Palintest®

Leading the way in water analysis




Hi-Tech Lead and Copper Monitoring

SA-1000

SCANNING ANALYZER

The Palintest SA-1000 Scanning Analyzer with unique disposable electrode technology is a breakthrough in testing for lead and copper in water. Simple on-site testing is now possible thanks to the Palintest system. Read how this new technological breakthrough can help you with on-site Lead and Copper monitoring.

Testing for lead and copper just could not be easier. The scanning analyzer features a unique disposable electrode system. Just immerse the electrode in the sample and the instrument does the rest. In three minutes the lead and copper concentrations will be displayed. It is simple, precise and specific. Complicated sample preparation is not required. The water is simply treated prior to the test with a special conditioning tablet in order to achieve the optimum test conditions.

Underlying this simple system is a wealth of the latest scientific innovation. A real technical breakthrough! The tiny disposable electrode is the result of many years of painstaking scientific research. This multi-layered mini electrode, developed exclusively for Palintest, lies at the heart of this revolutionary testing system.

Here is how it works! The process starts as soon as the electrode detects the sample. A tiny electric current is passed through the solution. The dissolved metal ions are deposited onto the electrode surface – just like electroplating.

Once the plating phase is complete, the scanning phase commences. The analyzer applies an increasing reverse potential to the electrode to strip off the deposited metals. These metals, including lead and copper, are stripped from the electrode in a fixed order and at precisely known potential. In this way the various metals are separated from each other.

The analyzer precisely controls the electrode cycle, and captures and collates thousands of signal readings. The processor interprets these readings to identify each metal and determines its exact concentration.

Technical Specifications

Instrument Type	Scanning analyzer dedicated to lead and copper determination.
Electrode System	Multi-layer disposable type
Range	Lead 2 - 100 µg/l / Copper 70 -2000 µg/l
Detection Limit	Lead 2 µg/l / Copper 70 µg/l
Resolution	Lead 1 µg/l / Copper 1 µg/l
Precision	+/- 5% CV at 15 µg/l lead
Display	Intelligent 2 x 16 character alphanumeric display
Calibration	Precalibrated electrodes
Internal Memory	Stores up to 300 previous readings
Output Interface	Output printer or computer via RS232 serial interface
Power	8 x 1.5v batteries (included), auto switch off
Size	Instrument only 170 x 130 x 55 mm

LEAD IN OUR ENVIRONMENT

Lead is one of our most serious environmental pollutants. Millions of people are still exposed to potential health risks from lead in household water supplies.

The long-term health hazards associated with lead and other heavy metals has been increasingly recognised by Government agencies and regulatory bodies. This has resulted in new environmental legislation and the tightening of existing standards covering drinking water. The World Health Organisation has already proposed a guideline value of 10 µg/l. In the European Community, the present maximum limit is 50 µg/l. However, in the future, this will be progressively reduced from 50 µg/l to 25 µg/l in 2003 to 10 µg/l in 2013. The need for simple affordable means of monitoring has therefore never been greater.

THE MEASUREMENT OF LEAD

The levels of lead and other heavy metals found in water are, in disproportion to their environmental impact, extremely small. The monitoring of lead has therefore always presented severe difficulties. On-site methods have lacked sensitivity and suffered interferences from other substances. Often they have involved long and complicated test procedures. The widespread monitoring of lead and copper in the field has therefore not been a practical possibility.

Now there is a development to meet the challenge of current environmental needs - the Palintest SA- 1000 Scanning Analyzer. It provides a simple, sensitive and accurate means of lead and copper testing. It is designed specifically for the monitoring of lead, and the supplemental determination of copper, in water supplies.

Ordering Information

PT420 **SA-1000 Clean Water Kit for Lead and Copper comprising:** SA-1000 Instrument, carry case, instructions, sensor (PT425)

PT425 **Sensor pack for clean water, lead and copper comprising:** Electrodes 10 SE-1 foil wrapped, tablets 10 foil wrapped, graduated tubes 10, crushing rods.

Optional Accessories

PT276 **Portable Printer**

PT277 **Instrument-Printer Cable (D9F-6-DIN)**

PT424 **Software 1000**

PT279 **Instrument-Computer Cable (D9F-D9F/D25F)**

PT429 **Neutralisation Pack**

Palintest Ltd
Palintest House, Kingsway, Team Valley,
Gateshead, Tyne & Wear, NE11 0NS, England
Tel: +44 (0) 191 491 0808
Fax: +44 (0) 191 482 5372
Email: sales@palintest.com
Website: www.palintest.com

Palintest USA
21 Kenton Lands Road, Erlanger,
Kentucky 41018, USA
Tel: (859) 341 7423 **Toll Free:** 800 835 9629
Fax: (859) 341 2106
Email: info@palintestusa.com
Website: www.palintestusa.com

Palintest Australia
21/53 Lorraine Street,
Peakhurst Business Centre,
Peakhurst NSW 2210, Australia
Tel: 1300 131516 **Fax:** 1300 131986
Email: palintest@palintest.com.au
Website: www.palintest.com.au

A HALMA COMPANY