



METALYSER® HM3000

Powerful Accurate Field Pro Trace Metal Analysis Lab

Accurate field measurement of trace levels of toxic heavy metals is essential for an effective pollution monitoring programme.

With laboratory methods, time delays from sampling to results mean that pollution problems can continue before being identified and rectified, often for days. With the Metalyser® HM3000, samples can be analysed in as little as five minutes from collection, allowing for immediate corrective action.

The modern environmental professional requires a compact, lightweight portable kit, with non-hazardous reagents, a simple operating procedure, and an intelligent handheld unit with built-in data analysis functionality, which offers accurate results comparable with laboratory techniques.

The Metalyser® HM3000 Portable trace heavy metals analyser from Trace2o® offers a powerful suite of heavy metal tests that can be utilised both in the field and laboratory for consistent and reliable water quality analysis. Using a powerful electrochemical analytical technique, the Metalyser® HM3000 is perfect for obtaining laboratory-quality results quickly in the field, even in the most challenging environments.



**SPECIALIST MANUFACTURERS OF ENVIRONMENTAL
ANALYSIS AND MONITORING EQUIPMENT**





BENEFITS



- ⊙ Reduce reliance on expensive laboratory equipment or unreliable outsourcing, by obtaining laboratory-quality results in the field
- ⊙ Save time with easy data analysis and reporting using the built in robust tablet PC with Metaware software preinstalled
- ⊙ Reduce fatigue with the lightweight, ergonomic and easy to hold handheld unit
- ⊙ Save time and money with rapid results at source across a wide range of heavy metal parameters
- ⊙ Save money on equipment costs and maximise utility of a single instrument with an extensive range of expansion kits that can easily be combined with an existing HM3000 system



- ⊙ Reduce worry of damage in the field due to the impact resistant reinforced digital screen
- ⊙ Measure in any ambient light with the backlit graphical LCD display

- ⊙ No loss due to accidental drops into water sources. The Metalyser® HM3000 floats and is IP67 rated
- ⊙ No need for additional accessories; the Metalyser® HM3000 kit contains all equipment, accessories and consumables required for analysis straight out of the box
- ⊙ Reduce training time and costs with helpful step-by-step application notes and intuitive menu system



- ⊙ High levels of stock at the Trace2o® warehouse means kits can reach the field fast, avoiding delays on your valuable results
- ⊙ Avoid loss of data by using the 1000 datapoint memory storage on the unit
- ⊙ Rapid deployment in the field due to its small size, and lightweight hard-shell carrying case
- ⊙ Communicate with your Laptop and store data using USB connectivity





IN YOUR KIT

IN YOUR KIT	QTY
Single black IP68 waterproof case for HM3000 instrument and tablet	1
Single black IP68 waterproof case for HM3000 accessories	1
HM3000 Instrument	1
Algiz 10x 10" Tablet PC	1
Metalyser Sonde	1
WE1 working electrode	1
WE2 working electrode	1
Reference electrode	1
Counter electrode	1
Pipette 100- 1000ul	1
Pipette 10 - 100ul	1
Pipette tips 100-1000ul	50
Pipette tips 10- 100ul	50
Cd, Pb, Cu, Zn analysis beaker	1
Hg, Au analysis beaker	1
Nalgene 250ml beaker	2
Sonde extension cable	1
Clamp rod 300mm	1
Cd, Pb standard	1
Hg standard	1
As standard	1
Cu standard	1
Cu stabiliser	1
Zn standard	1
M6 standard	1
Hg plating solution	1
Au plating solution	1
Electrode rinse solution	1
HM1 buffer (50 tests)	4
HM2 buffer (50 tests)	2
HM3 buffer (50 tests)	2
HM4 buffer (250ml)	3
HM5 buffer	1
Thick Hg plating solution	1
Mn analysis beaker	1
Polishing dish with glass platen	1
Polishing cloths (pack of 5)	1
Polishing slurry	1
Deionised water 500ml	1
Stirrer oil	1
Plastipak 20ml syringe	1
Eye glass	1
IPA wipes	20
Metal clamp	1
Accessory boxes	7
USB lead	1
Mains charger (US,EU,UK,IEC,AUS)	1
Car charger	1
Tablet PC transformer	1
Tablet PC UK charging cable	1
Tablet PC EU charging cable	1

