

INCA 04

Analysis device for measuring gas composition of biogas

APPLICATION

Measuring gas composition in:

- biogas production
- bio-methane production
- low-BTU gases
- landfill gases

ENCLOSURE

Dimensions	height:	620 mm
	width:	700 mm
	depth:	215 mm
Weight		38 kg
Power supply		90 ... 240 VAC, 50/60 Hz
Electrical power		max. 500 W ¹
Air pressure		min. 8 bar ² max. 16 bar

TECHNICAL SPECIFICATIONS

Temperature	+5 ... 45 °C (40 ... 115 °F)
Humidity	0 ... 95% relative humidity
Protection class	IP44
Interfaces	RS232
	3x relay
	optional:
	4x 0 ... 20 mA or 4 ... 20 mA
	Ethernet
	Profibus-DP Modbus-Plus Modbus-RTU
Metering points	1x calibration gas
	1x zero gas
	1x process gas
	2 ... 8 process gases ³
	Process conditioning
	gas cooler (Peltier) flame barrier (ATEX)
Condensate run-off	jet pump ^{2,3}
	or
	hose pump

¹ devices with a gas cooler ² only for multi-channel devices
³ only with air pressure



MEASUREMENT RANGE

NDIR - measurement⁴

CO ₂	0 ... 100 Vol%
CH ₄	0 ... 100 Vol%
or	
CO ₂	80 ... 100 Vol%
CH ₄	20 ... 100 Vol%
or	
CO ₂	0 ... 20 Vol%
CH ₄	80 ... 100 Vol%

Electrochemical measurement

O ₂	0 ... 25 Vol%
or	

Paramagnetic measurement⁴

O ₂	0 ... 25 Vol%
O ₂	0 ... 5 Vol%

Electrochemical measurement

H ₂ S	0 ... 50 ppm
and	
H ₂ S ⁵	0 ... 10000 ppm
H ₂	0 ... 1000 ppm
and	
H ₂ ⁵	0 ... 10000 ppm
NH ₃	0 ... 100 ppm
and	
NH ₃ ⁵	0 ... 10000 ppm

Measurement accuracy

NDIR - measurement	1% of full scale
Electrochemical measurement	3% of full scale

With μ Puls technology (>50 ppm):

Electrochemical measurement	10% of meas. value
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⁴ compensated over pressure and temperature
⁵ with μ Puls technology (Union Instruments GmbH patent)