rich integration events

With over 10 types of integration events, it meets customers' integration requirements for complex spectra.

◎ Cross project data comparison

Support data comparison between different projects.

Flexible report templates.

◎ Flexible report templates

Rich report elements, combined with their attribute settings, meet the requirements of different users for report content and format.

◎ Method library

Original design, the typical projects, standard method library, and user method library in the library can provide users with convenient method calls.

Consumables

Alphasil Columns



The Alphasil of high-performance liquid chromatographic (HPLC) columns employ ultrapure spherical silica gel as the matrix, leveraging unique silica gel surface bonding technologies such as "polar copolymerization," "click chemistry," and deep end-capping techniques. This comprehensive series boasts a full range of bonded phases, covering reverse-phase chromatography, hydrophilic interaction chromatography, and normal-phase chromatography products, catering to the separation and analysis of weakly polar, moderately polar, and strongly polar compounds alike. This versatility provides users with flexible options for method development.

Product Types Include

● Reverse-Phase Chromatographic Columns:

Alphasil ES-C18	Alphasil VC-C18	Alphasil VC-C18AQ	Alphasil XD-C18AQ	Alphasil XD-C18CH
Alphasil XD-Ph	Alphasil S-PFP	Alphasil S-AC Pigment-Specific Column	Alphasil XAqua C18 Calculus Bovis Column	

● Hydrophilic Interaction Columns / Normal-Phase Columns:

Alphasil VC-HILIC

AlphaHybrid Columns

AlphaHybrid C18 is an independently developed C18 column featuring an ethylene-bridged hybrid silica gel. The hybrid ethylene bridge enhances the base ball's resistance to alkaline conditions, while the unique surface bonding and end-capping technology impart exceptional separation selectivity and reduced silanol group activity. This column is widely applicable for the selective separation of non-polar to moderately polar acidic, basic, and neutral compounds.



Marsil Columns

The Marsil C18 is an ultrapure, fully porous silica gel-based universal reverse-phase column. It employs end-capping technology to suppress the activity of surface silanol groups, resulting in exceptional separation performance and a high cost-effectiveness ratio. This column is particularly suited for applications requiring frequent column replacements, with extensive applications in quality control and method development within the traditional Chinese medicine and food sectors.



StarCore Columns

The StarCore columns feature silica particles with a core-shell structure, consisting of solid silica spheres and a porous material on the surface. This core-shell design offers a shorter mass transfer path for material separation, reducing axial diffusion and resulting in higher column efficiency. It provides better resolution for the separation of complex samples. The solid core offers a robust support structure that can withstand high pressures and significantly reduces column backpressure.



Product Types Include

StarCore C18	StarCore C8	StarCore C18AQ	StarCore Amide
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SelectPrep Sample Preparation Products

The SelectPrep of sample preparation products, independently developed by Accchrom-Tech, focuses on customer needs and actual sample analysis requirements. This comprehensive product is tailored for the sample pretreatment process. Offering both standardized and customized options to cater to a wide range of application scenarios.



Product Types Include

SelectPrep HLB	SelectPrep MCX	SelectPrep WCX	SelectPrep WAX	SelectPrep Silica
SelectPrep C18	SelectPrep PSA	SelectPrep NH ₂	SelectPrep Florisil	SelectPrep AL-A
SelectPrep AL-N	SelectPrep AL-B	SelectPrep GCB/NH ₂	SelectPrep GCB/PSA	SelectPrep GCB

SelectPrep Sample Preparation Sorbents

The SelectPrep Sample Preparation Sorbents are developed by Accchrom-Tech based on silica and polymer matrices, modified with various bonded phases or ionic groups. These sorbents feature excellent product performance, rigorous process control, and good batch-to-batch reproducibility.

The sorbents primarily include: SelectPrep HLB, SelectPrep MCX, SelectPrep MAX, SelectPrep WCX, SelectPrep WAX, SelectPrep C18, SelectPrep PSA, and SelectPrep GCB, etc.

