

Multi-gas analyzer

INCA4000



Biogas



Energy generation
from waste





Multi-gas analyzer

INCA4000

Determine gas composition precisely.

- Methane
- Carbon dioxide
- Hydrogen sulfide
- Oxygen
- Higher hydrocarbons (C₂+)
 - Hydrogen (H₂)

The INCA4000 multi-gas analyzer is designed for indoor installation and can measure both condensate-free and moist gases. For wet gases, the device is equipped with a gas cooler to remove condensate. The measurement points (up to ten) and a calibration gas inlet are controlled via an external valve system.

Typical measuring ranges INCA4000

Sensors	Measuring principle	Measuring range	Repeatability
CH ₄	Infrared absorption (NDIR)	0-100 Vol.-%	0.05 Vol.-%
CO ₂	Infrared absorption (NDIR)	0-100 Vol.-%	0.05 Vol.-%
H ₂ S	Electrochemical (EC)	0-100, 0-2000, 0-5000, 0-10000 ppm	1 ppm, 20 ppm, 50 ppm, 100 ppm
H ₂ S pulse	Electrochemical (EC)	50-1000, 500-20000, 1000-50000, 2000-50000 ppm	5 ppm, 50 ppm, 100 ppm, 200 ppm
O ₂	Electrochemical (EC), paramagnetic	0-25 Vol.-%	0.1 Vol.-%
H ₂	Electrochemical (EC)	0-1000 ppm, 0-100 Vol.-%	5 ppm, 0.5 Vol.-%

CAM Biogas/Biomethane

Options	Measurement quantity / component		
Options for different IR sensors	CH ₄ CO ₂	0-100 Vol.-% 0-100 Vol.-%	Cyclic measurement
Digital IR	CH ₄ CO ₂ C ₂ +	0-100 Vol.-% 0-100 Vol.-% 0-30 Vol.-%	Continuous measurement
Digital IR	CH ₄ CO ₂ C ₂ +	0-100 Vol.-% 0-100 Vol.-% 0-30 Vol.-%	WLD for hydrogen or biomethane Continuous measurement
Options for different EC configurations	H ₂ S H ₂ S Pulse	0-100 ppm 50-1000 ppm	0-2000 ppm/0-5000 ppm/0-10000 ppm 500-20000 ppm/1000-50000 ppm/2000-50000 ppm
Digital EC	H ₂ H ₂ Pulse	0-1000 ppm 0-10000 ppm	
Digital EC	CO CO Pulse	0-200 ppm 0-1000 ppm	
O ₂	O ₂	0-25 Vol.-%	

Technical specifications INCA4000

Weight	up to 30 kg	Relative gas humidity	≤ 100% (condensate possible)
Dimensions W × H × D (mm)	755 x 630 x 310	Measurement gas cooler	yes
Protection class	IP20	Cooling principle	thermoelectric
Installation location	indoor	Dew point	3-30 °C adjustable
Power supply	100-240 V, 50/60 H	Ambient conditions	
Power consumption	250 VA	Operating temperature	15-45 °C
Gas inlets		Humidity	0-95 % relative humidity
Measurement gas inlets	up to 10	Ambient pressure	900-1250 hPa (0,9-1,2 bar)
Calibration gas inlets	1	Storage temperature	-20 to 60 °C
Zero gas	1	Interfaces	
Gas connections	compression fitting 6 mm	Relay	optional
Maximum gas inlet pressure	20 mbar rel.	4-20 mA	optional
Minimum gas inlet pressure	-100 mbar rel.	Fieldbus	optional



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