your first formula

Trace2o

SPECIFICATION

OPERATION
Analytical principle: Anodic & Cathodic stripping voltammetry using disc working electrodes
Parameters measured: Arsenic (III), Total Arsenic, Bismuth, Cadmium, Chromium, Cobalt, Copper, Gold, Iron, Lead, Manganese, Mercury, Nickel, Tin, Zinc
Operating Temperature: -20°C to +70°C

DATA
Results obtained in 5 minutes
Results transferred to integrated tablet PC and automatically stored
New application methods can be downloaded to the PC via the internet

USER INTERFACE
LCD 7" touch screen
Menu driven software

POWER
Metalyser rechargeable battery providing in excess of 50 tests per charge
Tablet PC with 6 hour run time and hot swap feature
Alternative power supply via mains adaptor or vehicle cigarette lighter

APPROVALS
Metalyser Instrument waterproof to IP67 CE mark; waterproof tablet PC

LIMITS OF DETECTION (FRESH WATER)

Parameter		Lower Limit (ppb)	Upper Limit (ppb)	WHO Guideline Value (ppb)
Arsenic (III)	As (III)	1	500	<10
Total Arsenic	As (Total)	1	500	<10
*Bismuth	Bi	1	500	–
Cadmium	Cd	1	500	<3
Chromium	Cr	50	500	<50
*Cobalt	Co	5	500	–
Copper	Cu	1	500	<2000
*Gold	Au	5	500	–
*Iron	Fe	5	500	–
Lead	Pb	1	500	<10
Manganese	Mn	1	200	–
Mercury	Hg	1	500	<6
*Nickel	Ni	10	500	<70
*Tin	Sn	5	500	–
Zinc	Zn	5	500	<4000

* Under Development

Lower limits achievable using the handheld at 60 seconds deposition. Increased accuracy can be achieved by setting the deposition time to 120 seconds.

Variability at 20ppb ±5% with Metalyser with handheld. Accuracy dependent on element measured, sample matrix and type.

ORDERING INFORMATION

» HM3000 - Metalyser Field Pro- Complete with integral tablet PC, Sonde assembly, electrodes, consumable kit and buffers and standards for 50 tests. Supplied in a hard-shell carry case.
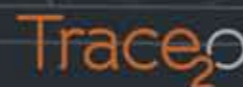
Consumables

» HMC301200 -M1, M4 & M5 Buffer and Standards Pack for 200 tests (Cd, Pb, Cu, Zn)
» HMC302200 -M2 Buffer and Standards Pack for 200 tests (Hg)
» HMC303200 -M3 Buffer and Standards Pack for 200 tests (As)
» HMC306200 -M6 Buffer and Standards Pack for 200 tests (Mn)
» HMC307200 -M7 Buffer and Standards Pack for 200 tests (Cr)
» HMC308200 -M8 Buffer and Standards Pack for 200 tests (Ni)
» HMC309200 -M9 Buffer and Standards Pack for 200 tests (Bi)
» HMC310200 -M10 Buffer and Standards Pack for 200 tests (Co)
» HMC311200 -M11 Buffer and Standards Pack for 200 tests (Au)
» HMC312200 -M12 Buffer and Standards Pack for 200 tests (Fe)
» HMC313200 -M13 Buffer and Standards Pack for 200 tests (Sn)

