



- Multigas analyzer
- Easy operation via touch screen
- Easy sensor calibration
- Best measurement performance
- For installation in a 19" rack
- Analog or digital output
- Photoacoustic sensors
- NDIR sensors
- Paramagnetic sensors Technology
- Electro chemical sensors



The ANAREX gas analyzers of smartGAS are high-performance solutions for various sectors of industrial gas measurement technology. The fields of application range from process measurement technology and emissions to fruit ripening. It convinces with its highly accurate and stable measurement performance as well as its customer-friendly interfacing via touch screen along with a simple sensor calibration.

The ANAREX is designed as a multi-gas analyzer and is suitable for installation in a 19" rack.

The smartGAS analyzer can also use different technologies to fulfil all kinds of application requirement.

The smartGAS Analyzer is equipped with a 5.6" touch screen, that displays the gas concentration as real-time reading. The internal software is designed to control zero, span and third point calibration to ensure a perfect accuracy of the measurement values.

#### Application examples

Emission monitoring CEMS  
Biogas  
Process control  
Fruit ripening  
High voltage

#### Measuring principles

Infra red NDIR  
Photo acoustic  
Electro chemical  
Paramagnetic O<sub>2</sub>

#### Peripherals

Gas cooler  
Pumps  
Particle filter  
Tubes  
Mounting equipment

#### Customizing options

Measuring gases  
Detection ranges  
Design and Software  
Gas pre treatment

## General features

Measurement principle:	C <sub>2</sub> H <sub>4</sub> ... Photoacoustic CO <sub>2</sub> ... NDIR O <sub>2</sub> ... Paramagnetic
Measurement range:	5 ... 1000 ppm (C <sub>2</sub> H <sub>4</sub> ) 0 ... 5 Vol.-% (CO <sub>2</sub> ) 0 ... 25 Vol.-% (O <sub>2</sub> )
Detection Limits:	≤ 5 ppm (C <sub>2</sub> H <sub>4</sub> ) ≤ 0.03 Vol.-% (CO <sub>2</sub> ) ≤ ± 0.03 Vol.-% (O <sub>2</sub> )
Repeatability	≤ 1% of measured value plus ± 1.5 ppm (C <sub>2</sub> H <sub>4</sub> ) ≤ ± 0.04 Vol.-% (CO <sub>2</sub> ) ≤ ± 0.03 Vol.-% (O <sub>2</sub> )
Drift:	≤ 1% of value ± 3 ppm over 24 h period (C <sub>2</sub> H <sub>4</sub> ) ≤ ± 0.6 Vol.-% over 1000 h period (CO <sub>2</sub> ) ≤ ± 0.1 Vol.-% over 168 h period (O <sub>2</sub> )

## Basic information

Display:	Touch screen, 5.6" LCD
Analogue output:	4-20 mA (in operation) 2 mA (Warm-up or alarm)
Load resistance:	250 Ω ~ 350 Ω
Alarm output:	Device status alarm // Measurement channel level alarm <i>Relay will close and isolate if alarm limits are exceeded</i>
Relay:	1 A Trigger (250 V AC / 2 A, resistive load)
Communication:	RS232 (DB-9 Female)
Power:	(198 ~ 242) V AC, 50 / 60 Hz
Power connection:	EN 60320 C1
Fuse:	Rated current: 3A; Size: 5 x 20 mm
Protection level:	IP42 (EN 60529)
Weight:	15 kg

## Gas flow & Environment information

Gas Inlet flow:	(0.4 ~ 0.8) L/min (flow fluctuation $\leq$ 0.02 L/min)
Gas temperature:	(5 ~ 35) °C
Gas pressure:	(76 ~ 116) kPa
Humidity:	non-condensing Inlet dew point: 5°C $\pm$ 0.1°C
Particulates:	100 $\mu\text{g} / \text{m}^3$ , $\leq$ 1 $\mu\text{m}$
Zero gas:	99.999 % N <sub>2</sub> (NDIR) Clean air, free of sample gas (Photoacoustic)
Span gas:	75 % ~ 110 % of span point Clean air (0 ~ 25 % O <sub>2</sub> measurement)
Third point gas:	35 ~ 75 % of span point
Operation temperature:	10°C ~ 40°C
Humidity:	0 ~ 90 % RH (non-condensing)
Pressure:	76 kPa ~ 116 kPa

\* Typical values related to 1013 hPa, T<sub>a</sub> = 22 °C, flow = 0.7 l / min for dry (not condensing) and clean sample gas. Stated values exclude calibration gas tolerance.

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For more information, please visit [www.smartgas.eu](http://www.smartgas.eu) or contact us at [sales@smartgas.eu](mailto:sales@smartgas.eu)

Please consult smartGAS sales for parts specified with other temperature and measurement ranges. At first initiation and depending on application and ambient conditions recalibration is recommended. Recurring cycles of recalibration are recommended.