



## SGP™ General Purpose Protein Chromatography System

SGP™ General Purpose Protein Chromatography System is ideal for the separation and purification of biochemical drugs such as small molecule chemicals, natural products, and polysaccharides. Both medium to low pressure preliminary separation and high-pressure precision separation can be easily executed in this flexible set of equipment for optimal preparative products.

- Modular, functional and flexible design is easy to configure and operate, allowing the most suitable purification system to be employed for application needs.
- In compliant with GMP/GLP regulations, and FDA and CFDA regulatory requirements, including user access level control, operation audit trail, and digital signature to ensure the integrity and safety of the data.

- 1 The high-pressure stainless steel pump is resistant to organic reagents and has good stability under low pressure.
- 2 Modular design allows for flexible configuration and experimental space saving
- 3 The dual-pump setup offers smooth gradient experience with precision.
- 4 The pump body employs a double plunger rod structure to effectively reduce pulsations.
- 5 Highly sensitive detector with multiple options of monitoring wavelengths.
- 6 Fully automatic fraction collector supports multiple collection methods to facilitate the purification and collection of target substances.
- 7 Easy to use software and intuitive GUI facilitates automated and manual operations by users.

System module		SGP 010	
System pump module	System pump	Type	Stainless Steel Piston pump
		Flow rate range	0.001-10ml/min
		Flow rate accuracy	±1.2%
		Flow rate precision	RSD<0.5%
		Pressure range	0-27MPa(270bar,4000psi)
	Mixer	Type	Magnetic stirring dynamic mixer
		Volume	Standard: 0.6ml; Optional: 2ml
	Air bubble sensor (optional)	Air bubble detection	Next step or Pause based on presence of air bubble
	Valve	Inlet valve	A pump, B pump, each with two inlets
	System characteristics	Chromatography workstation	PURfect® chromatography workstation software, Brand PC, and Win 10 operating system
		Installation kit	PEEK/PTFE tubing, Installation manual, User instructions, Tubing connectors, Column clamps, Back pressure valve, Pre-column filter, 1ml quantitative loop, Common tools, etc.
		Liquid contact material	PEEK, Ti, PTFE, 316L
		Power supply	100-240 VAC/50-60 Hz in, 24 VDC out, 200 W
		Weight	9.6 Kg each
Dimensions (W × H × D)		288 * 153 * 484 mm	
Detector module	UV detector	Wavelength Range	Fixed single wavelength 280nm; Dual-channel variable DAD detector:200-400nm(Standard); DAD400EX four-channel variable DAD detector: 200-400nm; DAD600EX four-channel variable DAD detector:200-600nm; DAD800EX four-channel variable DAD detector:200-800nm;
		Wavelength precision/ Repeatability	±1nm / ±0.5nm
		Noise/Drift	0.16mAu (1s) / 1mAu/h
		Optical path	2mm
		Operation pressure	2Mpa
	Conductivity detector (optional)	Range	0.001-999.99mS/cm
		Accuracy	±0.1mS/cm or ±2%
		Pressure	2Mpa
	Temperature detector (optional)	Range	0-100°C
		Accuracy	±1°C
	pH detector (optional)	Range	0-14
		Accuracy	±0.1 (2-12)
	Valve	Automatic injection valve	Support ManualLoad, Inject, Waste modes
	System characteristics	Liquid contact material	PEEK, Ti, PTFE, 316L
		Power supply	100-240 VAC/50-60 Hz in, 24 VDC out, 200 W
		Weight	6.5 kg
Dimensions (W × H × D)		298 * 156 * 384 mm	
Valve module (optional)	Custom valve options available		
Fraction collector module (optional)	Refer to fraction collector datasheet		
Ambient temperature	5 - 35°C		
Ambient humidity	0 - 85% RH, non-condensing		