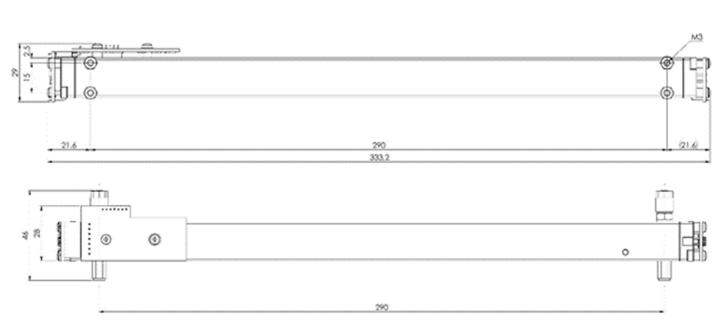
# smartGAS.



Infrared gas Sensor
Sulfuryl Flouride SO<sub>2</sub>F<sub>2</sub>
100 ppm
smartGAS item number: I

smartGAS item number: F3-412104-05000

- Pre calibrated
- Compact Design
- 3/5 mm gas line connector
- 3.3-6 V DC supply voltage
- Modbus ASCII or RTU
- Status indicated by LED
- Low drift



# **Application examples**

Fumigation monitoring Leak detection Occupational health and safety monitoring

# **Available equipment**

Gas cooler Particle filter Gas pump Calibration Software Mounting equipment

## Available design in support

Mechanical Installation Data communication Gas pre-treatment

# FLOW<sup>EVO</sup> I Sulfuryl Flouride SO<sub>2</sub>F<sub>2</sub> I F3-412104-05000

#### **General features**

Measurement principle:	Non-Dispersive Infra-Red (NDIR), dual wavelength
Measurement range:	0 100 ppm Full Scale (FS)
Gas supply:	by flow (nearly atmospheric pressure)
Flow rate:	0.1 1.0 l / min
Mounting dimensions:	336 mm x 30 mm x 50 mm (L x W x H)
Warm-up time:	< 2 minutes (start-up time) < 30 minutes (full specification)

### Measuring response\*

Digital resolution:	0.01 ppm	
Response time @ 0.7 l / min**:	Standard:	Fast:
t <sub>90</sub> (10 to 90 % FS):	≤ 13.2 s	≤ 1.1 s
t <sub>on</sub> (0 to 90 % FS):	≤ 17.5 s	≤ 1.7 s
Detection limit (3 $\sigma$ ):	≤ 2 ppm	≤ 5 ppm
Repeatability:	≤ ± 1 ppm	
Linearity error (straight line deviation):	≤ ± 1 ppm	
Long term stability (zero):	≤ ± 4 ppm over 1000 h period	d
Long term stability (span):	≤ ± 5 ppm over 1000 h period	d

## Influence of T, P, flow rate, other\*

Temp. dependence (zero):	≤ ± 0.3 ppm per °C
Temp. dependence (span):	≤±0.4 ppm per °C
Pressure dependence:	+ 0.100 % of actual reading / hPa
Flow rate dependence:	≤ ± 0.02 ppm per 0.1 l / min
Cross sensitivity (zero) other gases:	consult factory
Gas dew point requirement:	< + 5°C dew point (stable), particle free and clean sample gas

## **Electrical parameters**

Supply voltage	3.3 V 6.0 VDC
Supply current (peak):	< 400 mA @ 3.3 V, < 240 mA @ 5.0 V
Inrush current:	< 600 mA
Average power consumption:	< 800 mW
Digital output signal:	Modbus ASCII / RTU via UART, autobaud, autoframe
Calibration:	zero and span by SW

## **Climatic conditions**

Operating temperature:	0 +50 °C
Storage temperature:	-20 +60 °C
Air pressure:	800 1150 hPa
Ambient humidity:	0 95 % relative humidity (not condensing)

<sup>\*</sup> Typical values related to 1013 hPa, Ta = 22 °C, flow = 0.7 I / 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.