

Gas Data GFM400 series

ATEX certified landfill gas analysers

The GFM400 Series of handheld field instruments mark a step change in the design, performance and maintenance of portable landfill gas analysers. They meet all current demands from the landfill, biogas and contaminated land monitoring markets. Incorporating plug in sensors and user replaceable battery packs the GFM400 series leads the way for easy expansion, easy upgrade and easy maintenance. Gas Data's open upgrade path design philosophy guarantees that any model can be upgraded at any time.

GFM400/410

Optimised for the control and maintenance of landfill gas extraction systems and Flares. Its simple quick operation is designed to help engineers minimise down time and maximise plant efficiency.

GFM420

Similar to the 400 and 410 models but has the ability to analyse gas flows and pressures by interfacing to a range of industry standard devices such as orifice plates, pitot tubes and mass flow transducers.

GFM430

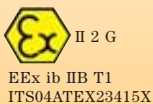
A truly universal landfill gas analyser. Measuring gas concentrations, pressures, flows and temperatures it can be used to equally great effect at peripheral boreholes and gas extraction wells.

Series Features

- Up to 7 gas analysis channels
- 4 Wavelength optical infra-red analyser
- Atmospheric pressure
- Powerful sample pump
- User replaceable sample filter
- Field replaceable/rechargeable battery pack
- Optional flow, pressure and temperature
- Plug in sensors
- Open upgrade path



Specification		GFM400	GFM410	GFM420	GFM430
Common features					
Infra red CH4 analysis	0-100%	✓	✓	✓	✓
LEL	0-100%	✗	✗	✓	✓
Infra red CO2 analysis	0-100%	✗	✓	✓	✓
Electrochemical O2 analysis	0-25%	✓	✓	✓	✓
Atmospheric pressure	800 to 1200 mbar	✗	✓	✓	✓
User spec'd gas channels		✗	✓	✓	✓
Static (Gauge) Pressure	±400 mbar	✓	✓	✓	✓
Vane anemometer input	0.01-40.0 m/s	✓	✓	✓	✓
Temperature probe input	-10 to 100c	✗	✗	✓	✓
Orifice plate and pitot tube interface					
Flow Range	0.1 to 6000 m3/hr	✗	✗	✓	✗
Pipe diameter range	0.1 to 3000 mm	✗	✗	✓	✗
Flow Resolution	0.1 m3/hr	✗	✗	✓	✗
Differential Pressure	±3000 Pa	✗	✗	✓	✗
Borehole (Low) Flow measurement					
Flow Range	+30/-30 l/hour	✗	✗	✗	✓
Flow Resolution	0.1 l/hour	✗	✗	✗	✓
Borehole Pressure	+1000/-1000 Pa (Typical)	✗	✗	✗	✓



Gas Data GFM400 Series Specifications

General			
Ex. Rating to:	ITS04 ATEX 23415, EEx ib IIB T1		
Ambient Temp Range	-10 to 40 C		
Battery Life	10 hours typical		
Battery charge time	2 to 4 hours		
Aspiration Rate	300 ml/min typical		
Storage Capacity	>1000 Readings		
Protection Rating	IP65		
Dimensions	200 x 100 x 60 mm (approx)		
Weight	750g typical depending on options installed		
GFM410 Standard Channels			
	Range	Typical Accuracy	Typical Response
Methane	0 to 100%	0.2% @ 5%	20s
		1.0% @ 30%	
		3.0% @ 100%	
	0 to 100% LEL	4% LEL	30s
Carbon Dioxide	0 to 100%	0.1% @ 10%	20s
		3.0% @ 50%	
		3% @ 100%	
Oxygen	0 to 25%	0.5%	20s
Atmospheric Pressure	800 to 1200 mbar	5 mbar, 1 mbar resolution	20s
Static Pressure	-200mbar - +200mbar	1 mbar resolution	
Standard Accessories			
Battery Charger, Carry Case, Sample Pipe, Manual, Calibration Certificate			
Optional Gas Channels (Maximum of 4)			
H2S	1500 ppm	5% of fs	30s
CO	1000ppm	5% of fs	30s
NO2	20 ppm	5% of fs	30s
SO2	100 ppm	5% of fs	30s
H2	1000 ppm	5% of fs	30s
NO	100 ppm	5% of fs	30s
Other Optional Channels			
Temperature (with external probe)	-10 to 100c	0.5c	0.1c
GFM430			
Flow Range	+30/ -30 litres per hour		
Flow Resolution	0.1 litres per hour		
Differential Pressure	+300/-100 Pa		
Gas Velocity (with optional vane anemometer)	0-40 m/s	0.01 m/s resolution	
GFM420			
Flow Range	0.1 to 6000 m3/hr		
Flow Resolution	0.1 m3/hr		
Differential Pressure	+/- 30 mbar		
Gas Velocity (with optional vane anemometer)	0-40 m/s	0.01 m/s resolution	

ACCESSORIES for your GFM400 Series Landfill Monitor

Part No:
GFMVANE

Description:

Vane Anemometer for measuring Gas velocity via gland in pipework.



GFMTEMP

Brass Temperature Probe for measurement in gas flow via gland in pipework.



GFMTEMP T

T Piece Temperature Probe which fits in-line with the supplied tubing for sample temperature measurement.



GFMFILT

Replacement Water Filter. Supplied in Pack of 10.

GFMTUBE

Spare Sample Tube. Supplied in metre lengths.

GFMQRC

Spare Quick Release Male Couplings for sample tube. Supplied in Pack of 10.