

PDV 6000*plus* + SV LabCell

Portable or lab monitoring of Heavy Metals in Water and Wastewater

DIMENSIONS: 16 CM WIDE, 22 CM HIGH, 16 CM DEEP



Measuring heavy metals in water has always been a vital part of modern environmental monitoring.

Voltammetry offers an internationally accepted alternative to laboratory sampling or automatic samplers.

Cogent portable monitors have been in use for twenty years. They provide an easy way to generate stored, real-time data, which allows real-time decision-making.

They can provide better on-site characterisation, with pollution hotspots and contamination sources identified.

They can be more cost-effective than laboratory analysis.

They can be used “stand-alone” or on a computer with our powerful VAS software.

SPECIFICATIONS

Power Supply	AC, NiMH battery pack or 2 x 9V internal batteries	Working Electrode	Glassy carbon with bismuth
Voltammetry Range	-2.0V to +2.0V	Counter Electrode	Platinum
Sensitivity	3nA	Reference Electrode	Ag/AgCl in saturated KCl
Display	LCD 16 character single line display	Metal menus	Up to 10 programmable menus in stand-alone mode
Keypad	5 button keypad	Cell Stirrer	DC magnetic motor and stirrer
Packing	Sturdy water-proof carry case	Analysis methods available	Anodic stripping, Cathodic stripping
Gas purging	Not required	Waveforms available	Linear sweep, square wave and differential pulse
Communications	Serial RS232 (USB adaptor provided)	Calibration	Standard comparison or standard addition
Outputs	CSV file, VAS file	Cell Material	Acrylic and PTFE
CE Compliant	Under review	Variation (%CV)*	5 to 10%
Application Software	Internal firmware	Result Output	Voltammetry curves, element concentration(s), historical data
Operating Software	Windows OS, VAS	Dimensions	220mm x 160mm x 160mm (H x W x D)

* All values are dependent upon the metal(s) being analysed and the nature of the sample.

Name

.....

Title

.....

Telephone

.....

Mobile

.....

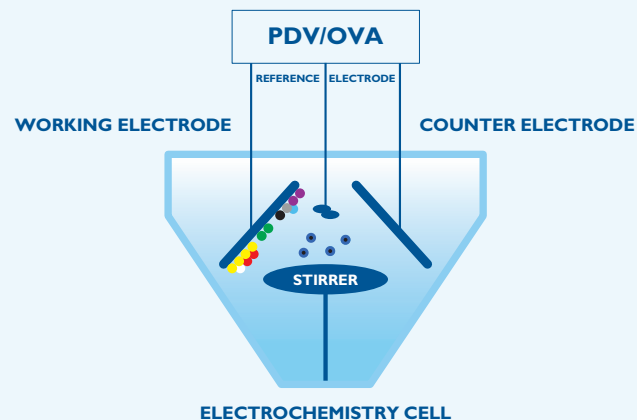
Email

.....

Voltammetry explained

How the test works

Metals are drawn onto the working electrode when a specific voltage is applied to the water sample under test.



When a stripping voltage is applied, the metals return to the sample solution, generating a small current. Each metal has a specific voltage at which it returns to solution. So the metal is identified by its stripping voltage, and the current generated indicates the concentration of metal in the sample.

What it detects

The SV LabCell can detect a range of metals (Co, Cr, Mo, Ni, U) to single figure ppb levels (typically 1-5ppb). Colour or turbidity does not affect the method. Samples range from wastewater, process water, river water to drinking water. Acid/UV digest and filtration are treatment options.

Applications include

- Accidental contamination events
- Monitoring of rivers, lakes, reservoirs, seawater
- Industrial effluent monitoring
- Groundwater monitoring / natural attenuation
- Wastewater recycling & WWTP influent monitoring
- Drinking water intake and distribution

Features

- Multiple metal analysis when using VAS
- AC or rechargeable battery for onsite use
- Pre-treatment options of acid/UV digest to eliminate interferences
- Low maintenance
- Drain tank, solid-state electrodes and stand provided
- Detection limits below 5ppb, depending on sample
- Report generation capability
- Precision $\pm 10\%$ at 50ppb levels
- Quick and accurate results, allowing defensible real-time decision to be made on-site
- Low running costs and maintenance
- VAS enables automatic data save, print facility for all traces, reports and analytical data, and accurate trouble-shooting via email or Skype

WHERE CAN IT BE USED?



DRINKING WATER



INDUSTRIAL EFFLUENT



MINE WATER



SEA WATER

MORE INFO:

www.cogenv.co.uk
or call +44 1223 420 311

Part of the Modern Water Group