

Overview

CO₂ / CO / NO / CH₄ / C_nH_m / N₂O

SO₂ / NO₂ / O₃ / CL₂ / H₂S

The third »RI.sens Multiline« module is a combination of both NDIR and NDUV Module on a common board. With this unit components can be measured simultaneously. The basic electronics can supply IR and UV radiation sources with different for 0 Hz (DC) to 100 Hz (AC). This system is an ideal tool for detecting multi-component gas at low ppm levels.



The various photometric components such as detectors, emitters, measuring sample cell, etc. will be assembled user-specifically in a **high-quality tabletop casing** by RITTER.



Applications

- › Biogas research
- › Environmental and process measuring technology
- › Elemental analysis
- › TOC-analyzers
- › Industrial gas analysis
- › Natural gas analysis

Characteristics and Benefits

- › Group of detectable gases: CO₂, CO, N₂O, NO, CH₄, C_nH_m und SO₂, NO₂, O₃, Cl₂, H₂S
- › Measurement accuracy ±2% of span (full scale)
- › No cross-sensitivity to H₂
- › Operating temperature: 5 - 45 °C
- › Operating pressure: 800 - 1200mbar (hPa) abs.
- › Flow rate range: 1 ltr/day – 100 ltr/h
- › Warm-up time: IR 2 min / UV 1 min
- › Response time (t₉₀): ≈ IR 3 s / UV 1-2 s depending on gas
- › Interface: USB, on request RS232
- › IR Sensor cuvette: Aluminum, gold plated for sensor length ≥ 100mm
- › UV Sensor cuvette: Stainless steel with inert coating inside and outside; PEEK for corrosive gases (H₂S, chlorine) on request
- › Incl. temperature compensation
- › Incl. data acquisition software
- › Power supply: 24 VDC (incl. power plug 100 - 240 VAC / 24 VDC)

Recalibration

- › Readjustment of the zero is recommended once a week.
- › Contamination of the measuring cuvette can lead to misalignment of the end point. Due to the integrated filter, readjustment of the endpoint is generally not required - but can be performed once a year.
- › Additionally, cartridges filled with an inert and the respective test gas for recalibration of the zero and end point can be provided.
- › Long-term drift is less than 1% FS (Fullscale) / 24 h.

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The most recent version of this data-sheet can be found at <https://www.ritter.de/en/datenblatt/ri-sens-multiline-module-3>

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