SENSORS »RI.SENS MULTILINE« ULTRAVIOLET SENSOR NDUV / UVRAS • DATA SHEET

Overview

NO / NO_2 / SO_2 / H_2S

For the detection of NO and H_2S an EDL (electrodeless gas discharge lamp) is used. A combination of both technologies (U UVLEDs) allows simultaneous gas analysis of NO, NO_2 and SO_2 in the lower ppm range, which is particularly important in f analysis (CEM, Continuous Emission Monitoring).

Measurement technology: In the EDL, N_2 and O_2 are converted to NO and produce selective UV radiation. With this radiati sensitivity free NO measurement is made possible. This method is called UV resonance spectroscopy (UVRAS).

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

- Exhaust gas monitoring (CEM, Continuous Emission Monitoring)
- Laboratory area
- Biogas research
- Industrial gas analysis
- Engine test benches
- Portable gas analysis (PEMS, Portable Emission Monitoring System)

Characteristics and Benefits

- Group of detectable gases: NO, NO_2, SO_2, H_2S
- Measurement accuracy ±2% of span (full scale)
- Simultaneous NO_x and SO_2 analysis
- No cross-sensitivity to H_2
- Temperature controlled up to 55 °C
- Fast response time < 3 seconds
- Durable EDL (> 16000 h)
- Flow-independent measurement 0-2 L/min
- No influence of gas humidity
- No NO_x converter required
- Compact size
- In »Thermobox« as standard for stable measurement conditions
- 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/data-sheet/ri-sens-multiline-module-4/

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