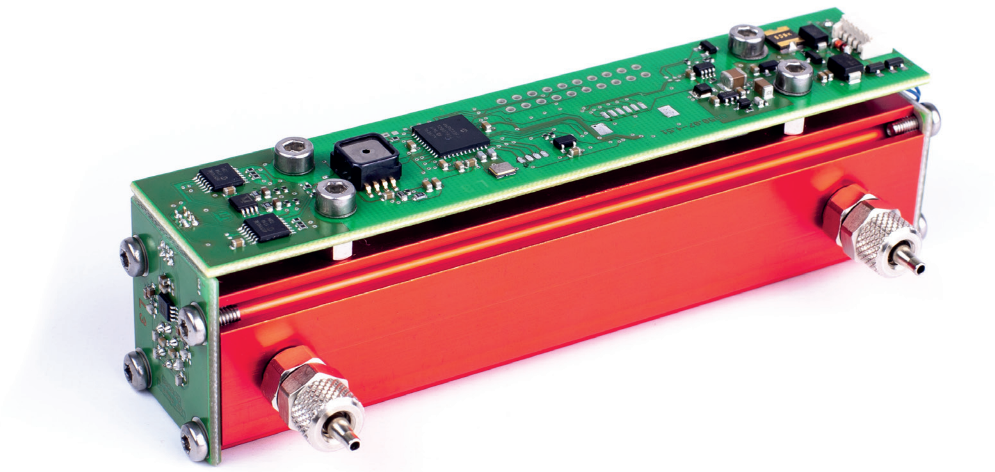
PRODUCT DATA SHEET

MicroFLOW IR methane sensor

Inline NDIR bench for CH_4 and hydrocarbon monitoring

MICRO-HYBRID



Inline NDIR CH_4 sensor for measuring combustible and explosive gases such as methane or propane*. Designed for various gas measurement applications like environmental monitoring, process control or leak detection, even for hand held gas detection systems.

The sensor can easily be integrated into OEM systems. IR dual beam technology and mems based components provide long term stability due to low signal drift.

* ATEX conformity must be guaranteed by the customer through flame arresters.

ADVANTAGES

- High accuracy by 5 point pre calibration
- Temperature and pressure compensated, integrated temperature measurement
- RS485 interface, customized interface for controlling keys and displays
- Low signal drift
- Low maintenace (maintenance service available)

APPLICATIONS

- Industry
  - environmental monitoring and process controll
  - detection of leaks in petro chemical facilities
- Mining
  - underground monitoring of methane levels
- Agriculture
  - process monitoring in bio gas plants

GAS SENSORS

Technical specification

General	
Measuring principle	NDIR
Measurement range	0 – 5 Vol.-% switchable to 4.4 Vol.-% as well as to 1 Vol.-% and to 0.88 Vol.-%
Gas supply	M5 or hose screw connection 6/4mm
Optimum flow rate (measurement)	1–2 l/min
Maximum flow rate (flushing)	6 l/min
Dimensions	123 mm x 30 mm x 40 mm (L x W x H)

