



AELAB OIC-M1

Ion Chromatograph



Technical Specifications:

AELAB OIC-M1 Parameter

Appearance	Integrated box design (Size:400mm×488mm×570mm)		Main body: Metal plate
			Front door panel: ABS
			Decoration panel: Acrylic
			Design style: Orun integrated box style
Structure	Modular integration structure	Eluent generator module	Eluent tank High pressure online degassing & Ion capture CR-TC
		Online degassing module	1-4 channel negative pressure degasification
		Leakage alarm module	Generator, pump, valve, pipeline, etc., with leakage alarm system
		Automatic pump clean & External regenerated liquid module	Cleaning fluid pump Regenerated liquid Pump
	Basic module	Flow system (mobile phase and waste liquid bottles; High pressure constant flow pump; pipeline and joints)	
		Sampling system (electric six-way valve; sample inlet; trigger unit)	
		Separation system (guard column and IC column)	
		Detection system (suppressor; detector)	
			Temperature control system (eluent preheating; column heating; detector temperature control)

Host-computer	Built-in chromatography workstation. Methods that can be saved and called			
	Generator	Can realize two elution modes: isocratic and gradient; can monitor feedback pressure and concentration parameters in real time; can dynamically display operating status spectra and set line charts in real time; can save and call completed methods; can be implemented with the sampling system and acquisition system Synchronous cycle; has pressure loss self-protection function;	Flow setting: 0=5ml/min, participate in current calculation	
			Concentration setting: 0-100mM/L, participate in current calculation	
			Time setting: used for gradient elution, the time and concentration curve has two modes: mutation and gradient.	
			Pressure monitoring: real-time, better with monitoring curve (pressure data can be obtained from the high-pressure pump)	
			Methods can be set, saved, called and changed (can be added to the total method)	
			Control (EG & CR-TC) power supply, when the pressure is lower than the specified value, the current will be stopped	
	After the injection, the workstation collects data simultaneously, and the generator method also starts a new cycle.			
	Low pressure online degassing: Pressure can be set; abnormal pressure alarm			
	Liquid leakage alarm: There are liquid leakage alarms and automatic stop functions for each module of the equipment.			
	Cleaning after pump	Online continuous cleaning & maintenance cleaning 2 modes	There are corresponding options and switch buttons	
	Suppressor external regeneration fluid: Self-regeneration/external regeneration:		There are self-regeneration and external regeneration mode options	
High-pressure pump		Flow setting: 0-10ml/min		
		Pressure monitoring: It is best to have a record curve chart		
		Gradual lifting and automatic switching program		
Electric valve	Controllable state switching and trigger signal sending: Workstation acquisition, generator triggering			
Suppressor	Suppressor current control: Current setting range: 0-350mA; Voltage loss self-protection power-off function (can be shared with the generator self-protection power-off condition)			
Temperature control: Column oven and detection, chamber temperature setting and control				



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Configuration	Modular build-in eluent generator	Type	Hydroxyl type; Carbonate bicarbonate mixed type; Methylsulfonic acid type
		Function	Isocratic elution and gradient elution can be achieved by simply adding pure water and continuously producing the desired concentration of eluent through electrolysis.
			High pressure online degassing
			Online ion capture
		Eluent concentration	0-100 mmol/L
		Flow rate	0-5 ml/min
		Withstand voltage	0-20Mpa
		Concentration accuracy	0.1mM/L
	Modular build-in online negative pressure degasification	Function	Realize online degassing of the mobile phase, effectively preventing air bubbles from entering the pump and causing instability in the flow path or idling wear of the pump.
			Overpressure alarm (high pressure / low pressure)
			Pressure setting (72000Pa-80000Pa)
			Pressure monitoring
		Expansion	1-4 channel negative pressure degasification
		Degassing efficiency	≥90%
		Degassing volume	≥5ml
	Leakage alarm		Generator, pump, valve, pipeline and other flow path components, leakage alarm function
	Pump automatic cleaning		It can realize online automatic cleaning of the pump and automatic maintenance after the experiment.
	External regenerator liquid		It can meet the needs of special experiments for external regeneration fluid of the suppressor.
	High pressure constant current pump	Structure	Double plunger pulse series pump
		Material	Peek
		Maximum withstand voltage	42Mpa/6000Psi
		Flow range	0-9.999ml/min
	Electronically controlled automatic sampling six-way valve	Structure	Peek
		Maximum withstand voltage	42Mpa/6000Psi
		Signal	Controllable by host computer; automatic trigger/switch trigger dual trigger mode
		Longlife	The number of switching times is not less than 100,000 times
	Chromatography column	N/A	
	Suppressor	Structure	New filling processing structure, resistant to pressure and fabrication, long service life
		Suppressor mode	Continuous regeneration micromembrane electrical suppression technology
Regeneration liquid Mode		Free choice of self-regeneration/external regeneration fluid	
Suppressor capacity		≥200μeq	
Volumn		≤50μL	
New suppression/non-suppression universal conductivity detector	Withstand voltage	10Mpa	
	Volumn	0.5μL	
	Baseline noise	≤0.5%FS 或 ≤0.0005μS	
	Baseline drift	≤10.0%FS/30min 或 ≤0.01μS/30min	
	Detection limit	CL-≤0.001μg/ml Li+≤0.0005μg/ml	
	Linear	r>0.999	
	Qualitative repeatability	RSD≤0.3%	
	Quantitative repeatability	RSD≤1.5%	