

GA5000



Air-Met Scientific Pty Ltd

Air-Met Sales/Service
P: 1800 000 744
F: 1800 000 774
E: sales@airmet.com.au

Air-Met Rental
P: 1300 137 067
E: hire@airmet.com.au
W: www.airmet.com.au

PORTABLE GAS ANALYSER | LANDFILL & CONTAMINATED LAND

The Geotech GA5000 is a landfill and contaminated land portable gas analyser, with available gas measurements of CH₄, CO₂, O₂, H₂S and CO. It is easy to use and calibrate, benefiting from our market leading reliability and helping you to standardise monitoring routines, whilst supporting environmental legislation compliance.



FEATURES

- Certified: ATEX, IECEx, CSA, MCERTS and UKAS calibration (ISO17025)
- Measures % CH₄, CO₂, and O₂
- Measures barometric pressure and relative pressure
- Peak and previous readings shown
- Choice of user settings and simple gas reading function
- Simultaneous display of all gases
- 3 year warranty
- CH₄ and CO₂ accuracy ± 0.5% after calibration
- Modular and upgradeable
- Memory: 2,000 IDs* and 4,000 readings (* with GAM software)
- Data logging and profiling function
- Up to 6 gases monitored

BENEFITS

- Easy to use and calibrate
- Supports environmental legislation compliance
- Market leading reliability
- Standardises monitoring routines
- Easy transfer of data

SECTOR

Landfill

APPLICATIONS

- Landfill gas monitoring
- Waste to energy
- Site investigation



OPTIONS (AVAILABLE AT PURCHASE OR LATER)

- Choice of additional gases including H₂S to 10,000ppm, and H₂ compensated CO
- Borehole gas flow (l/h)
- Flow logging for improved borehole analysis
- GPS / field navigator
- Gas Analyser Manager software for data download
- ATEX certified anemometer

© Product designs and specifications are subject to change without notice. User is responsible for determining suitability of product.

TECHNICAL SPECIFICATIONS

POWER SUPPLY				
Battery type	Rechargeable nickel metal hydride battery pack (not user replaceable)			
Battery life	Typical use 8 hours from fully charged			
Battery charger	Separate intelligent battery charger powered from mains supply (100-240V)			
Charge time	Approximately 4 hours from complete discharge			
GAS RANGES				
Gases measured	CO ₂ and CH ₄	By dual wavelength infrared sensor with reference channel		
	O ₂	By internal electrochemical sensor		
	CO (H ₂ compensated), H ₂ S, NH ₃ and H ₂ (optional)	By internal electrochemical sensor		
	A full range of internal gas cells can be specified at the time of manufacture			
Standard gas cells	Cell	Range	Typical accuracy (range : accuracy)	Typical accuracy (range : accuracy)
	CH ₄	0-100%	0-70% : ±0.5% (vol)	70-100% : ±1.5% (vol)
	CO ₂	0-100%	0-60% : ±0.5% (vol)	60-100% : ±1.5% (vol)
	O ₂	0-25%	0-25% : ±1.0% (vol)	
Optional gas cells	Cell	Range	Typical accuracy	
	CO	0-500ppm	±2.0% FS	
	CO	0-1,000ppm	±2.0% FS	
	CO	0-2,000ppm	±2.0% FS	
	CO (H ₂) +	0-2,000ppm	±1.0% FS	
	H ₂ S	0-50ppm	±1.5% FS	
	H ₂ S	0-200ppm	±2.0% FS	
	H ₂ S	0-500ppm	±2.0% FS	
	H ₂ S	0-1,000ppm	±2.0% FS	
	H ₂ S	0-5,000ppm	±2.0% FS	
	H ₂ S	0-10,000ppm	±5.0% FS	
	NH ₃	0-1,000ppm	±10.0% FS	
	H ₂	0-1,000ppm	±2.5% FS	
Typical accuracies	All typical accuracies quoted are after calibration			
*Hydrogen compensated carbon monoxide measurement	Hydrogen cross gas effect on carbon monoxide approximately 1%. Do not use where hydrogen is in excess of 10,000ppm			
Response time, T90	CH ₄	≤10 seconds		
	CO ₂	≤10 seconds		
	O ₂	≤20 seconds		
	CO	≤30 seconds		
	H ₂ S	≤30 seconds		
	NH ₃	≤90 seconds		
	H ₂	≤90 seconds		
PUMP				
Flow	550 ml / min typically			
Flow fail point	-200 mbar vacuum- user settable			
Maximum vacuum restart	-375 mbar approximately with flow rate of approx 80ml / min			

© Product designs and specifications are subject to change without notice. User is responsible for determining suitability of product.

GA5000

TECHNICAL SPECIFICATIONS CONTINUED

FACILITIES	
Temperature measurement	-10°C to +75°C with optional probe
Temperature accuracy	±0.5°C with optional probe
Flow from borehole	0-20 l / hr internal measurement
Flow from borehole accuracy	±0.3 l / hr
Alarm	User selectable alarm levels
Communications	Via USB lead or wireless Bluetooth*
Relative pressure measurement	±500 mbar
Relative pressure accuracy	±4 mbar typically (should be zeroed before reading) to ±15 mbar max
Barometric pressure measurement	500 to 1500 mbar, ±5 mbar accuracy
GPS sensor	Location and positioning
Available memory	2,000 IDs *, 4000 readings, 2,000 events *
ENVIRONMENTAL CONDITIONS	
Operating temperature range	-10°C to +50°C
Atmospheric pressure range	700 to 1200 mbar
Relative humidity	0-95% non condensing
Case seal	IP65
PHYSICAL	
Weight	1.6kg
Size	L 220mm, W 155mm, D 60mm
Case material	ABS / polypropylene with rubber over-moulding
Keys	Alpha-numeric keypad with "tactile" membrane
Display	Ultra-clear high resolution 4.3" full colour TFT
Connections	Colour coded gas inlet, outlet and pressure ports. Waterproof USB port, anemometer and charger / temperature probe connections.
Gas sample filters	External user changeable 2.0µm ptfe water traps
CERTIFICATION RATING	
ATEX	II 2G Ex ib IIA T1 Gb (Ta =-10°C to +50°C)
MCERTS	MC130238
ISO17025	Calibration to UKAS certificate number 4533
CSA	Ex ib IIA T1 (Ta=-10°C to +50°C) (Canada), AEx ib IIA T1 (Ta=-10°C to +50°C) (USA)
* Gas Analyser Manager software required.	
Important note: The information in this document is correct at the time of generation. We do, however, reserve the right to change the specification without prior notice as a result of continuing development.	



Air-Met Scientific Pty Ltd
 Air-Met Sales/Service
 P: 1800 000 744
 F: 1800 000 774
 E: sales@airmet.com.au

Air-Met Rental
 P: 1300 137 067
 E: hire@airmet.com.au
 W: www.airmet.com.au



© Product designs and specifications are subject to change without notice. User is responsible for determining suitability of product.

© Product designs and specifications are subject to change without notice. User is responsible for determining suitability of product.

Geotech

Sovereign House, Queensway, Leamington Spa, Warwickshire, CV31 3JR

 geotechuk.com  sales@geotech.co.uk  +44 (0)1926 338111

PAGE 4 OF 4 | DS45-ISSUE.12