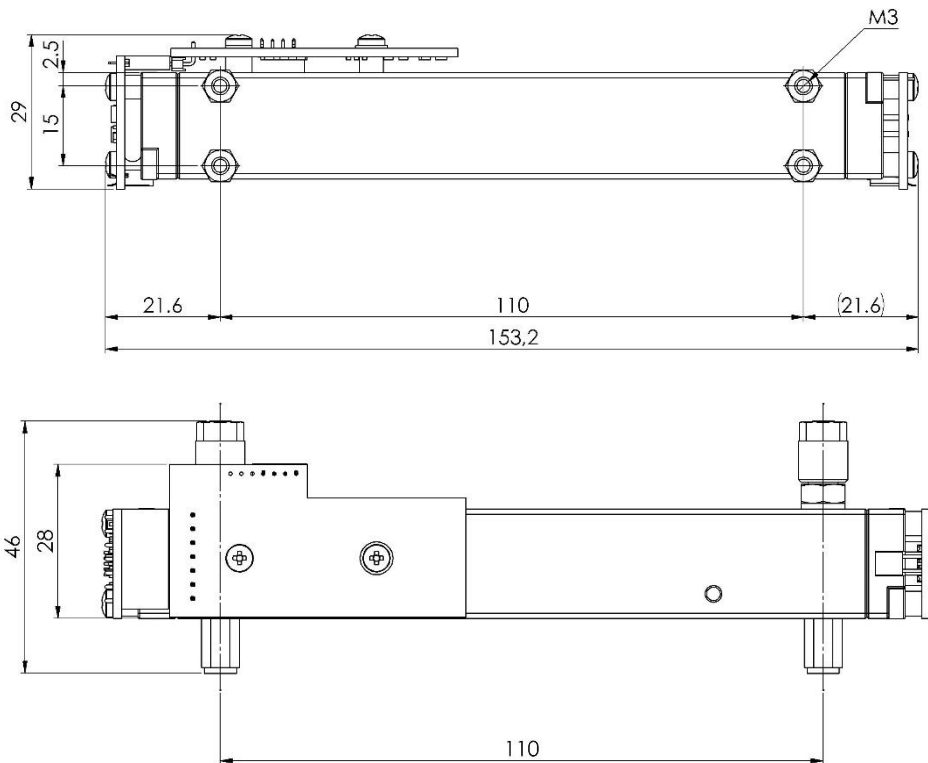
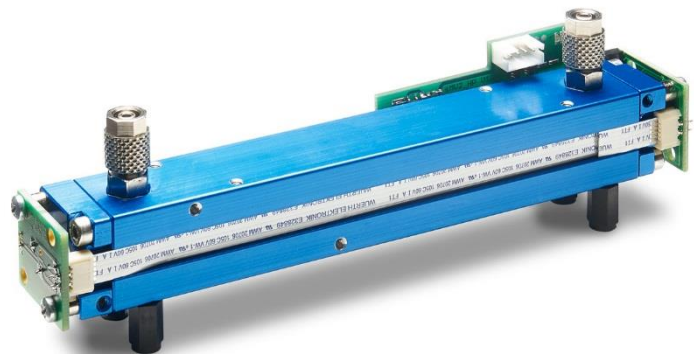


FLOW^{EVO}

Infrared gas sensor CH₄ // Methane // 5.0 Vol-%
smartGAS item number: F3-042506-05000

- Pre calibrated
- Compact design
- 3/5 mm gas line connectors
- 3.3 – 6.0 V DC supply voltage
- Modbus ASCII or RTU
- Status indication by LED
- Low drift



APPLICATION EXAMPLES

GAS ANALYSING // BIOGAS APPLICATION // ENVIRONMENTAL MONITORING

F3-042506-05000	CH₄ // Methane // 5.0 Vol.-%	
General features		
Measurement principle:	Non Dispersive Infra-Red (NDIR), dual wavelength	
Measurement range:	0 ... 5 Vol.-% Full Scale (FS)	
Gas supply:	by flow (nearly atmospheric pressure)	
Flow rate:	0.1 ... 1.0 l / min	
Dimensions (with stands):	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:	0.001 Vol.-%	
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 _{on} (0 to 90 % FS):	≤ 15.9 s	≤ 1.6 s
Detection limit (3 σ):	≤ 0.03 Vol.-%	≤ 0.07 Vol.-%
Repeatability:	≤ ± 0.05 Vol.-%	
Linearity error (straight line deviation):	≤ ± 0.05 Vol.-%	
Long term stability (zero):	≤ ± 0.044 Vol.-% over 1000 h period	
Long term stability (span):	≤ ± 0.315 Vol.-% over 1000 h period	
Influence of T, P, flow rate, other*		
Temp. dependence (zero):	≤ ± 0.01 Vol.-% per °C	
Temp. dependence (span):	≤ ± 0.01 Vol.-% per °C	
Pressure dependence:	+ 0.100 % of actual reading / hPa	
Flow rate dependence:	≤ ± 0.02 Vol.-% per 0.1 l / min	
Cross sensitivity (zero) other gases:	consult manufacturer	
Electrical inputs and outputs		
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, Ta = 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.