

#### **HPLC-1100 HPLC-1100FP**



• Engineered using the core competencies of our experience, Agress1100 provides superior data quality, excellent robustness and long-term performance.

#### Characteristics

- Affordable
- VFD display screen
- Control mode: external/internal
- Easy to use
- Superior repeat-ability

### **Key Technologies**

- Connections University
- Methods Validation Software and System
- Performance Certified Training and Education

#### **Excellent Performances**

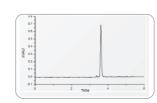
●1.The LOD as low as 4x10-9g/ml

Mobile phase: Methyl alcohol Flow rate: 1mL/min Detection wavelength: 254nm RT: 1.0s Sample: Naphthalene (1×10-7g/ml)

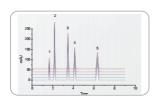
#### 2.Repeatability

1-uracil, 2-acetophneone, 3-toluene, 4-ethyl benzene, 5-fluorene Peak area of fluorene: RSD=0.048% Retention time of fluorene: RSD=0.017%

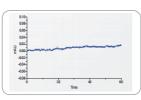
- 3.Baseline Noise
- 4.Gradient
- 5.High Resolution



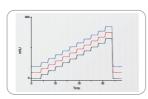
1.The LOD as low as 4x10-9g/ml



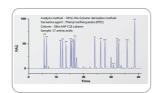
2.Repeatability



3.Baseline Noise



4.Gradient



5.High Resolution





# **Isocratic Systems Configurations**

Item	Description	Quantity
1	HPLC-1100FP High Pressure Constant Flow Pump	1 ea
2	HPLC-1100DT UV/VIS Detector	1 ea
3	Valco Sample Injector	1 ea
4	HPLC-1100CO Column Oven (alternative)	1 ea
5	SinoChrom HPLC Column	1 ea
6	HPLC-1100ST Workstation	1 set

HPLC-1100

## **Binary High Pressure Gradient Systems Configurations**

Item	Description	Quantity
1	HPLC-1100FP High Pressure Constant Flow Pump	2 ea
2	HPLC-1100DT UV/VIS Detector	l ea
3	Valco Sample Injector	l ea
4	HPLC-1100 GM Gradient Mixer	1 ea
5	HPLC-1100CO Column Oven (alternative)	1 ea
6	SinoChrom HPLC Column	l ea
7	HPLC-1100ST Workstation	1 set

# HPLC-1100FP High Pressure Constant Flow Pump

 1.Function keys for setting Max. pressure and switching A/B pump 2.Decreased fluid pulsation
 3.Improved stepper motor operation stability by radiating way

# **Specifications**

tem	Description
low Rate	0.001-10.000 mL/min (Step: 0.001 mL/min)
ccuracy	≤±0.3%
recision	≤0.1% RSD
lax Pressure	42 MPa (6000 psi)
imension/Weight	420 mm×260 mm×160 mm/12 kg
ower	AC 220 V, 50 Hz



#### HPLC-1100DT HPLC-1100CO HPLC-1100ST

# HPLC-1100DT UV/VIS Detector

1.Function keys for wavelength program and D2 Lamp energy
 2.D2 lamp alarming function
 3.Casting monochromator framework for improved light path accuracy and sealing efficiency

### **Specifications**

Item	Description
Wavelength	190-700 nm
Noise	≤±1.0×10−5 AU
Drift	≤2.0×10−4 AU/h
Dimension/Weight	420 mm×260 mm×160 mm/12 kg
Power	AC 220 V (±10%), 50 Hz/100 W

#### HPLC-1100CO Columns Oven

# **Specifications**

Item	Description
Temperature	R.T.+5 °C~99 °C
Setting Precision	0.1 °C
Control Accuracy	±0.5 °C
Dimension/Weight	120 mm×65 mm×500 mm/8.5 kg
Power	AC 220 V (±10%), 50 Hz

