

MADE IN GERMANY

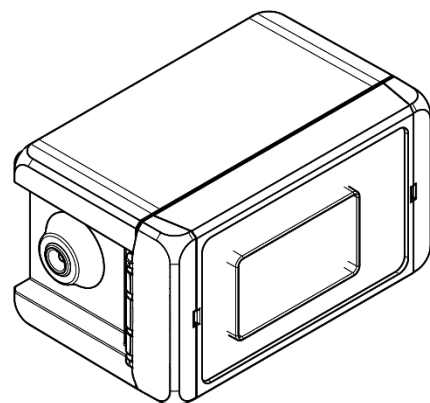
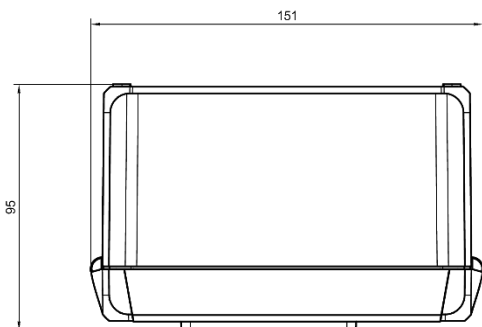
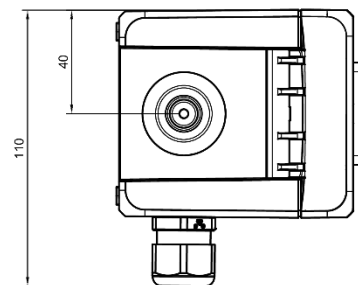
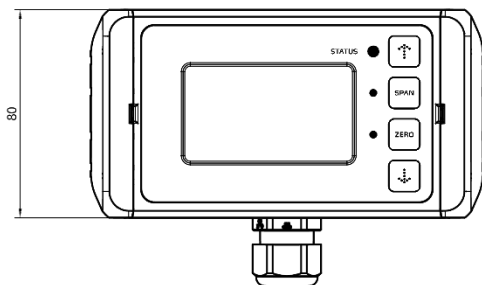


## TRANSMITTER<sup>EVO</sup>

Infrared gas detector  
Refrigerant R1234yf  
1000 ppm  
smartGAS item number: T4-782105-03000



- Ready to install
- IP54 protection
- 12 - 28V DC supply voltage



### Application examples

Hotel air conditions  
Laboratories  
Hospitals  
Research  
Food transport

### Available equipment

Calibration software  
Calibration adapter  
Calibration gas

### Available design in support

Mechanical installation  
Data communication

## General features

Measurement principle:	Non Dispersive Infra-Red (NDIR), dual wavelength
Measurement range:	0 ... 1000 ppm Full Scale (FS)
Gas supply:	by diffusion (atmospheric pressure)
Mounting dimensions:	151 mm x 80 mm x 95 mm (L x W x H)
Warm-up time:	< 2 minutes (start up time) < 11 minutes (fade in finished) < 30 minutes (full specification)
Protection class:	IP54
Electrical connection:	Cable diameter without adapter plug max. 1.5 mm <sup>2</sup> (single wire) or 1 mm <sup>2</sup> (strand). Cable diameter with adapter max. 2.5 mm <sup>2</sup>

## Measuring response\*

Response time (t <sub>90</sub> ):	appr. 60 s
Digital resolution:	1 ppm
Detection limit (3 σ):	≤ 7 ppm
Repeatability:	≤ ± 10 ppm
Linearity error (straight line deviation):	≤ ± 20 ppm
Long term stability (zero):	≤ ± 20 ppm over 12 month period
Long term stability (span):	≤ ± 20 ppm over 12 month period

## Influence of T, P, other\*

Temp. dependence (zero):	≤ ± 1.5 ppm per °C
Temp. dependence (span):	≤ ± 3 ppm per °C
Pressure dependence:	+ 0.100 % of actual reading / hPa

## Electrical parameters

Supply voltage	12 V . . . 28 VDC
Supply current (peak):	< 85 mA @ 12 V, < 45 mA @ 28 V
Inrush current:	< 100 mA
Average power consumption:	< 1000 mW
Digital output signal:	Modbus ASCII / RTU via RS 485, autobaud, autoframe
Analogue output signal:	0(4) –20 mA, max 500 Ω / 0-2 V / 0-5 V / 0-10 V (DC)
Calibration:	zero and span by SW or push buttons

## 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, T<sub>a</sub> = 22 °C, flow = 0.7 l / min for dry (not condensing) and clean sample gas. Stated values exclude calibration gas tolerance.

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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.