



The **Metalyser 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 todays 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 Metalyser and Metalometer offering high levels of accuracy at a wider range, for a complete solution to portable metals analysis.





Patent No. GB2481541

## SIMPLE ANALYSIS





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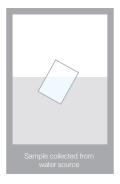


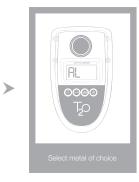


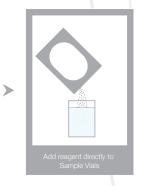




**METALOMETER** 









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# 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







5	SPECIFICATION			
	OPERATION	Analytical principles:	Anodic & Cathodic stripping voltammetry Fixed wavelength visible absorption	
		Parameters measured:	Aluminium, Arsenic, Boron, Cadmium, Chromium (VI),	
		Operating Temperature:	Copper, Iron, Lead, Manganese, Mercury, Nickel & Zinc Metalyser -20°C to +70°C Metalometer +5°C to +40°C	
	DATA	Results obtained in minutes		
	DAIA	Metalyser internal memory:	1000 data sets with facility to enter	
		Matalamatar internal mamanu	sample number, time and date, transfer via USB to PC 16 data sets, time and date stamp,	
		Metalometer internal memory.	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 Alternative power supply via mains adaptor or vehicle cigarette lighter	
		Metalometer:	4x user replaceable AAA cells - alkaline	
	APPROVALS	Metalyser: Metalometer:	Waterproof to IP67, CE conformity 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	e, available separately	

Metalyser Parameters	s	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		· Charles	
Cadmium	Cd		500	±7.5%	HMC301200	
Copper	Cu		500	±7.5%	HMC301200	
Lead	Pb		500	±7.5%	HMC301200	19
Manganese	Mn	5	200	±7.5%	HMC306200	11/1/3
Mercury	Hg	5	500	±7.5%	HMC302200	EB
Zinc	Zn		500	±7.5%	HMC301200	A. K.
Metalometer Parame	ters		0			
Aluminium	Al	10	250	±5%	HMC351200	
Boron	В	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	(3) 18,000	±5%	HMC356200	
Nickel	Ni	100	10,000	±5%	HMC358200	
ORDERING INFORMA	TION				Irace	

#### 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.

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Every effort has been made to ensure that the descriptions given in this catalogue were correct at the time of going to press, but we accept no liability for any error and the specifications are subject to change without prior notice.