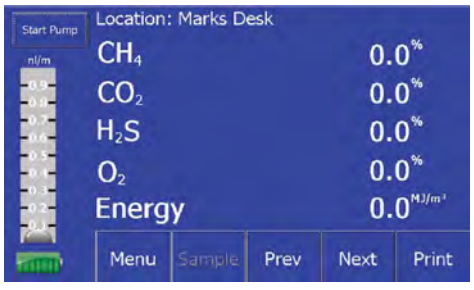
Rapidox 5100 Biogas Analyser

The Rapidox 5100 Biogas Analyser is a high specification and mobile instrument designed for the analysis and calculation of calorific value for biogas produced from the anaerobic digestion of organic materials.



The Rapidox 5100 Biogas Analyser can be used at a fertilisation plant, landfill site, farm, sewage plant or laboratory to measure and print-out the results for both gas content (CH_4 / H_2S / O_2 / CO_2) and energy content (calorific value, CV) for biogas produced in a digester from biomass; this obviates the need to collect separate samples in Tedlar bags and sending then to a laboratory for third-party analysis in order to determine the calorific value of the biogas, as all results are obtained on site. Another advantage is that the Rapidox 5100 Biogas Analyser can be moved from site to site and used as required.

Gas flow from a sampling probe (directly from the digester), sampling bag (off-line analysis) or the pipework (on-line analysis) is regulated manually via a rotary knob on the analyser fascia and displayed on the screen, together with the individual gas component concentrations and the calculated calorific value of the biogas being sampled. All data is continuously logged for review and inspection and Excel compatible data can be downloaded via a USB memory stick.

The Rapidox 5100 Biogas analyser is a mobile field instrument yet still maintains full laboratory functionality - with no compromises being made because of its portability - and incorporates the following features:

- a full battery life greater than 8 hours on a full charge (6 hours),
- a heavy-duty IP66 case for extra protection,
- a weight of only 7kg, making it easier to move around when out in the field,
- a thermal printer to provide a copy of results instantly.

Please contact Cambridge Sensotec for further information or to discuss your requirements.

Accessories

1 Sample Probe

2 Collapsible Sample Probe

3 Sample Probe Filters

4 Gas Recovery Bag

5 Calibration Gas Kit

6 Calibration Service

Specification

CH4 (methane)	0-100%, IR sensor (other ranges available)
CO2 (carbon dioxide)	0-100%, IR sensor (other ranges available)
O2 (oxygen)	0-30%, electrochemical sensor
H2S (hydrogen sulphide)	0-2000ppm or 0-10,000ppm / 0-1%(other ranges available)
Ambient Operating Temperature	-10°C to 40°C
Warm-up Time	3-4 minutes at 20°C
Measurement Time	Approximately 2-4 minutes (dependant on sensor configuration)
Battery Life	In excess of 8 hours (up to 500 cycles). 4-6 hour charge
Voltage (Charging)	90-260VAC, 50/60Hz
Sample Connections	4mm ID/6mm OD Rectus style, closed coupled fittings
Data Output	Excel compatible data via USB memory stick
Data Storage	4GB internal data storage allowing for approximately 1 year of continuous monitoring
Optional Pump	0-1 litres per minute
Calibration	Zero and span calibration with two user selectable gas compositions
Display	7" (180mm) full-colour LCD with touchscreen operation
Printer	Thermal printer allows output of results on demand
Analyser Dimensions	180mm(H) x 480mm(W) x 360mm(D)
Weight	7kg

Cambridge Sensotec Limited. Unit 29 Stephenson Road,
St Ives, Cambs, PE27 3WJ, United Kingdom

+44 (0)1480 462142
www.cambridge-sensotec.co.uk
info@cambridge-sensotec.co.uk

cambridge sensotec