

BIOGAS 5000



Geotech

envirotecnics

ANALIZADOR DE GAS PORTÁTIL | DIGESTIÓN ANAERÓBICA

Analizador portátil por infrarrojos para biogás, mide CH₄, CO₂, O₂ y H₂S. Está certificado para poder ser utilizado en atmósferas explosivas, conforme a la directiva ATEX 94/9/EC (grupo y categoría del equipo: EX II 2 G y concepto de protección Ex ib IIA T1 (Ta = -10 °C a +50 °C)). Aplicable a la monitorización de gas en digestores, control y monitorización de biogás en procesos de alimentos, vertederos, depuradoras, incineradoras, procesos industriales y digestores de biomasa.



SECTOR



APLICACIONES

- Monitorización de gas en digestores.
- Control y monitorización de biogás en procesos de alimentos
- Vertederos
- Depuradoras
- Digestores de biomasa
- Procesos industriales

CARACTERÍSTICAS

- Analizador para CH₄, CO₂, O₂.
- Configurable por el usuario.
- Certificación ATEX, certificación MCERTS (solicitada), certificación CSA, certificación UKKAS calibración (ISO 17025).
- La precisión del CH₄ y CO₂ es +0.5% después de la calibración.

BENEFICIOS

- Analizador diseñado para el trabajo de campo.
- Uso muy fácil así como su calibración en campo.
- No necesita calibración realizada por el usuario del anemómetro.
- Ayuda a verificar que los digestores de proceso trabajen de forma eficiente.

OPCIONALES (DISPONIBLES EN EL PEDIDO INICIAL O POSTERIORMENTE)

- Sondas Adicionales para SH₂ desde 0 a 5.000 ppm o 0 a 10.000 ppm..
- Datalogger.
- Software Gas Analyzer manager para la descarga de datos.
- Medidores de flujo externos anemómetro (ATEX)/ Tubos de Pitot.
- Filtros antihumedad.
- Bolsa Flexible para trabajo en campo.

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



Envirotecnics Global Service SL
Oficinas y Fabricación: Calle dels Pirineus s/n (esquina Espinau)
 17460 - Celrà - Girona Tel: 872 080 542 Fax: 872 080 543
Delegación Madrid: Avda. de Castilla 28 - 28830 - Tel: 916 780 039
 Servicio al cliente: envirotecnics@envirotecnics.com

www.envirotecnics.com

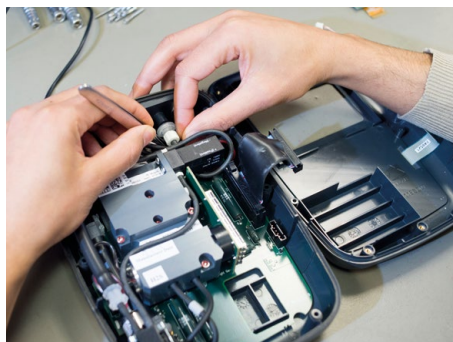
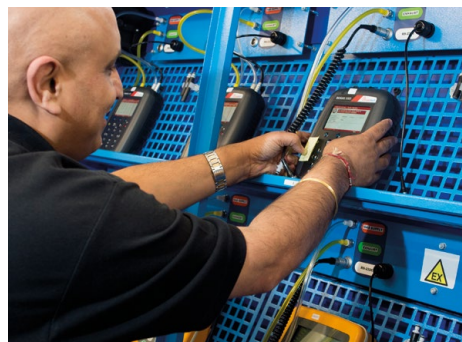


TECHNICAL SPECIFICATIONS

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	CH ₄ and CO ₂	By dual wavelength infrared sensor with reference channel		
	O ₂	By internal electrochemical cell		
	H ₂ S/H ₂ /CO/NH ₃	By internal electrochemical cell		
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	
	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	
	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	
	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 10,000 ppm.			
Response time, T90	CH ₄	≤10 seconds		
	CO ₂	≤10 seconds		
	O ₂	≤20 seconds		
	H ₂ S	≤30 seconds		
	CO	≤30 seconds		
	NH ₃	≤90 seconds		
	H ₂	<90 seconds		

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

PUMP	
Flow	550 ml/min typically
Flow fail point	-200 mbar vacuum- user settable
Maximum vacuum restart	-250 mbar approximately with flow rate of approx 250ml/min
FACILITIES	
Temperature measurement	-10°C to +75°C with optional probe
Temperature accuracy	±0.5°C with optional probe
Flow measurement	Via Pitot tube, orifice plate, or anemometer
Alarm	User selectable alarms
Communications	Via USB lead or wireless Bluetooth**
Relative pressure measurement	±250 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
Available memory	10 IDs**, 500 readings
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



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

TECHNICAL SPECIFICATIONS CONTINUED

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 MARKING	 II 2G Ex ib IIA T1 Gb (Ta = -10°C to +50°C)
MCERTS	MC/130240
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.	



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