

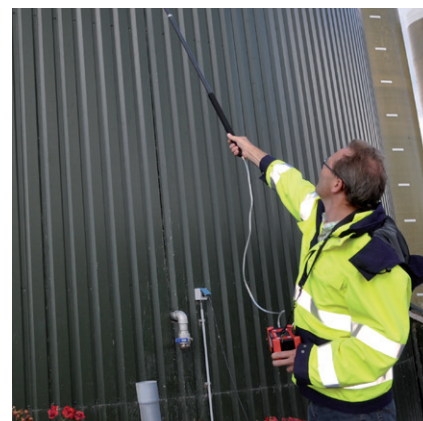
# GOLIATH Biogas

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



- Use of infrared sensors for CH<sub>4</sub> and CO<sub>2</sub> 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 H<sub>2</sub>S is 0 to 2,000 ppm and cover the requirement for measurements at biogas plants ideal.

## PICTURES OF APPLICATION



# GOLIATH Biogas

## 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.

Sensors (Measurement)		Measuring range	Resolution	Active principle
Hydrocarbons	standard	0 to 100 Vol.-% CH <sub>4</sub>	0,1 Vol.-% CH <sub>4</sub>	infrared
Carbon dioxide	standard	0 to 100 Vol.-% CO <sub>2</sub>	0,1 Vol.-% CO <sub>2</sub>	infrared
Oxygen	optional	0 to 25 Vol.-% O <sub>2</sub>	0,1 Vol.-% O <sub>2</sub>	electrochemical
Hydrogen sulfide	optional	0 to 2.000 ppm H <sub>2</sub> S	1 ppm H <sub>2</sub> S	electrochemical
Hydrogen sulfide	optional	0 to 1.000 ppm H <sub>2</sub> S	1 ppm H <sub>2</sub> S	electrochemical
Hydrogen sulfide	optional	0 to 100 ppm H <sub>2</sub> S	1 ppm H <sub>2</sub> S	electrochemical
Application leak detection		Measuring range	Resolution	Alarm
Leak detection		0 to 10.000 ppm CH <sub>4</sub> 0 to 10.000 ppm CO <sub>2</sub>	approx. 100 ppm CH <sub>4</sub> approx. 100 ppm CO <sub>2</sub>	acoustic + optic

## 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.

## TECHNICAL 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
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
Protection type	IP 54
Dimensions	200 x 100 x 87 mm
Weight	ca. 1.200 g
ATEX	BVS 09 ATEX E 079 X –  II 2G Ex ib d IIB T3/T4 Gb

Technical specifications subject to change! Status 2020/06



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