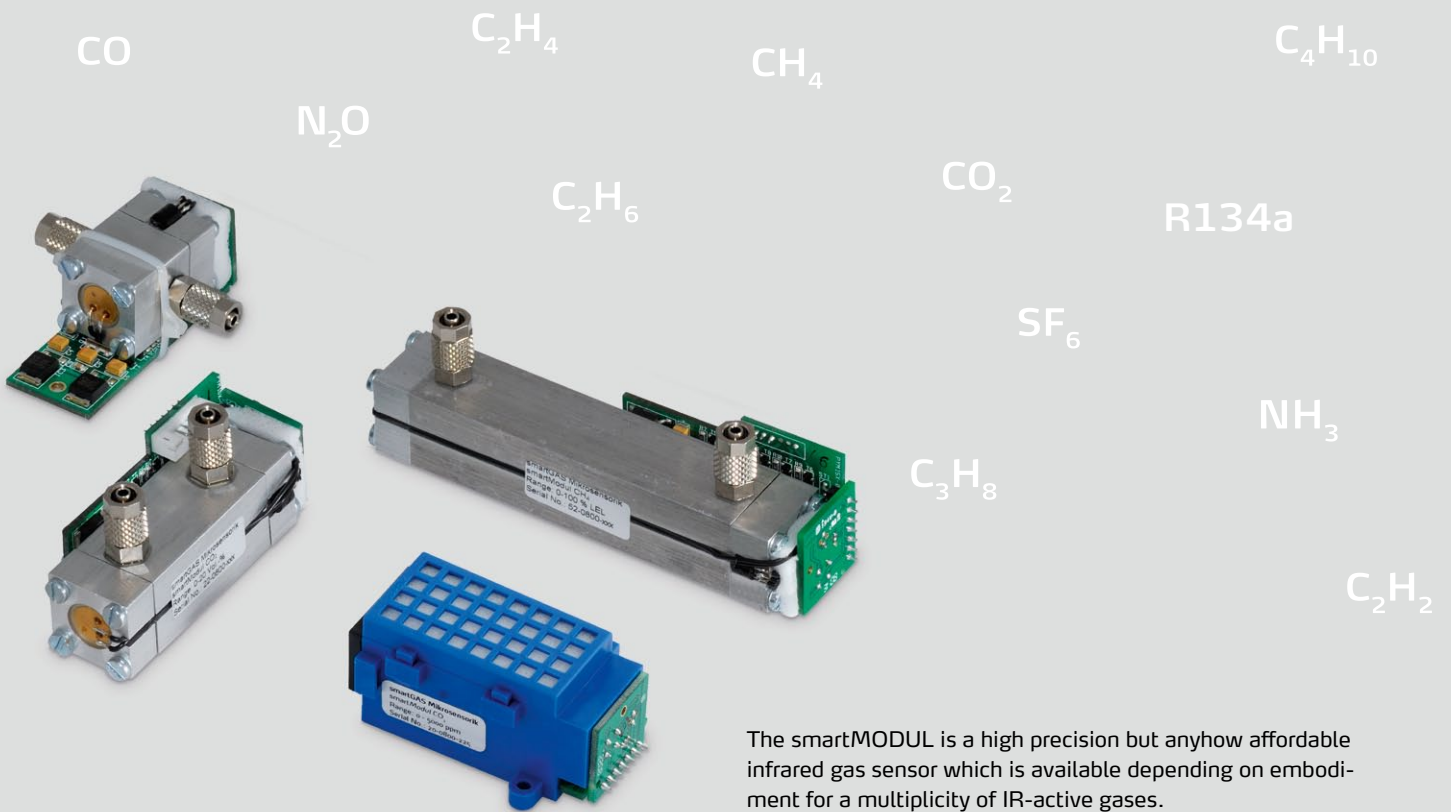


smartMODUL

Compact and affordable infrared gas sensor for a multiplicity of uses



The smartMODUL is a high precision but anyhow affordable infrared gas sensor which is available depending on embodiment for a multiplicity of IR-active gases.

The IR-gas sensor, which is built up in dual beam technology, fulfills highest requirements concerning accuracy, selectivity, reliability and economy. An integrated evaluation electronic system compensates all drift and temperature influences reliably and because of that, a genuine measurement result is guaranteed.

Because of its extremely compact dimensions and its wide variety of standard interfaces, the smartMODUL offers highest compatibility for a multiplicity of uses.

The flow-trough versions of the smartMODUL are housed in very robust aluminum cuvettes that also allow a constant temperature level. The modular construction also allows an easy adaptation of the optical stretch of way onto the specific measuring problem.

- Gas sensor with infrared measurement (NDIR)
- Dual beam technology
- High reliability
- High selectivity
- Bus-capable
- Analog or digital interfaces
- Durability > 10 years
- Optional with temperature stabilization



smartMODUL ^{BASIC}

High precision, compact IR-gas sensor

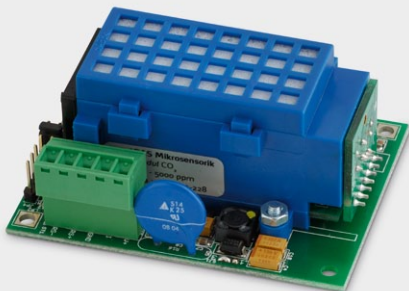
- Dual beam operation (NDIR)
- Open collector outputs
- Digital interface via μ -controller
- Dimensions 62 mm x 37 mm x 30 mm



smartMODUL ^{FLOW}

Gas inlet and outlet version, based on the BASIC version

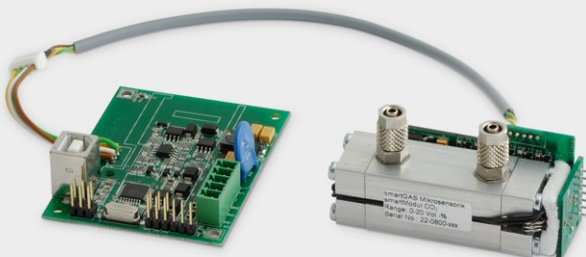
- Robust enclosure
- Hose connections for the gas inlet and outlet
- Applicable for high gas concentrations
- Customer-specific adaptable



smartMODUL ^{CONNECT}

High compatibility by integrated standard interfaces

- 12 - 30 V DC
- Analog interfaces (4-20 mA, 0-1 V resp. 0-2,5V)
- Digital interface RS 485 with Modbus-Open-Protocol
- Dimensions 72 mm x 55 mm x 33 mm



smartMODUL ^{PREMIUM}

Combination of FLOW and CONNECT version

- Aluminum cuvette for flow operation
- High compatibility by integrated standard interfaces
- For a wide range of flexible use
- Optional with heating element for temperature stabilization