

Multi-gas analyzer

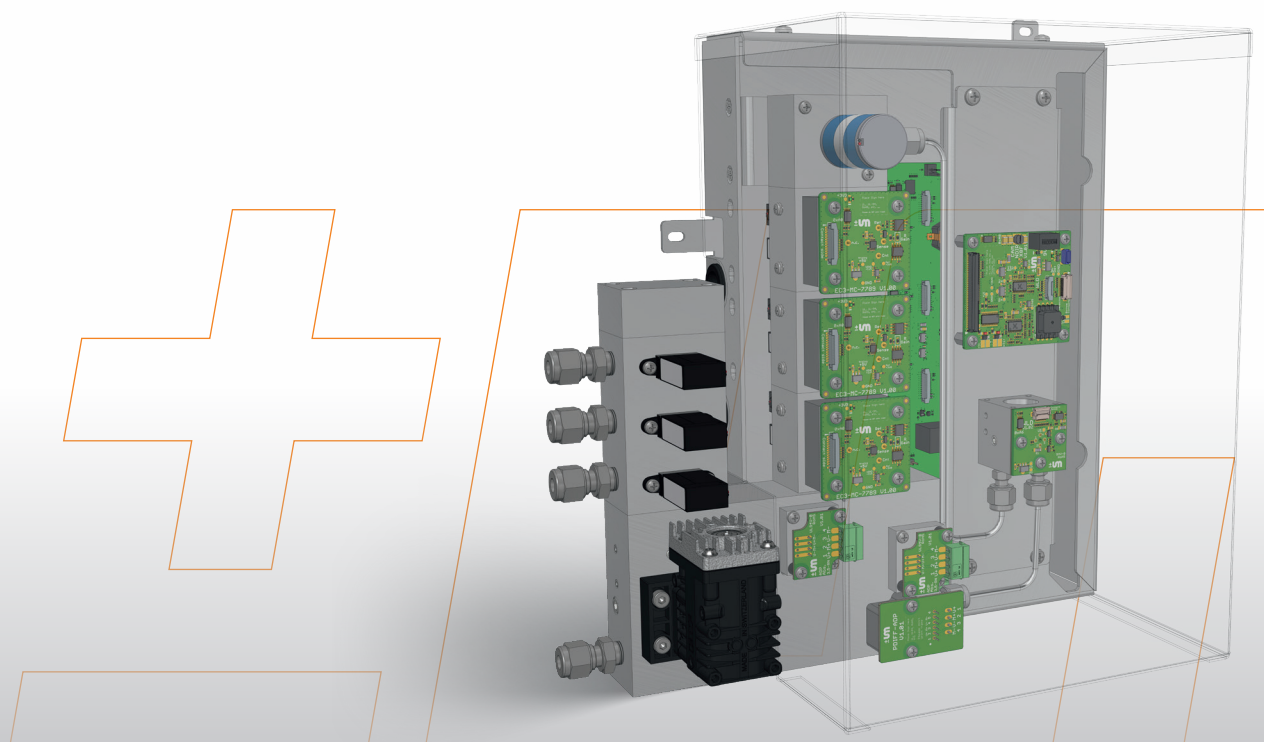
CAM

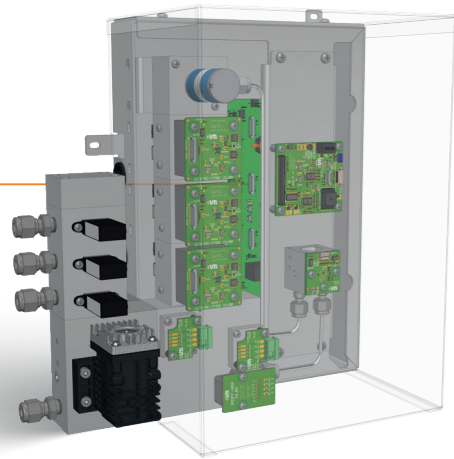


Biogas



Energy generation
from waste





Multi-gas analyzer

CAM

Determine gas composition precisely.

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

The CAM (Compact Analyzer Module) multigas analyzer is designed for indoor installation. It can measure condensate-free gases with or without upstream pressure.

The device can be equipped with up to 10 gas measurement inputs.

Typical measuring ranges CAM

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 CAM

Weight	5 kg	Minimum gas inlet pressure	–100 mbar
Dimensions W × H × D (mm)	230 x 320 x 160	Relative gas humidity	< 95 % condensate-free
Protection class	IP40	Ambient conditions	
Installation location	indoor	Operating temperature	15–45 °C
Power supply	24 V DC	Humidity	0–95 % relative humidity
Power consumption	30 W	Ambient pressure	900–1250 hPa (0,9–1,2 bar)
Gas inlets		Storage temperature	–20 to 60 °C
Measurement gas inlets	up to 10	Interfaces	
Calibration gas inlets	1	Fieldbus	required, details on request
Zero gas	1		
Gas connections	compression fitting 6 mm		
Maximum gas inlet pressure	50 mbar rel.		



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