DESCRIPTION	PACK SIZE	PART NUMBER
Metalyser® Portable HM3000	Unit	HM3000
EXPANSION KITS		
Portable UV Digester HMUV1825P- 240V	Unit	HMUV1825P-240
Portable UV Digester HMUV1825P- 110V	Unit	HMUV1825P-110
Portable Soils Extraction Kit	Unit	HMPSEK
Portable Metalometer® Kit	Unit	HMPHOT
UV Digester Portable Power Pack	Unit	HMUVPP



TECHNICAL SPECIFICATIONS

Dimensions (mm)	⊙ 487 x 386 x 229
Weight (Kg)	⊙ 18
Approvals	⊙ CE Conformity, IP67 (Metalysr®) ⊙ CE Conformity, IP65 (Tablet PC)
Country of origin	⊙ United Kingdom
Data	⊙ 1000 data set storage on handheld unit ⊙ Data upload to tablet PC and automatic storage ⊙ Real-time date/time stamp ⊙ Method update download to unit from tablet PC ⊙ Optional GSM internet connection (requires local SIM card and data subscription)
Analytical principle	⊙ Anodic and cathodic stripping voltammetry using disc working electrodes
Parameters measured	⊙ Antimony, Arsenic (III), Arsenic (III + V), Bismuth, Cadmium, Chromium (VI), Cobalt, Copper, Gold, Lead, Manganese, Mercury, Nickel, Selenium, Thallium, Tin, Zinc
User Interface	⊙ LED backlit 10.1" (25.7cm) touchscreen ⊙ Menu driven software
Portability	⊙ IP68 rated waterproof case ⊙ Buoyant ⊙ Hard Shell carry case
Protection	⊙ Pressure resistant reinforced screen ⊙ Hard shell case ⊙ Chemically resistant housing ⊙ Case floats in water ⊙ IP68 water and dust proofing
Operating temperature	⊙ -20°C to 70°C
Power supply	⊙ Handheld unit- rechargeable Li-ion battery, > 50 tests per charge ⊙ Alternative power supply via mains adaptor or vehicle cigarette lighter ⊙ Tablet PC – rechargeable Li-ion battery, > 6 hours run time, hot swap feature
Manufacturer's warranty	⊙ Standard 1 Year from purchase

Intel® quad-core N2930 1.83GHz Processor with 2.16 GHz boost, 4 GB DDR3 RAM, 128 GB SSD, genuine Windows® (64-bit), 10.1" widescreen 1366x768 resolution LED display, resistive single touch interface, 5MP camera, USB 3.0, RS-232, VGA, RJ45 and micro-SD interface, 802.11 ac a/b/g/n Dual Band 2.4/5GHz WLAN, integrated GPS, 4G cellular data connectivity (LTE/GSM/GPRS)

Limits of detection

		Lower LOD (ppb)	WHO Guideline Value (ppb)
Antimony	Sb	10	<20
Arsenic (III)	As (III)	5	<10
Arsenic (III + V)	As (III + V)	10	<10
Bismuth	Bi	10	N/A
Cadmium	Cd	3	<3
Chromium (VI)	Cr (VI)	50	<50
Cobalt	Co	20	N/A
Copper	Cu	5	<2000
Gold	Au	10	N/A
Lead	Pb	5	<10
Manganese	Mn	5	<100
Mercury	Hg	5	<6
Nickel	Ni	10	<70
Selenium	Se	5	<40
Thallium	Tl	2	N/A
Tin	Sn	10	N/A
Zinc	Zn	5	<4000

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