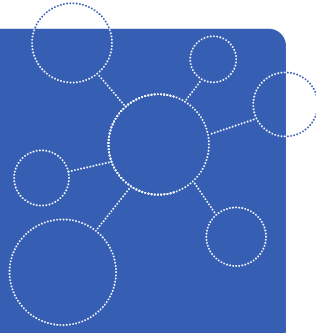


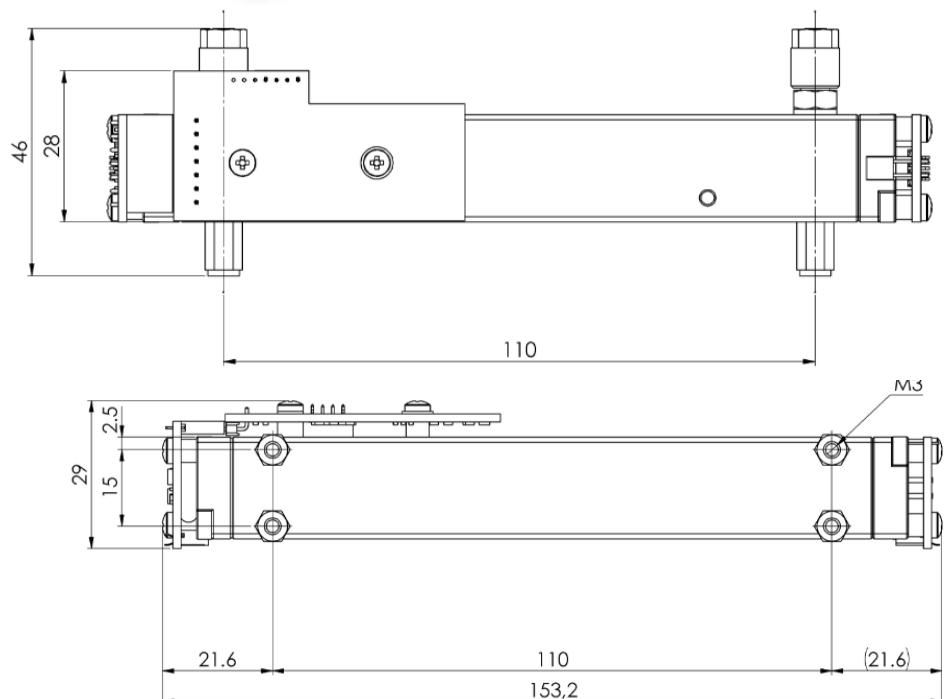
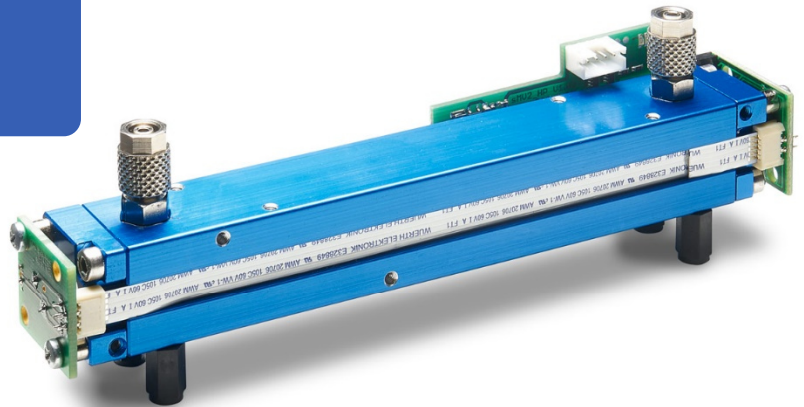
MADE IN GERMANY



FLOW^{EVO}

Infrared gas Sensor
Sulfur Hexafluoride SF₆
50 ppm
smartGAS item number: F3-602503-05000

- 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

Fix and portable SF₆ leakage detection
Tracer gas measurement
SF₆ analysis
High voltage cables and transformers
Laboratories

Available equipment

Gas cooler
Particle filter
Gas pump
Calibration Software
Mounting equipment

Available design in support

Mechanical Installation
Data communication
Gas pre-treatment

General features

Measurement principle:	Non-Dispersive Infra-Red (NDIR), dual wavelength
Measurement range:	0 ... 50 ppm Full Scale (FS)
Gas supply:	by flow (nearly atmospheric pressure)
Flow rate:	0.1 ... 1.0 l / min
Mounting dimensions:	156 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**:	<i>Standard:</i>	<i>Fast:</i>
t ₉₀ (10 to 90 % FS):	≤ 11.6 s	≤ 0.9 s
t _{0n} (0 to 90 % FS):	≤ 15.9 s	≤ 1.6 s
Detection limit (3 σ):	≤ 0.5 ppm	≤ 1.15 ppm
Repeatability:	≤ ± 0.5 ppm	
Linearity error (straight line deviation):	≤ ± 0.7 ppm	
Long term stability (zero):	≤ ± 6 ppm over 240 h period	
Long term stability (span):	≤ ± 7 ppm over 240 h period	

Influence of T, P, flow rate, other*

Temp. dependence (zero):	≤ ± 0.05 ppm per °C
Temp. dependence (span):	≤ ± 0.07 ppm per °C
Pressure dependence:	+ 0.100 % of actual reading / hPa
Flow rate dependence:	≤ ± 0.1 ppm per 0.1 l / min
Cross sensitivity (zero) other gases:	≤ + 1.0 ppm @ 10 Vol.-% CO ₂ in dry air
Test gas 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)

* 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.

** Adjustable only via smartGAS Calibration-Tool SW.

All rights reserved. Any logos and/or product names are trademarks of smartGAS. The reproduction, transfer, distribution or storage of information contained in this brochure in any form without the prior written consent of smartGAS is strictly prohibited. All specifications – technical included – are subject to change without notice. Depending on the application, the target gas and the measurement range the technical data may differ. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale.

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.