

Oxygen Analyser for measurement in the Vol. % - Range AMS 5200



available options:

- pressure reducer
- particle filter 2-7 μ m
- manual 5 way valve
- electronical/pneumatic gas supply pump
- electronical flowmeter
- auto-Calibration
- back purge
- 2 free adjustable measuring values
- different housings

The Application:

The basics of the Oxygen Analyser AMS 5200 is the development project "AMS 5000" for a compact electronic to be used with Zircon dioxide and electrochemical sensors for the measurement of trace oxygen and Oxygen concentrations in Percent range.

The Oxygen Analyser AMS 5200 is designed for the measurement of Oxygen concentrations in noble gases and process gases without combustibile impurities. For this application the Oxygen Analyser AMS 5200 is equipped with a Zircondioxid sensor. Due to the compact design the Oxygen Analyser AMS 5200 fits in a electronic housing IP20, 28 TE, 3 HE with a depth of 250 mm. The Oxygen Analyser AMS 5200 is available in different housings for General Applications and classified areas.

The Measuring principle:

The Zircondioxid sensor is the ideal detector for the measurement of Oxygen in gases without combustible impurities. The Zircondioxid sensor can be installed in the housing of the Oxygen Analyser AMS 5200. Using a calibration adapter with the Zircondioxid sensor, the Zircondioxid sensor can also be installed directly in a process gas pipe. This setup allows easy supply of calibration and reference gas to the sensor by using a separate pneumatic unit. In combination with the optional, time controlled auto-calibration feature the already high accuracy and reproducibility of the Oxygen Analyser AMS 5200 is improved further.

The Measuring system:

A long list of options allows to adopt the Oxygen Analyser AMS 5200 for almost every application. Four measuring ranges with automatic switch-over and digital measuring range recognition can be set freely within the maximum measuring range. The software for remote control and remote service with access via the customer computer network further increase the flexibility of the Oxygen Analyser AMS 5200 in a application.

Technical Data

Analyser	AMS 5200 Analyser
Measuring principle	ZrO ₂ sensor with Pt-electrodes
Application	Soldering machines OEM application Gases Industries Chemical Industries
Measuring range	0 ... 25 Vol %
Analogue signal port	(0) 4 ... 20 mA or 0 ... 10V, galvanically separated
Reproducibility	+/- 2 % of the measuring value
Resolution	0,01 %
T90-Time	ca. 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 rate
Gas connection	inlet / outlet 3 / 6 mm ferrule pack
Gas sampling	min. 30 NI/h, max. 50 NI/h
Sample pressure (inlet)	min. 1,01 bar abs., max. 10 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 / 3HU IP65 / wall mounting housing / ca. 300 x 260 x 130 mm (hxbxt) IP54 / portable housing 42 TE / 3 HE IP 54 / panel mounting 144 x 144 mm
Weight	2,5 kg ... 10 kg depending on housing and built-in options
Options	pneumatic suction Mechanical and electronic flow analysis manual 5 way valve Particle filter 2-7µm Software for remote display and service max. 4 measuring ranges automatically switching with digital range detection auto-calibration pressure regulator
Version: AMS 5200 E V-2013-07	

Specifications subject to change.