THE INTRO

For Peak Performance in LC-EC

ANTEC LEYDEN

ELECTROCHEMICAL DETECTOR
LC-EC workstation for routine trace analysis

The Benchmark in Electrochemical Detection

General specifications

- Power: 100-120/220-240 VAC, 50/60 Hz, max. 150 W
- Operating mode: DC
- Cell potential: between -1.5 and +1.5 V
- Integrator: max/min range 10 µA/100 nA, max 10 or 1 V output
- Recorder:
  max/min range 10 µA/100 pA, max 10 or 1 V output
  autozero, maximum compensation:
  oxidative mode: 8.5 or 35 nA (att 1); 850 or 3500 nA (att 100)
  reductive mode: 85 or 120 nA (att 1); 8500/12000 nA (att 100)
  offset: continuously adjustable between -0.15 and +0.15 V
  event marker: 1 or 0.1 V
- Oven: 100 W, length 40 cm, stable from 5°C above ambient, max 47.5°C, accuracy better than 0.5°C, stability better than 0.1°C; accommodates flowcell, column and the following options: Rheodyne injector, SSI pulse dampener
- Resolution display: cell potential (1 mV), output voltage (10 mV), oven temperature (0.1°C) cell current (1, 0.1, 0.01 or 0.001 nA)
- Noise: better than 3 pA with load of 0.5 µF (+ 300 MΩ) and 0.1 s filter, with 1 s better than 1 pA

Front panel

Frames

- V_{cell}: cell on/off, ox/red indication, cell potential up and down
- Display: V_{cell}, V_{out}, °C, I_{cell}, $I_{cell,HR}$
- Heater: off, 25 - 47.5°C in 2.5°C increments, on/heating indication
- Zero: on/set/off indication, mark
- Filter: 0.1 - 5 s in 1, 2, 5 increments
- Range: 0.01 - 10 nA/V, or 1 - 1000 nA/V in 1, 2, 5 increments, att 100 indication

Rear panel

- Mains
- Recorder (adjustable offset)
- Integrator

I/O connector

- Cell on, cell off, mark, zero on/set, zero off, range x1/x100, common, load/inject, T_{oven} (10 mV/°C), common

Dip switches

- Recorder: max 10 or 1 V
- Zero: low or high
- Integrator: max 10 or 1 V
- Mark: 1 or 0.1 V

Physical specifications

- Dimensions: 44 (L) x 19 (W) x 26 (H) cm = 17.3" x 7.5" x 10.2"
- Weight: 10.9 kg (24.0 lbs)

Flow cells

VT-03

Confined wall-jet design, working volume determined by spacer thickness and working electrode (WE) diameter

- Spacers: 25, 50 or 120 µm, stackable
- WE diameters: 0.5, 0.7, 2 and 3 mm
- Cell volume 0.005 µl minimum

FLEXCELL

Thin-layer design, exchangeable working electrodes

- Cell volume 0.5 µl
- WE diameter 8 mm (replaceable)

WE electrodes: glassy carbon, Pt, Au, Ag and Cu
Reference electrodes: salt-bridge Ag/AgCl; in-situ Ag/AgCl (ISAAC); Hy-REF
Auxiliary electrodes: stainless steel (VT-03) and carbon-filled PTFE (FLEXCELL)
Wetted materials: PCTFE, PTFE, FEP, 316-SS, Viton, silver, silver chloride and WE

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