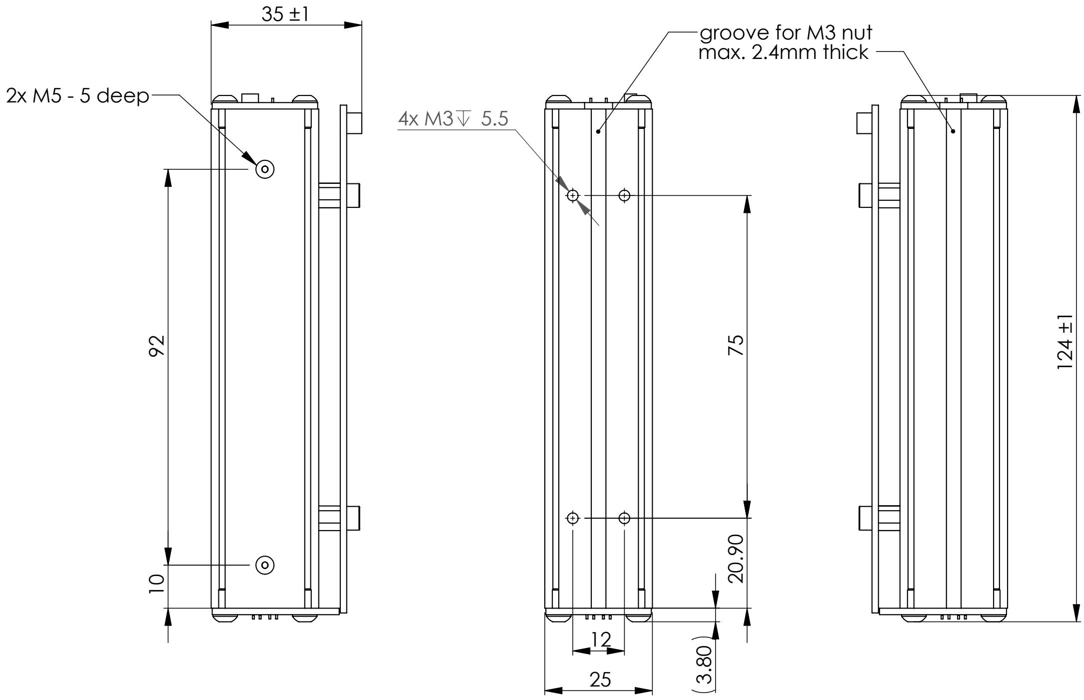
Electrical sizes	
Power supply	24 V ± 10% DC
Ø Power	< 2 W
Max. power @ start up	< 6 W
Max. current	0.1 A
Inrush current	0.25 A
Interface	Customized interface for controlling keys and display
Digital interface	RS485

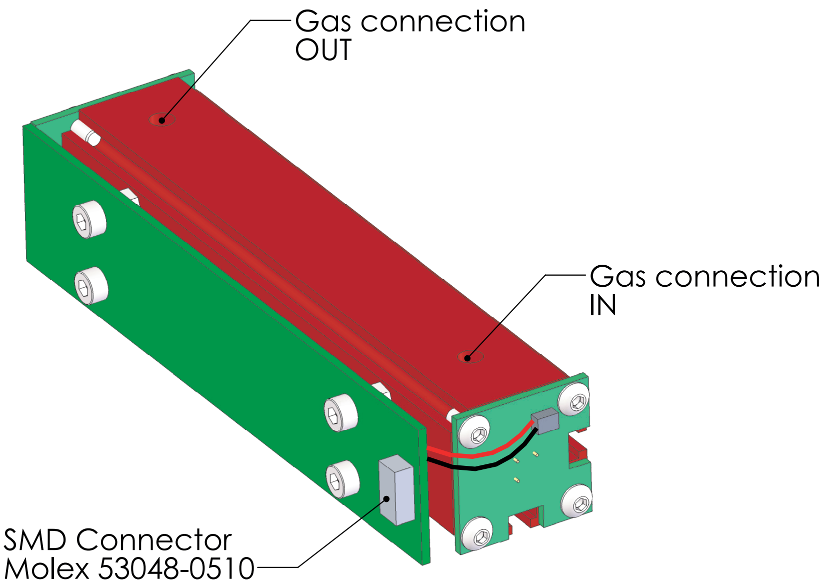
Metrological quantities	
Start-up time	60 s
Warm-up time	15 min (full scale)
Response time	(t90) < 10s @ 0.5 l/min
Accuracy	± 0.1 Vol.-% ± 2% MW
Repeatability	± 1.5 Vol.-%
Long-term stability in the measuring range	± 5% MBE or ± 10% @ 60 days

Climatic conditions	
Operating temperature	-20°C ... 65°C
Storage temperature	-20°C ... 65°C
Pressure range	800 ... 1150 hPa
Humidity	0 ... 95% rH non-condensing

Pin out	
Pin 1	24V IN
Pin 2	5V OUT
Pin 3	RS485 +
Pin 4	RS485 -
Pin 5	GND

Mechanical drawings





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