

Gas Measurement

Goliath - Biogas B

Robust Gas instrument for the specific use in biogas, landfill and sewage gas



With the proven ESDERS operation philosophy

In the field of biogas, landfill gas and sewage gas production the observation and check of the gas composition, and the inspection of the facilities for unexpected gas leaks are an inherent part of work processes.

The GOLIATH is ready for use after a short run time and offers clear and very fast results. The used infrared sensor technology shows the concentrations for methane and carbon dioxide in a reaction time less than 10 seconds. The rugged, shockproof device is easy to use. All measured values can be read in the clear, backlit display and can be saved as needed.



Leak detection of methane and carbon dioxide

The GOLIATH biogas offers another menu item „leak detection“. This will provide an additional field of application for the detection of leaks at all biogas containing parts of the plant.

Advantages:


- Use of infrared sensors for CH₄ and CO₂ guarantee fast run-in period and extremely short response times and exclude cross-sensitivities to other gases.
- An oxygen and a hydrogen sulphide sensor are offered as an option.
- The measurement range for H₂S is 0 to 2,000 ppm and cover the requirement for measurements at biogas plants ideal.



Sensors (Measurement)		Measuring range	Resolution	Active principle
Hydrocarbons	standard	0 to 100 Vol.-% CH ₄	0.1 Vol.-% CH ₄	infrared
Carbon dioxide	standard	0 to 100 Vol.-% CO ₂	0.1 Vol.-% CO ₂	infrared
Oxygen	optional	0 to 25 Vol.-% O ₂	0.1 Vol.-% O ₂	electrochemical
Hydrogen sulfide	optional	0 to 2,000 ppm H ₂ S	1 ppm H ₂ S	electrochemical
Application leak detection		Measuring range	Resolution	Alarm
Leak detection		0 to 10,000 ppm CH ₄ 0 to 10,000 ppm CO ₂	ca. 100 ppm CH ₄ ca. 100 ppm CO ₂	acoustic + optical

Documentation of measurements:

- Data readout to PC via USB through charging cradle infrared link.
- Network compatible windows-software with extensive features for further characterization and storage of measurements in a database.
- Report output in PDF and HTML format.

Typical Data	
Display	LCD Graphic display with 128 x 64 pixels, illuminated
Power supply	NiMH Battery pack
Operating temperature	-10°C to +40°C
Operating time	> 9 hours (without backlight)
Charging	Charging power supply for 12 Volts or 230 Volts, AC Charging time: 5 hours
Data memory	Flash memory of 4 MB for more than 1 million readings
Type of protection	IP 54
Dimensions	168 x 90 x 80 mm without connection couplings
Weight	ca. 1,200 g, depending on sensor placement
ATEX	BVS 09 ATEX E 079 X -  II 2G Ex ib d IIB T3/T4

Accessories Goliath



Item Number. 202002
Power supply 230 V



Item Number. 202019
Charging cradle



Item Number. 202021
Test and charging cradle



Item Number. 271118
Hand probe V2



Item Number. 271126
Long probe set 4m



Item Number. 202042
Carrying case GOLIATH



Item Number. 331020
PED Basis 35 l/h



Item Number. 372010
Test gas: 60 Vol.-% CH₄ +
40 Vol.-% CO₂

Other accessories on request!

Technical changes reserved!

