



- 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 O₂

Peripherals

Gas cooler
Pumps
Particle filter
Tubes
Mounting equipment

Customizing options

Measuring gases
Detection ranges
Design and Software
Gas pre treatment

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_{90} @60 L/h stable flow)
Warm-up time:	<25 s	(t_{90} @60 L/h stable flow)

Typical measurement gas (examples)

Blast furnace gas:	Online emission gas:
CO, CO ₂ , CH ₄ , O ₂	SO ₂ , NO, NO ₂ , O ₂ , CO ₂
Steel converter gas:	TOC Measurement:
CO, O ₂	CO ₂ 100 / 500 / 2000 ppm
Calorific value gas:	Fumigation gas:
CO, CO ₂ , CH ₄ , O ₂	CH ₃ Br, SO ₂ F ₂
Cement process control:	Chemical industry process:
CO, CO ₂ , O ₂ , NO _x	CO, CO ₂ , CH ₄ , SO ₂ , O ₂

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 μm
Zero gas:	99.999 % N ₂ (NDIR) Clean air, free of sample gas (Photoacoustic)
Span gas:	75 % ~ 110 % of span point Clean air (0 ~ 25 % O ₂ 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, T_a = 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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