#### **HPLC-1100ST Workstation**

- HPLC-1100ST workstation is the classical chromatography data-processing system, with a completely fresh external-connect design hardware (USB port) and software based on Win OS, with up to date software design technology(O-O) and the experiences collection of many experts & clients, all of the above make it to be more functional, and easily-operated workstation.
- HPLC-1100ST is easily operated as MS OFFICE software, such as analysis of complex samples with visual and graphical button line. Call out chromatogram with clipboard under the software of WORD and create a report of pictures & words.
- HPLC-1100ST can accommodate the Agress HPLC system, and any types of chromatography instruments. It
  is the ideal substitute of integrator, data processor and traditional workstation, so it will be your right hand in
  your laboratory analysis.

#### Characteristics

- Simple for use
- Flexibility in data display
- Real-time and fast determination of peak area
- Easy review of entire system
- Real-time operating status and indicator feedback of instrument units
- Easy comparison of multiple chromatograms
- Customizable reports
- Supporting tools for GLP / 21 CFR Part 11——Audit trail of whole system and chromatograms
- User accounts-selectable rights, unique user profiles, allow to create a unique password to protect profiles of each user.



#### 3100 HPLC

# 3100 HPLC System

 3100 HPLC System is the higher and more reliable quality product with samples analysis.

# **System Configuration**

- Isocratic system
- High-pressure binary gradient system
- Quaternary lo w-pressure gradient system
- ELITE-AAK/AAP amino acid analyical system

#### Characteristics

Classic short stroke, serial, and multi-stage flow correction ensuring pump performance.
 Concave surface holographic grating and intelligent power supply for deuterium lamp steadily improving detector functioning.
 Self-developed PID control measure bringing true t he accuracy of column oven temperature to 0.1°C.
 The brand-new S3100 auto-sampler capable of greatly improving instrument automaticity and matching with a variety of HPLC systems.

Application of optoelectronic isolation and EMI protection ensuring stable communication.

All round upgraded Chromsoft workstation that is operator-friendly and promotes customer experience.

# **Isocratic Systems Configurations**

Item	Description	Quantity
1	HPLC-3000FP High Pressure Constant Flow Pump	1 ea
2	HPLC-3000DT UV/VIS Detector	1 ea
3	HPLC-3000SL Auto-Samper (alternative)	1 ea
4	EClassical D3110 Diode Array Detector(DAD)(alternative)	1 ea
5	HPLC-7725SI Sample Injector	1 ea
6	HPLC-3000CO Column Oven (alternative)	1 ea
7	SinoChrom HPLC Column	1 ea
8	HPLC-5100 WS Workstation	1 set
9	HPLC-M3100 System Manager	1 ea



HPLC-3100

# **Binary High Pressure Gradient Systems Configurations**

Item	Description	Quantity
1	HPLC-3000FP High Pressure Constant Flow Pump	2 ea
2	HPLC-3000DT UV/VIS Detector	1 ea
3	HPLC-3000SL Auto-Samper (alternative)	1 ea
4	HPLC-3000DAD	1 ea
	Diode Array Detector(DAD)(alternative)	
5	Rheodyne 7725i Sample Injector	1 ea
6	HPLC-15GM Gradient Mixer	1 ea
7	HPLC-3000CO Column Oven (alternative)	1 ea
8	SinoChrom HPLC Column	1 ea
9	HPLC-5100 WS Workstation	1 set
10	HPLC-M3100 System Manager	1 ea

# **Quaternary Low Pressure Gradient Systems Configurations**

Item	Description	Quantity
1	HPLC-P3100 Quaternary Low Pressure Constant Flow Pump	1 ea
2	HPLC-3000DT UV/VIS Detector	1 ea
3	HPLC-3000SL Auto-Samper (alternative)	1 ea
4	HPLC-3000DAD	1 ea
	Diode Array Detector(DAD)(alternative)	
5	HPLC-7725SISample Injector	1 ea
6	LU3100 Quaternary Low Pressure Unit	1 ea
7	HPLC-3000CO Column Oven (alternative)	1 ea
8	SinoChrom HPLC Column	1 ea
9	HPLC-5100 WS Workstation	1 set
10	HPLC-M3100 System Manager (include Quaternary Degasser)	l ea



