PDV6000\textit{plus} Portable trace metal analyser

Quality Data for real time decision making. The new PDV6000plus is the latest evolution of the world's most advanced range of onsite metal analysers

- High data quality, allowing defensible real time decisions to be made onsite
- Real time results enabling immediate remediation action as required
- More Cost Effective than laboratory analysis
- Better sample site characterisation with pollution hotspots and contamination sources better identified

Improved VAS Software

The new instrument boasts easier to use software; with many of the improvements implemented through end user feedback. Improved peak resolution, better sensitivity and increased rejection of interferences all contribute to improved data quality.

**Specifications**

<table>
<thead>
<tr>
<th>Features</th>
<th>Chemical Specifications</th>
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<tbody>
<tr>
<td>Quick and accurate results</td>
<td>Precision +/- 5% at 100 ppb</td>
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<tr>
<td>Waterproof carry case</td>
<td>Detection limits below 1 ppb possible</td>
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<tr>
<td>Low detection limits</td>
<td>using VAS software*</td>
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<td>Solid state electrodes, no hazardous elemental mercury</td>
<td>Standard Applications include: As (III),</td>
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<td>Applications available for water and soil analysis, including sea water</td>
<td>total As, Cd, Pb, Cu, Zn, Hg, Cr and Ni</td>
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<td>* Detection limit dependant on metal</td>
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<td></td>
<td>and sample type</td>
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<td>Low running costs and maintenance</td>
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<td>Powerful, easy to use VAS software</td>
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<td>Multiple metal analysis when using VAS</td>
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<tr>
<td>Report generation capability</td>
<td></td>
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<tr>
<td>Instrument has standalone capability or can be used with VAS software</td>
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<tr>
<td>USB connectivity to PC</td>
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<td>Rechargeable battery for onsite use</td>
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VAS (Voltammetry Analysis Software) is a powerful, but easy to use Windows software application that gives the PDV6000plus the functionality of a laboratory instrument. It allows the PDV6000plus handset to be programmed with specific application methods and firmware upgrades. VAS is supplied as standard with every PDV6000plus. VAS gives the user full control over all of the voltammetry parameters that can be set to give the best analytical condition possible.

The key features are:
- Multiple metal detection in a single analytical run
- Blank subtraction to minimise the effects of contamination
- Quantification by Standard Comparison or Standard Addition analysis with regression graph display
- Adjustable data smoothing and averaging to improve detection limits
- Adjustable peak centre detection to identify overlapping peaks

Other VAS features:
- Automatic data save after every action with time and date stamp
- Full colour graphics
- Report generation
- Print facility for all traces, reports and analytical data
- Comprehensive notes and descriptions can be added to sample and project files
- Simple import and export facility for sending analytical methods and data via email
- Upload any firmware upgrades issued by Cogent Environmental into the PDV 6000plus unit
- Program up to 10 metal menus to analyse different metals or specific sample matrices
- Program up to 10 working electrode conditioning menus

Instrument specifications

**Instrument Electronics**

- **Input Power:** 8-12 VDC, 250 mA
- **Electrode voltage range:** -2 V to + 2 V (-3 V to + 3 V version available)
- **Sensitivity:** 3 nA
- **Display:** LCD 16 character single line display
- **Keypad:** 5 button keypad
- **Communications:** Serial RS232 interface for connection to a personal computer or laptop

**Instrument Software**

- **Application Software:** Internal firmware. Upgradeable. Upload the latest version using VAS.
- **Metal Menus:** Up to 10 programmable metal menus
- **Conditioning Menus:** Up to 10 programmable working electrode conditioning menus

**Cell**

- **Material:** Disposable 30 mL analysis cups
- **Sample volume:** 10 mL nominal
- **Working electrode:** Glassy Carbon (standard), Gold (optional)
- **Counter electrode:** Platinum
- **Reference electrode:** Ag/AgCl in 1M KCl Cell
- **Stirrer:** DC motor and stirrer

**Method of Analysis**

- **Stripping Voltammetry:** Anodic Stripping Voltammetry (ASV), Cathodic Stripping Voltammetry (CSV)
- **Waveforms:** Linear sweep, Differential Pulse, Square Wave
- **Calibration:** Standard Comparison and Standard Addition

**Cary Case**

- **(includes PDV6000plus handset and supplied accessories)**
- **L x W x D:** 360mm x 270mm x 155mm
- **Weight:** 4kg

**Distributed by:**