DRAWELL
Artist of Science

SHE-8 Electrochemical Detector

Introduction

In the case of applied voltage, the electrochemical detector detects the change of current caused by the redox reaction of the substance to be measured on the electrode surface. Electrochemical detector is often used to analyse ions with low dissociation, which are difficult to detect with conductivity detectors and have electrical activity .

Advantages

1. Unique noise reduction technology

Advanced Digital Filter (ADF), different from traditional filter time constant (FTC), has less signal loss in the process of noise reduction, which can let low frequency peaks pass, remove high frequency noise, improve signal-to-noise ratio and increase detection limit.

2. Unique structure of analytical flow cell

Central spray wall structure. The sensitivity of analytical flow cell can be continuously adjusted. The working volume can be continuously adjusted between 0 and 300 nl.One electrode can meet the application requirements of different sensitivity.

3. Built-in Faraday shielded temperature oven

Reduce static and unexplained interference and influence of temperature change, improve repeatability and stability.

4. Applicable to IC, HPLC and UHPLC

5. With DC ,PULSE and SCAN mode

6. The most sensitive electrochemical detector

7. Different flow cells to cover every application

Specifications

Mode	**DC ,PULSE and SCAN**
Working Temperature	**10-40°C(indoor use only)**
Safety and EMC	**According to Ec-directives; Emission Group I Class A;cMETus approved**
Sensors	**Up to 3 flow cells**
Max Current Compensation(Autozero)	**- 25 nA-25 mA in DC and PULSE mode dependent on range setting**
Oven	**+7°C above ambient to 60°C, accuracy 0.5°C, stability 0.1°C; accommodates column and flow cell(s)**
Offset	**+50% to - 50% of max. output voltage, 5% steps**
Analog Output (DAC)	**-1 to +1 V full scale (via 16-bit D/A converter)**
Analog Output (I/E)	**-2.5 to +2.5 V full scale (unprocessed I/E con-verter signal)**
DC mode	
Range	**10 pA-200 uA in 1. 2. 5 increments**
Filter (ADF)	**10-0.001 Hz in 1.2. 5 increments RAW and OFF: for unprocessed data**
Potential (EC)	**-2.50V to +2.50V with 10 mV increments**
Data Rate	**1- 100 Hz in 1, 2, 5 increments, dependent on filter setting**
Noise	**<2pA with dummy cell(load of 300 MΩ /470 pF) in 1 nA range, filter off, Ec+800mV and temperature of 35'C**

PULSE Mode	
Range	**10 nA - 200 μA in 1, 2, 5 increments，OFF: for unprocessed data**
Filter (ADF)	**0.5 - 0.001 Hz in 1, 2, 5 increments**
Potential (Ec)	**-2.50 V to + 2.50 V with 10 mV increments**
Data Rate	**1/(pulse duration) Hz**
SCAN Mode	
Range	**10 nA - 200 μA in 1, 2, 5 increments**
Potential (Ec)	**-2.50 V to + 2.50V with 10 mV increments**
Data Rate	**1 Hz Scan rate 1 - 100 mV/s in 1，2，5 increments**
Cycle	**Half, Full, Continuous**
Dimensions	**43(D)*22(W)*44(H)cm**
Power requirements	**100-240 VAC, 50/60 Hz, 260 VA, auto-sensing**
Weight	**Max 14. 4 kg without flow cell and column**