# smartGAS.





- Self-controlledor partiallycontrol via a connected PLC
- Compact Design
- Zero-calibration by external command or automatic
- Measured values continuously accessible via UART data stream
- Status indicated by LED
- Automatic compensation of the water vapor cross-sensitivity
- Designed for 24/7 operation

**Application examples** 

Gas analysis
Biogas application
Environmental monitoring
Process control
Emission monitoring

Available equipment

Gas cooler Particle filter Gas pump Mounting equipment Galvanically isolated output Available design in support

Mechanical Installation Data communication Gas pre-treatment



# PAS I Ethylene C<sub>2</sub>H<sub>4</sub> I PA-032204-00000

#### **General features**

Measurement principle:	Photoacoustic
Measurement range:	1 200 ppm Full Scale (FS)
Gas supply:	by flow (nearly atmospheric pressure)
Flow rate:	0.1 2.0 l / min
Mounting dimensions:	127 mm x 96.5 mm x 200 mm (L x W x H)
Warm-up time:	≤ 10 minutes

## Measuring response\*

Digital resolution:	0.1 ppm
Detection limit (3 $\sigma$ ):	≤1 ppm
Repeatability:	≤ 1% of measured value plus ± 0.5 ppm
Long term stability (zero):	≤± 1.0 ppm over 24 h period
Long term stability (span):	≤ 1% of value ± 2 ppm over 24 h period

### **Electrical parameters**

Power Supply	12 Volts DC ± 1%
Power consumption:	10 minute heat up approx.45 Watts / Operation approx. 15 Watts
Communication:	TTL-UART and digital I/O's
Calibration:	Zero-calibration by external command or automatic

### **Climatic conditions**

Operating temperature:	+10°C -+40 °C
Storage temperature:	+10°C -+40 °C
Air pressure:	800 – 1150 hPa
Ambient humidity:	0 – 95 % relative humidity (not condensing);
	Housing has to be purged with dry air or nitrogen.

Typical values related to 1013 hPa, Ta = 0 °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.

<sup>\*\*</sup> Adjustable only via smartGAS Calibration-Tool SW.