#### HPLC-3000FP HPLC-3000SL HPLC-3000CO HPLC-3000DT HPLC-3000DAD

### **HPLC-3000FP High Pressure Constant Flow**

#### Pump

HPLC-3000FP high-pressure constant flow pump is based on years of experience in the research and production as a high performance pump for HPLC system.

### **Specifications**

Item	Description
Flow Range	0.001~10.000 ml/min (step 0.001 ml/min)
Accuracy	≤ ±0.2%
Precision	≤0.06% RSD
Pressure Range	0-45 MPa
Power	AC 220 V±10%, 50 Hz/80 W
Dimensions/Weight	420×300×175 mm (Length × Width × Height)/12 kg

# HPLC-3000SL Auto-Samper (alternative)

• The S3100 auto-sampler is driven by high-precision stepper motor, which makes it easy and reliable. It can realize unattended automatic analysis, which can reduce the error and improve the efficiency.
S3100 is can also be used with other instruments through independent software.

# **Specifications**

Item	Description
Inject volume range	0~100 μL
Number of vials	120
Precision	< 0.3% RSD (Full - loop)
	<0.5% RSD (partial loop-fill)
	<1.0% RSD (µL-pick-up)
Power	AC220 V±10%, 50Hz/30 W
Dimensions/Weight	540×400×300 mm (Length × Width × Height) /23 kg

#### HPLC-3000CO column oven

O3100 column oven is based on the research and production of ZW1201/230II column oven. It is a high performance column oven for HPLC system.
 It can be used alone as a temperature control tool.

#### **Specifications**

Item	Description
Temperature range	Ambient + 5 °C ~ 85 °C
Accuracy	±0.3 °C
Precision	≤0.1 ℃
Power	AC220 V±10%, 50 Hz/130 W
Dimensions /Weight	420×300×120 mm (Length × Width × Height)/7 kg

# HPLC-3000DT UV/VIS Detector

HPLC-3000DT UV-Vis detector is a single light source detector of deuterium lamp, mainly used in UV region. UV3100 series detector has four work modes: single wavelength, double wavelength, wavelength-time program and spectrum scanning.
 UV3100 single wavelength detector
 UV3110 double wavelength detector

#### **Specifications**

Item	Description
Detector	HPLC-3000DT UV/VIS Detector
Wavelength Range	190nm-700nm
Precision	≤0.lnm
Accuracy	≤±1.0nm
Optical Bandwidth	8nm
Rise Time	0.0-4.9s
Linear	≥2.0AU(5%)
Noise	≤±0.5x10-5AU ≤±0.5x10-5AU(Dual Wavelength)
Drift	≤1x10-4AU/h
Minimum Detectable Concentration	4.0x10-9g/ml (Naphthalene in methanol solution)
Scanning spectrogram	Yes
Time-wavelength program	Yes

#### **HPLC-3000DAD Diode Array Detector**

• HPLC-3000DAD diode-array detector has advanced optical system differing from single wavelength UV-Vis detector. Light from lamp is focused first, and then passes through the cell. After part absorption, the light passes through a narrow slit to the grating, where it is diffracted into full wave band spectrum. At the photodiode array, measurement of the light occurs. The detector provides chromatograms at any wavelength, as well as spectra at any time. In this way, users obtain 3D spectrum.

