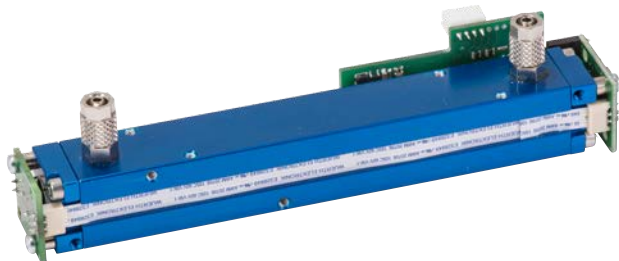
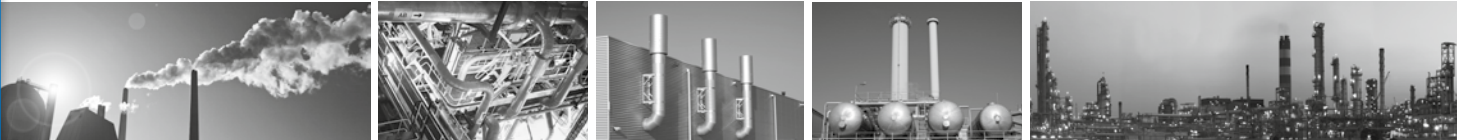


smartMODUL FLOW^{EVO}

CO // CARBON MONOXIDE // 2000 ppm

Infrared gas sensor CO 2000 ppm // F3-222205-05000



- Pre calibrated
- Compact design
- 3/5 mm gas line connectors
- 3,3 - 6 V DC supply voltage
- Modbus ASCII or RTU
- Status indication by LED
- Low drift

Non Dispersive Infrared (NDIR) gas sensor for process control and gas analysing using dual wavelength technology. Designed for emission monitoring, environmental analysing, process control and research in a wide range of gas measurement systems.

The FLOW^{EVO} CO sensor can easily be integrated into OEM systems, where long term stability, repeatability and reliable performance are required. It can be utilised in numerous fields of applications to provide vital data for efficiency enhancement, safety control and precise analysis measures. They are deployed as CO meters or flue gas analysers in incineration- and biogas-plants to monitor exhaust gas flows and ensure continuous process operation but also suit for various scientific applications.

Modbus ASCII or RTU data communication offer a variety of options to connect the FLOW^{EVO} sensor to a controller.

CO // CARBON MONOXIDE SENSOR

EMISSION MONITORING

ENVIRONMENTAL MONITORING

PROCESS CONTROL

RESEARCH

GAS ANALYSING

BIO GAS

FLOW^{EVO} // CO // CARBON MONOXIDE // 2000 ppm

Infrared gas sensor CO 2000 ppm // F3-222205-05000

blue performance

General features	
Measurement principle:	Non Dispersive Infra-Red (NDIR), dual wavelength
Measurement range:	0..2000 ppm Full Scale (FS)
Gas supply:	by flow (nearly atmospheric pressure)
Flow rate:	0.1 .. 1.0 l / min
Dimensions:	156 mm x 30 mm x 37 mm (L x W x H)
Warm-up time:	< 2 minutes (start up time) < 30 minutes (full specification)
Measuring response related to Pa = 1013 hPa, Ta = 25 °C, flow = 0.7 l /min	
Response time (t ₉₀):	Appr. 12 s @ 0.7 l / min
Digital resolution (@ zero):	1 ppm
Detection limit (3 σ):	≤ 20 ppm
Repeatability:	≤ ± 20 ppm
Linearity error (straight line deviation):	≤ ± 30 ppm
Long term stability (span):	≤ ± 50 ppm over 1000 h period
Long term stability (zero):	≤ ± 50 ppm over 1000 h period
Influence of T, P, flow rate, other related to Pa = 1013 hPa, Ta = 25 °C, flow = 0.7 l /min	
Temp. dependence (zero):	≤ ± 3 ppm per °C
Temp. dependence (span):	≤ ± 6 ppm per °C
Pressure dependence:	+0.134 % / hPa
flow rate dependence:	≤ ± 6 ppm per 0.1 l / min
cross sensitivity (zero) other gases:	≤ + 700 ppm @ 10% CO ₂ in dry air
gas dew point requirement:	< + 5 °C
Electrical inputs and outputs	
Supply voltage:	3.3V .. 6.0V DC
Supply current (peak):	< 400mA @ 3.3V, < 240mA @ 5.0V
Inrush current:	< 450mA
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)

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Please consult smartGAS Marketing 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.