

# METALYSER DELUXE HM2000



PORTABLE METALS ANALYSIS  
DUAL INSTRUMENTATION  
TO PPB LEVELS



The **Metalysers Deluxe HM2000** has been developed to offer precise portable analysis of 12 commonly regulated hazardous metals that may be found in water courses. Targetted for on site monitoring across a number of applications within environmental, agricultural, and industrial fields, the HM2000 is the kit of choice for today's water professionals.

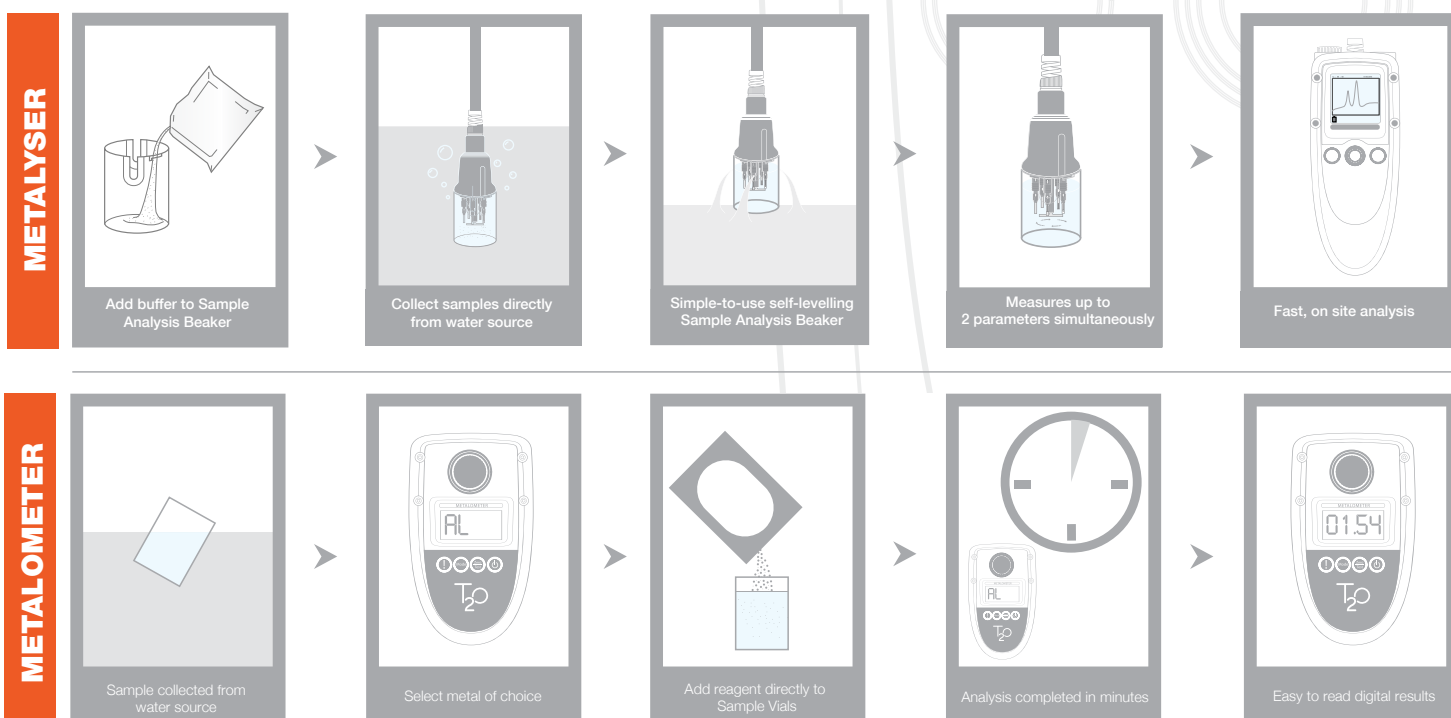
Lightweight, dual instruments supplied in the kit offer complimentary techniques, providing a wider detection capability in the field.

Our team of experienced multi-disciplinary technical experts have hand-picked the optimum techniques for each parameter. Voltammetric and photometric technologies have been combined into a compact portable solution, enabling Trace2o to provide the user with simple, cost-effective testing of heavy metals.

