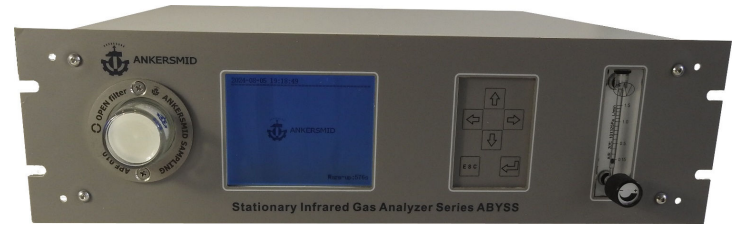




ANKERSMID Online Analyzer
ABYSS BioGas Series 100-700



* Picture may vary

Application

The general applications are Landfill, Flare and Biogas plants.

Description

The analyzers can be used for measurement of the concentration of up to 4 gases such as CO₂, CH₄, H₂S and O₂ components in sample gases simultaneously. It is based on the single source dual-beam non-dispersion infrared (NDIR) method for CO₂, CH₄ and the fuel cell method (ECD) for H₂S and O₂. This analyzer is designed with a digital pulsable infrared source and dual-beam systems.

- **Up to 4 gases measurement with combination of NDIR and ECD gas sensor technology**
- **Proven design with pulsable infrared source and dual-beam technology**
- **Heated gas bench for high stability**
- **320*240 LCD display**
- **Integrated flow meter with needle valve**
- **Integrated gas inlet panel fine-filter (0,1µm)**
- **Integrated pump for auto-zeroing (with air)**
- **RS232 & 4-20mA output**
- **2 free configurable alarm levels per measuring channel**

Version	Part number	Gas components
ABYSS BioGas 100	ABG 100	CH ₄
ABYSS BioGas 200	ABG 200	CH ₄ +O ₂
ABYSS BioGas 300	ABG 300	CH ₄ +H ₂ S
ABYSS BioGas 400	ABG 400	CH ₄ +CO ₂
ABYSS BioGas 500	ABG 500	CH ₄ +CO ₂ +O ₂
ABYSS BioGas 600	ABG 600	CO ₂ +CH ₄ +H ₂ S
ABYSS BioGas 700	ABG 700	CO ₂ +CH ₄ +H ₂ S+O ₂



ANKERSMID Online Analyzer

Technical data

ABYSS BioGas Series 100-700

Specifications					
Measurement		CO ₂ , CH ₄ , O ₂ , H ₂ S			
Calculation (optional)		High heating value or low heating value in MJ/m ³ or kcal/m ³			
Gas flow		0.7 - 1.2l/min, external flow meter with needle valve			
Pressure of gas inlet		20-500mbar			
Sampling gas requirement		Remove water vapor, dust (<1µm) and oil			
Response time		<10s (NDIR)			
Warm-up time		800s			
Interface		RS232, 4-20mA			
Technology		CO ₂ , CH ₄ : proprietary dual-beam NDIR detectors H ₂ S, O ₂ : ECD			
Display		LCD 240 x 128 with back-light function Simultaneous indication of all measures and units			
Gas inlet filter		Type APF 010, filter porosity: 0,1µm			
Integrated pump		For auto-zeroing (pump for gas sampling optional)			
Operating temperature		0 to +50°C			
Relative humidity		5 – 85%			
Ambient air pressure		86 – 108kPa			
Power supply		115/230VAC			
Dimension		19"-rack enclosure 3U, 485 x 132 x 400 mm (W x H x D)			
Weight		± 12Kg			
Gas	Method	Range	Resolution	Precision	T90
CO ₂	NDIR	0-50%, 0-100%	0,01%	≤2% FS	<10s
CH ₄	NDIR	0-100%	0,01%	≤2% FS	<10s
H ₂ S	ECD	0-500ppm, 0-5000ppm, 0-10000ppm	1ppm	≤3% FS	<60s
O ₂	Fuel cell	0-25%	0,01%	≤3% FS	<30s



ANKERSMID Portable Analyzer ABYSS BioGas Series 100P-700P



* Picture may vary

Application

The general application are Landfill, Flare and Biogas plants.

Description

The ABYSS portable infrared SynGas analyzer is powered by Li-Ion battery and can be used without AC power supply.

The analyzers can be used for measurement of the concentration of up to 4 gases such as CO₂, CH₄, H₂S and O₂ components in sample gases simultaneously. It is based on the single source dual-beam non-dispersion infrared (NDIR) method for CO₂, CH₄ and the fuel cell method (ECD) for H₂S and O₂. This analyzer is designed with a digital pulsable infrared source and dual-beam systems.

A nylon carrying bag for analyzer and accessories is included as standard.

- **Up to 4 gases measurement with combination of NDIR and ECD gas sensor technology**
- **Proven design with pulsable infrared source and dual-beam technology**
- **Heated gas bench for high stability**
- **320*240 LCD display**
- **Integrated flow meter with needle valve**
- **Built-in pump for auto-zeroing (with air) & gas sampling**
- **RS232 interface, datalogger**

Version	Part number	Gas components
ABYSS BioGas 100P	ABG 100P	CH ₄
ABYSS BioGas 200P	ABG 200P	CH ₄ +O ₂
ABYSS BioGas 300P	ABG 300P	CH ₄ +H ₂ S
ABYSS BioGas 400P	ABG 400P	CH ₄ +CO ₂
ABYSS BioGas 500P	ABG 500P	CH ₄ +CO ₂ +O ₂
ABYSS BioGas 600P	ABG 600P	CO ₂ +CH ₄ +H ₂ S
ABYSS BioGas 700P	ABG 700P	CO ₂ +CH ₄ +H ₂ S+O ₂



ANKERSMID Portable Analyzer ABYSS BioGas Series 100P-700P

Technical data

Specifications					
Measurement	CO ₂ , CH ₄ , O ₂ , H ₂ S				
Calculation (optional)	High heating value or low heating value in MJ/m ³ or kcal/m ³				
Gas flow	0.7 - 1.2 l/min, external flow meter with needle valve				
Pressure of gas inlet	20-500mbar				
Sampling gas requirement	Remove water vapor, dust (<1µm) and oil				
Response time	<10s (NDIR)				
Warm-up time	800sec.				
Interface	RS232 (real time and memory data download software available)				
Data-logging	Up to 2560 sets of data; logging rate adjustable from 3 to 99 sec Possibility to identify 10 different sites and up to 100 measuring points				
Technology	CO ₂ , CH ₄ : proprietary dual-beam NDIR detectors H ₂ S, O ₂ : ECD				
Display	LCD 240 x 128 with back-light function Simultaneous indication of all measures and units				
Integrated pump	For auto-zeroing (with air) and gas sampling				
Operating temperature	0 to +50°C				
Relative humidity	5 - 85%				
Ambient air pressure	86 – 108kPa				
Power supply	External: 115/230VAC via AC/DC-adaptor Internal: with Li-Ion battery and charger; autonomy of > 4h with pump in operation, 8h without pump				
Dimension	380mm x 140mm x 225mm (W x L x H)				
Weight	± 5Kg				
Gas	Method	Range	Resolution	Precision	T90
CO ₂	NDIR	0-50%, 0-100%	0,01%	≤2% FS	<10s
CH ₄	NDIR	0-100%	0,01%	≤2% FS	<10s
H ₂ S	ECD	0-500ppm, 0-5000ppm, 0-10000ppm	1ppm	≤3% FS	<60s
O ₂	Fuel cell	0-25%	0,01%	≤3% FS	<30s