METALYSER FIELD PRO HM3000

PORTABLE HEAVY METALS ANALYSIS
TABLET PC CONTROL TO PPB LEVELS

ISO 9001
REGISTERED FIRM

Trace$_2$o has developed the Metalyser Field Pro HM3000, which incorporates a tablet PC for the more experienced water analyst. Based on the award-winning Metalyser HM1000, our new instrument features an enhanced range of parameters for field based detection of heavy metals. The integrated tablet PC provides instant graphical data, via the dedicated pre-loaded Metaware software. The advanced user will benefit from the increased accuracy and precision that this provides.
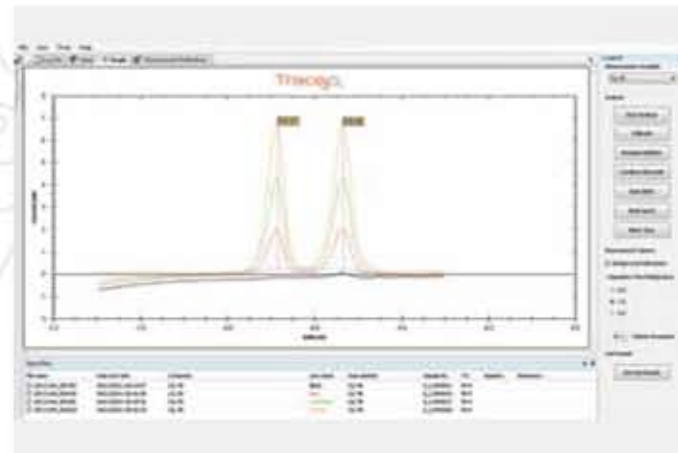
The Field Pro is housed in a fully waterproof Peli case, and with the water-resistant tough PC and waterproof instrument, testing can continue in the most adverse of conditions.

The user can now take traditional laboratory analysis tools such as repeat scanning and multi-point standard additions to the field, greatly increasing confidence in the results as well as providing much more information about the sample matrix and potential interferences.

With the manual peak height calculation function, peaks can be measured that automatic techniques cannot detect. The spreadsheet function can average data, calculate correlation coefficients, draw best fit lines and calculate the original sample concentration. With these tools the field user can detect levels as low as 1ppb with confidence.

A wide range of parameters can be measured accurately using the HM3000. The design of the Metalyser allows for the addition of future parameters, plus those currently under development, without the need to upgrade the instrument.
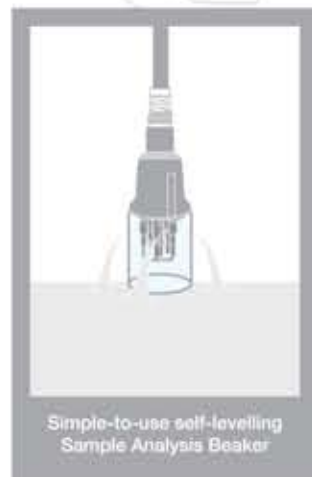
The unit also features built-in wireless connectivity. This gives the user access to the internet for cost effective technical support on site.

SIMPLE ANALYSIS

Collect samples directly from water source

Simple-to-use self-levelling Sample Analysis Beaker

Measures up to 2 parameters simultaneously

Fast, on site analysis

BENEFITS

> Field based detection of heavy metals to low ppb concentrations using the popular Metalyser instrument but with a tablet PC offering advanced levels of analysis

> Rapid results allowing immediate remedial action to be taken

> Integrated tablet PC incorporating Metaware software, displays and stores all of the graphical data, allowing the more advanced user to undertake enhanced analysis at site

> Data manipulation using the tablet PC allows for extended detection limits and high levels of accuracy

> Rugged and durable PC and instrumentation built for a tough environment which enable operation even in adverse weather conditions

> Ability to measure up to 15 parameters – As (total), As (III), Au, Bi, Cd, Cr, Co, Cu, Fe, Hg, Pb, Mn, Ni, Sn, Zn

FEATURES

> PC with latest operating system, pre-loaded with integrated metaware software for data analysis

> All graphical data stored directly on PC

> Robust, dustproof and waterproof to IP67 standard

> Multiple power options - rechargeable battery/ mains AC/ vehicle cigarette lighter socket

> 6 hours PC run time with hot swap feature

> GSM mobile internet (additional cost via local GSM subscription) allows instantaneous upgrades from Trace$_2$o website

> Multi-point standard addition calculator

> Automatic or manual peak interpretation

> Direct, instantaneous temperature measurements

> Stirrer test function

> Five electrode sensor module with temperature probe, integrated stirrer and quick connect system

SONDE

The uniquely designed submersible sonde utilises the familiar three electrodes system, comprising reference, counter and working electrode.

In addition, the sonde incorporates a stirrer, temperature probe and space for an extra two working electrodes. This allows multi-parameter measurement within a single unit.

The Field Pro system will select the electrode accordingly for the metal of interest.

> Maintenance-free electrodes

> Push fit removable electrodes

> Integral temperature sensing

> Up to 3 working electrodes in one sonde