

## NDIR Analyser AMS 2500



available options:

pressure reducer  
electronical flowmeter  
pneumatic/electric pump  
different types of housings

### The Application:

The Analyser AMS 2500 operates on base of an NDIR sensor and equipped with a micro-processor for the highly accurate measurement. Changes in concentrations  $< 0,1$  Vol% can be measured. The available housings are designed for use in General Applications.

### The Measuring principle:

Gas analysis based on NDIR technique is an established method to determine the concentrations of gases in complex mixtures. Our sensor uses novel optical components for optimum analysis results. For the combined detection of CO and NO a multi wavelength detector is implemented. The Analyser AMS 2500 is developed for the determination of different concentrations of CO, CO<sub>2</sub> and NO.

### The Measuring system:

The Analyser AMS 2500 consists of an electronic, the pneumatic components for the gas supply and flow control, installed in an electronic housing 84 TE / 3 HE. To protect the analyser against high gas pressure and fluctuations, the analyser can be equipped with a pressure reducer for gas pressure up to 10 bar (abs) and a manual purge valve. A micro processor controls the electronics and the display. Calibration and service are menu-driven.

## Technical Data

Analyser	<b>AMS 2500 Analyser</b>
Measuring principle	NDIR
Application	Gases Industries Chemical Industries
Measuring range	CO-range 0 ... 5.000 ppm
Analogue signal port	(0) 4 ... 20 mA isolated
Repeatability	< 0,5 % F.S.
Linearity	+/- 1 % F.S.
Detection limit	< 0,5% of span
Drift	+/- 1% F.S. / 6 month
T90-Time	ca. 20 Seconds
Warm up time	25 Minutes
Pressure influence	+/- 0,015%/mbar
Temperature influence span	< 1% F.S./10K
Influence gas flow	< 0,5% F.S.
Display	2* 16 digit, illuminated LCD display 1. Line: display of concentration in ppm 2. Line: messages, device status, sensor parameters
Messages	1 system message (measuring value yes / no) max. 2 messages configurable as oxygen value, calibration message, measuring value in the range, flow rate
Gas connection	inlet / outlet 6 / 6 mm ferrule pack
Gas sampling	min. 30 NI/h, max. 60 NI/h
Sample pressure (inlet)	min. 1,05 bar abs., max. 2 bar abs.
Digital communication	serial interface RS232
operating temp.	+ 15 °C up to + 45 °C
Operating pressure	800 – 1200 mbar
Power supply	110 ... 230 VAC or 24 VDC
Protection / Housing / Dimensions	IP20 / electronics unit 28 TE / 3HU IP 20 /electronic housing 84 TE / 3 HU IP54 / portable housing 42 TE / 3 HE
Weight	2,5 kg ... 10 kg depending on housing and built-in options
Version: AMS 2500 E V-2019-05	

Specifications subject to change.