

SHE-3 Electrochemical Detector

Introduction

The amperometric detector requires the occurrence of electrolytic reaction in the electrolytic cell, that is, under the action of applied voltage, it is a method to measure the change of current caused by the redox reaction of the substance to be measured on the electrode surface. Amperometric detector is often used to analyze ions with low degree of dissociation, which are difficult to detect with conductivity detector and have electrical activity at the same time.

Advantages

1. Three detection methods: DC amperometric, pulsed amperometric, integral amperometric, to suit different samples.
2. All-plastic flow path to reduce the contamination of ions.
3. High sensitivity, a very low detection limit.



Specifications

Model	SHE-3	
Baseline Noise	≤ 0.2 nA;	
Baseline Drift	≤ 2 nA/30min	
Minimum Detectable Concentration	≤ 0.005 $\mu\text{g/mL}$	
Instrument Linearity	> 0.999	
Quantitative Repeatability	$\leq 1.0\%$	
Qualitative Repeatability	$\leq 1.0\%$	
Signal Range	DC amperometric test method	10pA-200μA
	Integral amperometric test method	50pC-200μC
Working Electrode	Gold electrode, platinum electrode, silver electrode, glassy carbon electrode	
Reference Electrode	Ag / AgCl (saturated KCl) electrode	
Cell Volume	< 0.5 pL	