

BIOGAS ✓ TECHNICAL SPECIFICATION

POWER SUPPLY

Battery type	Rechargeable Nickel Metal Hydride battery pack containing six 4AH cells (not user replaceable)
Battery life	Typical use 10 hours from fully charged
Battery lifetime	Up to 1000 charge/discharge cycles
Battery charger	Separate intelligent 2A battery charger powered by mains supply (100–240V 47-63Hz)
Charge time	Approximately 2 hours from complete discharge
Alternative power	Can be powered externally for fixed in place applications. Contact Geotechnical Instruments (UK) Ltd for further information
Memory back up battery	Lithium Manganese for data retention

GAS RANGES

Gases Measured	CO ₂ and CH ₄	By dual wavelength infra-red cell with reference channel		
	O ₂	By internal electrochemical cell		
	H ₂ S 0-5000ppm	By external gas pod		
Oxygen cell lifetime	Approximately 3 years in air			
Range	CH ₄ CO ₂ O ₂	0-70% to specification, 0-100% reading 0-40% to specification, 0-100% reading 0-25%		
Typical accuracy	Gas	0-5% vol	5-15% vol	15% FS
	CH ₄	±0.5%	±1.0%	±3.0%
	CO ₂	±0.5%	±1.0%	±3.0%
	O ₂	±1.0%	±1.0%	±1.0%
Response time, T⁹⁰	CH ₄	≤20 seconds		
	CO ₂	≤20 seconds		
	O ₂	≤20 seconds		

FACILITIES

Temperature measurement	With optional probe -10°C to +75°C
Temperature accuracy	±0.2°C (± probe accuracy)
Visual and audible alarm	User selectable CO ₂ , CH ₄ , and O ₂ alarm levels
Communications	RS232 protocol with variable baud rate
Relative pressure	± 500 mbar from calibration pressure
Relative pressure accuracy	<ul style="list-style-type: none"> • ±4 mbar typically (should be zeroed before reading) • ±15 mbar max
Static pressure measurement	±500 mbar
Static pressure accuracy	±4 mbar typically (should be zeroed before reading)
Differential pressure measurement	±125 mbar
Differential pressure accuracy	±0.5 mbar typically (should be zeroed before reading)
Available memory	100 complete readings

PUMP

Flow	300cc/min typically
Flow fail point	50cc/min approximately
Flow with 200 mbar vacuum	250cc/min approximately
Vacuum pull	400mbar approximately

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ENVIRONMENTAL CONDITIONS

Operating temperature range	0°C - 40°C
Relative humidity	0 - 95% non condensing
Case seal	IP65
Barometric pressure	±200mbar from calibration pressure
Barometric pressure activity	±5 mbar typically

PHYSICAL

Weight	2 Kilograms
Size	L 252mm, W190mm, D63mm
Case Material	ABS
Keys	Membrane panel
Display	<ul style="list-style-type: none"> • Liquid crystal display, 40 x 16 characters • Fibre optic woven back-light for low light conditions
Gas sample filters	User replaceable integral fibre filter at inlet port and an external PTFE water trap filter

CERTIFICATION RATING

Certified to EEx ibd IIA T1

Due to Geotechnical Instruments' continuous programme of improvement, this specification is subject to change without prior notice.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.