AQUAGAS MONITORING SYSTEMS

ABYSS ® Portable Biogas Multigas Analyser

Description - The **ABYSS BioGas** NDIR portable gas analyser is specially designed for short-term simultaneous monitoring of primary biogas constituents CH4, CO2, O2 and H2S. The ABYSS BioGas fulfils the requirements of waste recycling facilities and associated odour filtration systems. It is based on the **micro-flow type non-dispersive infrared (NDIR)** method for CH4 and CO2, and uses a **Thermal Conductivity Detector (TCD)** for H2S and O2.

Applications - Standards applications are wastewater treatment plant, odour control system, landfill, anaerobic digestion and other fermentation processes.

Highly durable to harsh process conditions - The **ABYSS BioGas** uses a dual beam IR cell highly resistant to corrosive flue gases and harsh environments of operation. Its **light weight rugged enclosure** fitted LCD screen, safety filter and Stainless fittings enables efficient short term measurement of emissions and process gas.

ANKERSMID The ABYSS analysers are built, calibrated and factory tested in Belgium and certified **CE by Ankersmid Sampling BVBA**. certified **C.E.** by **Ankersmid Sampling BVBA**.

High Performance Process Monitoring

ANKERSMID Sampling

ABYSS ® Key Features

- Proprietary infrared single beam Micro-Flow NDIR detectors with built-in cross interference compensation
- Online monitoring of 4 gases simultaneously
- RS 232 serial com port for real-time data download to external PC or laptop as text file,
- Rugged enclosure. Reliable and easy to operate with Side-mount built-in filter
- Field proven technology for fast, accurate and reliable analysis of primary biogas constituents
- Stainless steel connectors for gas inlet/outlet and zero air inlet ports, Built-in Sampling Pump and flowmeter
- Keyboard / LCD display interface for configuration & calibration
- PFA and PTFE gas path

BioGas Portable Multigas Analyser

When sampling gas from landfill, anaerobic digestion/bacteria and other fermentation processes, the use of a dedicated sampling system is necessary to ensure application specific sample preparation and to preserve your monitoring equipment. The use of the **APS Portable sampling system** and **APP sampling probe** in combination with the **ABYSS ABG** enables efficient source testing operations with automated sampling sequences, high performance gas conditioning and heated filtration .

ABYSS ® Specifications

INTEGRATION	
Dimensions	Rugged field proof enclosure
Weight	432x420x132mm wxhxd 12kg
Flow	0.7 to 1.2 lpm
Response time	TD+T90 < 15s (NDIR)
Warm- up time	5 min
inlet pressure	2kPa - 50kPa
Interface	LCD display + keyboard
Output	RS232 / 4-20mA / dry contact alarm
Power supply	240 VAC 50 +/-1Hz
Operating conditions	Temp 0-50C Pressure 86-108kPa Humidity 5-85% non-condensing

GAS	MODELS	APPLICATIONS
CH4 - CO2 - H2S - O2	ABG700	BioGas
CH4 - CO2 - H2S	ABG600	BioGas
CH4 - CO2 - O2	ABG500	BioGas
CH4 - CO2	ABG400	BioGas
CH4 - H2S	ABG300	BioGas
CH4 - O2	ABG200	BioGas
CH4	ABG100	BioGas

GAS	TECHNOLOGY	RANGE (max/min)	PRECISION	RESOLUTION	REPEATABILITY
CO2	NDIR	0 - 50 %	≤±2% FS	0.1%	≤±2% FS
CH4	NDIR	0 - 100 %	≤±2% FS	0.1%	≤±2% FS
H2S	TCD	0 - 10 000PPM	≤±3% FS	1PPM	≤±2% FS
O2	TCD	0 - 25 %	≤±3% FS	0.1%	≤±2% FS

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