

# TECHNICAL DATA SHEET

## BIOGAS-OPTION

for all *Engine* variants

Ideal for servicing biogas plants, CHP units and gas engines

With the BIOGAS option, all flue gas measuring devices of the *Engine* version can be extended for use on biogas, sewage gas or landfill gas operated systems. Special components reliably protect the sensor system when measuring flue gases from digester gas-based fuels, which are particularly demanding due to moisture, aggressive components and high loads.

The option is ideal for operators, service technicians and inspectors of biogas-powered CHP units where availability and measurement reliability are paramount.



### Technical data

Measured values	Range	Resolution	Accuracy *= Higher value prevails	
✓ = Standard; • = Optional EC; • = Optional NDIR				
Maximum number of measurable gas components				6
O <sub>2</sub>	0...21 %	0,1 vol. %	± 0,3 vol. %	✓
CO (H <sub>2</sub> -comp.)	0...2.500 ppm (10.000 ppm)	1 ppm	± 20 ppm / 5 % of measured value*	✓
NO	0...5.000 ppm	1 ppm	± 5 ppm / 5 % of measured value*	✓
NO <sub>2</sub>	0...1.000 ppm	1 ppm	± 5 ppm / 5 % of measured value*	✓
H <sub>2</sub> S	0...5.000 ppm	1 ppm	± 50 ppm / 5 % of measured value*	✓
CH <sub>4</sub>	0...100 vol. %	0,1 vol. %	± 5 % of the measuring range end value	✓
Other measured variables	Range	Resolution	Accuracy *= Higher value prevails	
T-Gas	0...500 °C	1 °C	± 2 °C / 1,5 % of measured value*	✓
	0...1.000 °C	0,1 °C	± 2 °C / 1,5 % of measured value*	•
T-Air	0...99 °C	0,1 °C	± 1 °C	✓
Pressure   ΔP	± 100 hPa	0,01 hPa	± 0,5 hPa / 1 % of measured value*	✓
Calculation values			Range	
CO <sub>2</sub>			0...CO <sub>2 max</sub>	✓
Combustion efficiency (ETA)			0...120 %	✓
Excess air (Lambda)			>1	✓
Losses qA			0...100 %	✓
CO <sub>(u)</sub> undiluted			x ppm	✓
Dew point			x° C	✓
mg/m <sup>3</sup>			x mg/m <sup>3</sup>	✓
mg/kWh			x mg/kWh	✓
O <sub>2</sub> reference			x % O <sub>2</sub>	✓

As of 06/25, design and technical changes as well as possible printing errors are subject to change.



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