Developed and manufactured in the UK by acknowledged experts, the HM2000 kit offers a breakthrough in terms of simple-to-use field instruments, with the Metalysers and Metalometer offering high levels of accuracy at a wider range, for a complete solution to portable metals analysis. Patent No. GB2481541



#### SIMPLE ANALYSIS



## BENEFITS

- Field based kit offers portable analysis of a wide range of heavy metals in water
- Dual instrumentation provides the ability to measure 12 metals from ppb to ppm concentrations; – Al, As, B, Cd, Cr (VI), Cu, Fe, Hg, Mn, Ni, Pb, Zn
- Rapid results facilitate immediate action on site
- Simple preparation and analysis procedures enable non-technical personnel to obtain lab-comparable results
- Step-by-step pictorial guides allow untrained personnel the ability to use the instruments quickly and easily
- Low cost per test
- No PC required for sample analysis
- Rugged and durable instrumentation built for tough environments, allows operation even in adverse weather conditions

## FEATURES

- Combines electrochemical & photometric techniques, using two complementary instruments
- Robust, dustproof and waterproof design to IP68 standard
- Internal data loggers with time and date stamp
- PC connectivity for data upload
- LCD backlit displays
- Tactile keypad control
- Multiple power options - rechargeable battery/ mains AC/ vehicle cigarette lighter socket
- Sample analysis beakers & photometric vial included
- Full set of buffers and reagents for analysing 12 metals included as standard
- Multi-lingual support

## SONDE

The uniquely designed submersible sonde utilises the familiar three electrode 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, without the use of a computer.

The intelligent Metalyser unit 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



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## SPECIFICATION

OPERATION	Analytical principles:	Anodic & Cathodic stripping voltammetry Fixed wavelength visible absorption
	Parameters measured:	Aluminium, Arsenic, Boron, Cadmium, Chromium (VI), Copper, Iron, Lead, Manganese, Mercury, Nickel & Zinc
	Operating Temperature:	Metalyser -20°C to +70°C Metalometer +5°C to +40°C
DATA	Results obtained in minutes	
	Metalyser internal memory:	1000 data sets with facility to enter sample number, time and date, transfer via USB to PC
	Metalometer internal memory:	16 data sets, time and date stamp, sample number, transfer via IR to PC*
USER INTERFACE	Metalyser:	LCD full graphics backlit display: 128 x 128 pixels joystick cursor control, menu driven software
	Metalometer:	4 digit backlit LCD, 4 button rubber keypad
POWER	Metalyser:	Rechargeable battery providing in excess of 50 tests per charge
	Metalometer:	Alternative power supply via mains adaptor or vehicle cigarette lighter 4x user replaceable AAA cells - alkaline
APPROVALS	Metalyser:	Waterproof to IP67, CE conformity
	Metalometer:	Waterproof to IP68, CE conformity
KIT	Dimensions:	Box 1 487mm (L) x 386mm (W) x 229mm (D) Net Weight: 9kg Box 2 462mm (L) x 340mm (W) x 170mm (D) Net Weight: 4.5kg

\*requires optional IrDA module, available separately

## LIMITS OF DETECTION (FRESH WATER)

Metalyser Parameters		Lower Limit (ppb)	Upper Limit (ppb)	Precision	Buffer & standards packs 200 tests
Arsenic (III)	As (III)	5	500	±7.5%	HMC303200
Total Arsenic	As (Total)	10	500		
Cadmium	Cd	3	500	±7.5%	HMC301200
Copper	Cu	5	500	±7.5%	HMC301200
Lead	Pb	5	500	±7.5%	HMC301200
Manganese	Mn	5	200	±7.5%	HMC306200
Mercury	Hg	5	500	±7.5%	HMC302200
Zinc	Zn	5	500	±7.5%	HMC301200
Metalometer Parameters					
Aluminium	Al	10	250	±5%	HMC351200
Boron	B	100	2,000	±5%	HMC352200
Chromium (VI)	Cr (VI)	20	2,000	±5%	HMC357200
Copper	Cu	50	5,000	±5%	HMC354200
Iron	Fe	20	3,000	±5%	HMC353200
Manganese	Mn	100	18,000	±5%	HMC356200
Nickel	Ni	100	10,000	±5%	HMC358200

## ORDERING INFORMATION

- HM2000 - Metalyser Deluxe  
Complete with Metalyser, Metalometer, Sonde assembly, electrodes,  
consumable kit and buffers and standards for 50 tests each of 12 parameters.  
Supplied in 2 hard-shell carry cases.

### Consumables

- For information on available consumables please ask when ordering  
or visit [www.trace2o.com](http://www.trace2o.com).

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