# Specifications

Item	Description
Linear	≥2.0 AU
Wavelength Range	190~800 nm
Noise	≤±1,0×10−5 AU
Drift	≤2.0×10−4 AU/h
Power	AC220 V±10%, 50 Hz/180 W
Dimensions/Weight	500×300×175 mm (Length × Width × Height) /18 kg



#### **5100 HPLC**

### 5100 HPLC System

 5100 HPLC System is the a high-end product, suitable for research and development

## **System Configuration**

- Isocratic system
- High -pressure binary gradient system
- Quaternary low-pressure gradient system
- ELITE- AAK/ AAPamino acid analytical system

#### Characteristics

 High pressure constant flow pump with parallel pump heads and optimized 5mm stroke of plunger rod ensuring perfect pump performance
 The higher level of integration with binary or quarter nary pumps integrated into one set of module

Specially designed column oven for GPC, which represents greater capacity of three ID 8.0x 300 mm columns
Adoption of advanced UDP communication protocol that is fast, stable and can be used for instrument remote control
Equipped with Chromsoft data system match fully the FDA 21CFR Part 11

The HPLC system being more integrated and intelligent

# **Isocratic Systems Configurations**

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Item	Description	Quantity
1	HPLC-5100P1 High Pressure Constant Flow Pump	l ea
2	HPLC-5100DT UV/VIS Detector	1 ea
3	HPLC-5100SL Auto-Samper (alternative)	1 ea
4	HPLC-5100DADS Diode Array Detector(DAD) (alternative)	1 ea
5	HPLC-7725SI Sample Injector	1 ea
6	HPLC-5100CO Column Oven (alternative)	l ea
7	iChrom HPLC Column	l ea
8	HPLC-5100 WS Workstation	1 set
9	HPLC-5100SC1 System Manager	lea



# **Binary High Pressure Gradient Systems Configurations**

Item	Description	Quantity
1	HPLC-5100P2 Binary High Pressure Constant Flow Pump	1 ea
2	HPLC-5100DT UV/VIS Detector	1 ea
3	HPLC-5100SL Auto-Samper (alternative)	1 ea
4	HPLC-5100DADS Diode Array Detector(DAD) (alternative)	1 ea
5	HPLC-7725SI Sample Injector	1 ea
6	HPLC-5100CO Column Oven (alternative)	1 ea
7	iChrom HPLC Column	1 ea
8	HPLC-5100 WS Workstation	1 set
9	HPLC-5100SC2 System Manager (include Binary Degasser)	1 ea

# Quaternary Low Pressure Gradient Systems Configurations

Item	Description	Quantity
1	HPLC-5100P3 Quaternary Low Pressure Constant Flow Pump	1 ea
2	HPLC-5100DT UV/VIS Detector	l ea
3	HPLC-5100SL Auto-Samper (alternative)	l ea
4	HPLC-5100DADS Diode Array Detector(DAD) (alternative)	l ea
5	HPLC-7725SI Sample Injector	lea
6	HPLC-5100CO Column Oven (alternative)	l ea
7	SinoChrom HPLC Column	l ea
8	HPLC-5100 WS Workstation	1 set
9	HPLC-5100SC3 System Manager (include Quaternary Degasser)	l ea



#### HPLC-5100P HPLC-5100SL HPLC-5100CO HPLC-5100SC

#### **HPLC-5100P Series Pumps**

HPLC-5100P1 high pressure pump
 HPLC-5100P2 high pressure binary pump
 HPLC-5100P3 low pressure quaternary pump

## **Specifications**

Item	Description
Flow Range	0.001~10.000 ml/min (step 0.001 ml/min)
Accuracy	≤±0.2%
Precision	≤0.06% RSD
Pressure Range	0- 63 MPa
Power	AC 220 V±10%, 50 Hz/100 W
Dimensions/Weight	540×400×160 mm (Length × Width × Height)/25 kg

### HPLC-5100SL Auto-sampler

 HPLC-5100SL auto sampler is used as the sample injection unit. Designed mode of needle and pallet shorten injection time 8 points calibration method improves positioning accuracy Advanced sampling mode brings low injection residue Side-opening injection needle avoids blockage

