

## Trace Oxygen Analyser AMS 5100 Z



available options:

pressure reducer  
particle filter 2-7 $\mu$ m  
manual 5 way valve  
electronical/pneumatic gas supply pump  
electronical flowmeter  
different housings

### Application / Measuring principle

The basics of the Oxygen Analyser AMS 5100 Z is the development project "AMS 5000". The Trace Oxygen Analyser AMS 5100 Z is designed for the measurement of the lowest Oxygen traces under presence of oxidable components for example in Air separation plants. For this application the Oxygen Analyser AMS 5100 Z is equipped with a catalytic inactive Zircondioxid sensor. Due to the compact design the Oxygen Analyser AMS 5100 Z is available in different housing types.

A long list of options allows to adopt the Oxygen Analyser AMS 5100 Z for almost every application. The software for remote control and remote service with access via the customer computer network further increase the flexibility of the Oxygen Analyser AMS 5100 Z in an application.

## Technical Data

Analyser	<b>AMS 5100 Z</b>
Measuring principle	Catalytic inactive ZrO <sub>2</sub> probe
Application	Gases Industries, Chemical Industries
Measuring range	0 ... 25 Vol % 0 ... 10 ppmv
Analogue signal port	(0) 4...20 mA or 0...10V, galvanically separated
Reproducibility	+/- 2 % of the measuring value
Resolution	0,01 ppm – C(O <sub>2</sub> ) – 0,01 % depending on the O <sub>2</sub> concentration
T <sub>90</sub> -Time	< 20 Seconds
Display	2* 16 digit, illuminated LCD display 1. Line: display of concentration in ppm or Vol % 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
Gas connection	inlet / outlet 3 / 6 mm ferrule pack
Gas sampling	built-in inlet valve
Sample flow	min. 20 NI/h, max. 40 NI/h
sample pressure (inlet)	min. 1,1 bar abs., max. 2 bar abs.
Digital communication	serial interface RS232
Ambient operating temp.	-5 °C up to + 60 °C
Power supply	110 ... 230 VAC or 24 VDC
Protection / Housing / Dimensions	IP20 / electronics unit, 28 TE, 1/2", 19" / 3HU IP65 / wall mounting housing / ca. 300 x 260 x 130 mm (hxbxt) IP54 / portable housing 42 TE / 3 HU
Weight	2,5 kg ... 10 kg depending housing and built-in options
Options	pneumatic pump electronic flow control software for remote control and service particle filter 2-7µm manual 5 way valve pressure regulator
Version: AMS 5100 Z E V-2019-06	

**Please note:** The cross interference from combustible gases to the Oxygen measurement depends upon the temperature, the gas flow rate and both the concentration of Oxygen and of the combustible component.

Oxygen concentration	10 ppmv O <sub>2</sub>	100 ppmv O <sub>2</sub>
<b>Combustibles</b>	<b>cross interference</b>	<b>cross interference</b>
10 ppm H <sub>2</sub>	< -0,5 ppm O <sub>2</sub>	< -1 ppm O <sub>2</sub>
10 ppm CO	< -0,4 ppm O <sub>2</sub>	< -0,6 ppm O <sub>2</sub>
1000 ppm CH <sub>4</sub>	not traceable	< -1 ppm O <sub>2</sub>

Specifications subject to change.