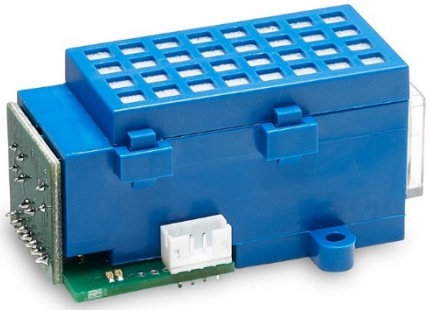
smartGAS.

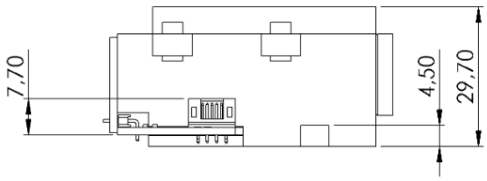
MADE IN GERMANY

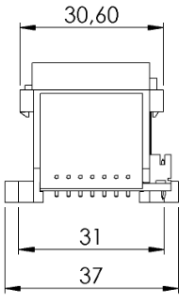
BASIC^{EVO}

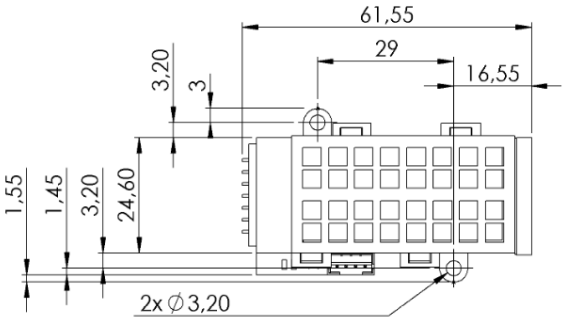
Infrared gas Sensor
Refrigerant R407c
2000 ppm
smartGAS item number: B3-802205-03000

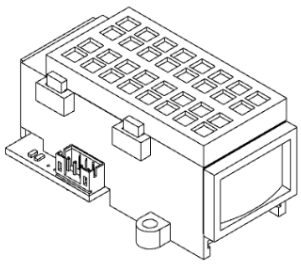


- **Pre calibrated**
- **Low drift**
- **Gas entry by diffusion**
- **3.3 - 6 V DC supply voltage**
- **Modbus ASCII or RTU**
- **Status indication by LED**









Application examples
Hotel air conditioning
Food storage rooms
Industrial Refrigeration
Food Transport
Research

Available equipment
Connect Interface
Wall mount enclosure
Calibration software
Mounting equipment

Available design in support
Mechanical installation
Data communication
also, as complete Transmitter

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DS_B3_802205-03000_2000ppm
Edition 04_05/2021

smartGAS.

BASIC^{EVO} I Refrigerant R407c I B3-802205-03000

General features

Measurement principle:	Non Dispersive Infra-Red (NDIR), dual wavelength
Measurement range:	0 … 2000 ppm Full Scale (FS)
Gas supply:	by diffusion (atmospheric pressure)
Mounting dimensions:	62 mm x 37 mm x 30 mm (L x W x H)
Warm-up time:	< 2 minutes (start up time) < 11 minutes (fade in finished) < 30 minutes (full specification)

Measuring response*

Response time (t_{90}):	appr. 60 s
Digital resolution:	1 ppm
Detection limit (3 σ):	≤ 10 ppm
Repeatability:	≤ ± 20 ppm
Linearity error (straight line deviation):	≤ ± 30 ppm
Long term stability (zero):	≤ ± 30 ppm over 12 month period
Long term stability (span):	≤ ± 40 ppm over 12 month period

Influence of T, P, flow rate, other*

Temp. dependence (zero):	≤ ± 3 ppm per °C
Temp. dependence (span):	≤ ± 6 ppm per °C
Pressure dependence:	+ 0.100 % of actual reading / hPa

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:	< 450 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:	-20 … + 40 °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.

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.