# **Specifications**

Item	Description
Inject volume range	0~100 µL
Number of vials	120
Precision	<0.2% RSD
Power	AC220 V±10%, 50Hz/30 W
Dimensions/Weight	540×400×300 mm (Length × Width × Height)/23 kg

#### HPLC-5100CO Column Oven

HPLC-5100CO column oven is a column heating device, it can install at most three columns (250mm in length).
 Special modulation method ensures the accurate power control (1/65000W)
 Digital PID setting technology shorten the heating balance time to 20 minutes

## **Specifications**

Item	Description
Temperature range	Ambient + 5 °C ~85 °C
Accuracy	±0.1°C
Precision	≤0.1℃
Power	AC220 V±10%, 50 Hz/130 W
Dimensions/Weight	540×400×120 mm (Length × Width × Height) /15 kg

# HPLC-5100SC System Controller

 HPLC-5100SC system controller integrates data communication hub, power distribution hub, solvent tray, and on-line degassing.

HPLC-5100SC1 System controller for iChrom5100

HPLC-5100SC2 System controller for iChrom5100 with binary on-line degassing

HPLC-5100SC3 System controller for iChrom5100 with quaternary on-line degassing use with P5103

# **Specifications**

Item	Description
On-line Degasser	2-4
Wetted Materials	PEEK, Teflon® AF
Power	AC 220 V±10%, 50 Hz/30 W
Dimensions /Weight	540×400×120 mm (Length × Width × Height)/10 kg



#### HPLC-5100DAD HPLC-5100DT

#### **HPLC-5100DAD Diode Array Detector**

• HPLC-5100DAD diode array detector is a detection unit of HPLC system, It can get chromatogram at any wavelength (from 180 nm to 800nm) at once, and also obtain the corresponding spectrogram information, and generate 3D spectrogram.

# **Specifications**

Item	Description
Linearity	≥2.0 AU
Wavelength Range	190~800 nm
Noise	≤±1.0×10−5 AU
Drift	≤2.0×10−4 AU/h
Power	AC 220 V±10%, 50 Hz/100 W
Dimensions/Weight	540×400×160 mm (Length × Width × Height)/16 kg

#### HPLC-5100DT UV-VIS Detector

• D5115/6 diode array detector is a detection unit of HPLC system, It can get chromatogram at any wavelength (from 180 nm to 800nm) at once, and also obtain the corresponding spectrogram information, and generate 3D spectrogram.

# **Specifications**

Item	Description
Linearity	≥2.0 AU
Wavelength Range	190∼800 nm
Noise	≤±1,0×10−5 AU
Drift	≤2.0×10−4 AU/h
Power	AC 220 V±10%, 50 Hz/100 W
Dimensions/Weight	540×400×160 mm (Length × Width × Height)/16 kg







HPLC-5100DAD



HPLC-5100P



HPLC-5100SC1

# **Chromsoft Data System**

• Chromsoft data system is designed according to the requirements of "Pharmaceutical Research Chromatograph Data System and Chromatographic Data Management".

It meets the requirements of GLP/GMP and 21CFR Part11 compliance well.

There are multiple operating units such as multi-system control, extended SST module, extended GPC module and extended PDA module can be selected according to your requirements.

#### **Chromsoft PAD Module**

 Four views can be opened in PDA chromatogram simultaneously, and each view can be set according to your needs including contour map, chromatogram map, spectrogram map, 3D view, peak purity, peak purity spectrum, spectrum library, spectrum search view.

What's more, it has many other functions, such as spectral library retrieval, peak purity calculation and multichannel comparison and so on.

#### **Chromsoft GPC Module**

GPC module is applied to molecular weight distribution calculation.
 The analysis of GPC data can be provided automatic by the workstation, which makes data processing easier.
 And several correction function are working in the system to ensures the reliability of GPC data.