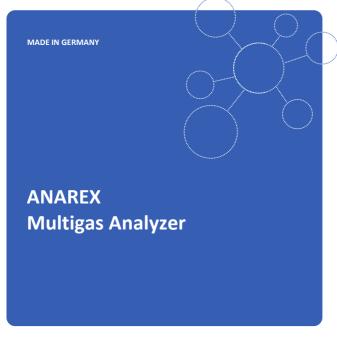
# smartGAS.



- 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 accoustic 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

## smartGAS.

#### **Measurement Specification**

Resolution:	0.01 %	(Photoacoustic)
	0.001 %	(Paramagnetic)
	0.1 %	(NDIR)
Repeatability:	0.1 %FS	(Photoacoustic)
	1 %FS	(Paramagnetic)
	1 %FS	(NDIR)
Linearity:	0.1 %FS	(Photoacoustic)
	1 %FS	(Paramagnetic)
	1 %FS	(NDIR)
Response time:	<25 s	(t <sub>90</sub> @60 L/h stable flow)
Warm-up time:	<25 s	(t <sub>90</sub> @60 L/h stable flow)

### Typical measurement gas (examples)

Blast furnace gas:	Online emission gas:
CO, CO <sub>2</sub> , CH <sub>4</sub> , O <sub>2</sub>	SO <sub>2</sub> , NO, NO <sub>2</sub> , O <sub>2</sub> , CO <sub>2</sub>
Steel converter gas:	TOC Measurement:
CO, O <sub>2</sub>	CO <sub>2</sub> 100 / 500 / 2000 ppm
Calorific value gas:	Fumigation gas:
CO, CO <sub>2</sub> , CH4, O <sub>2</sub>	CH <sub>3</sub> Br, SO <sub>2</sub> F <sub>2</sub>
Cement process control:	Chemical industry process:
CO, CO <sub>2</sub> , O <sub>2</sub> , NO <sub>x</sub>	CO, CO <sub>2</sub> , CH <sub>4</sub> , SO <sub>2</sub> , 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
	Relay will close and isolate if alarm limits are exceeded
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

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#### **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 ± 0.1°C	
Particulates:	100 µg / m³, ≤1 µm	
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 ~ 95 % RH (non-condensing)	
Pressure:	76 kPa ~ 116 kPa	

Typical values related to 1013 hPa, Ta = 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 or contact us at 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.



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