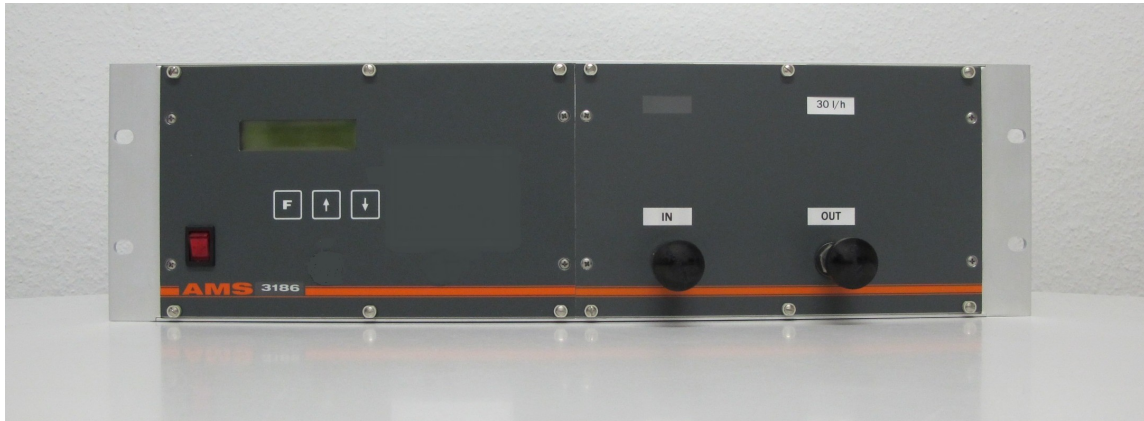


Trace Oxygen Analyser AMS 3186

Measuring range 0...1 ppm

with heated pneumatic cassette



The Application:

The Trace Oxygen Analyser AMS 3186 operates on base of an electrochemical sensor. The Trace Oxygen Analyser AMS 3186 is a micro-processor controlled analyser for the highly accurate measurement of lowest oxygen traces. Changes in concentrations of < 0,1 ppm of oxygen with a resolution of 0,01 ppm can be measured. The available housings are designed for use in General Applications. The lowest oxygen measuring range is 0 ... 1 ppm.

The Measuring system:

Besides of the measuring cell and pneumatic components we are also heating the gas pipes or the highest repeatability / stability measurement in a range of 0...1 ppm. For that reason our analyser is divided into 2 parts. The electrical connections are done by assembled cables on the backside of the analyser via screws. The temperature in the pneumatic cassette is controlled and adjusted to a fixed value (range +10...+40°C). By that fact the fluctuations of the ambient temperature can be taken into account. An easy exchange of the gas-tight-potted cell leads to a very fast restart of the measurement and avoids large purge times.

Technical Data

Analyser	AMS 3186
Measuring principle	Electrochemical oxygen sensor
Application	Gases Industries, Chemical Industries, Process Measurement
Measuring range	4, automatic selection, digital ID, adjustable, for example 0 ... 1 / ...10 / ...100 / ...1.000 ppmv
Analogue signal port	0 (4) ... 20mA, galvanically separated, with measuring range changeover and digital identification
Reproducibility	+/- 2 % of the measuring value, +/- 0,5 % measuring range
Resolution	0,01 ppm - C(O ₂) -1 ppm, depending on the O ₂ concentration
T90-Time	< 30 seconds
Long term drift	< 1 % per month
Display	2* 16 digit, illuminated LCD display
Analyser Status Messages	System Status, Calibration, Service via potential free contact relays
Oxygen Messages	2 Messages, configurable as Oxygen Alarm High / Low via potential free contact relays
Gas connection	inlet / outlet 3 / 6 mm ferrule pack (other onrequest)
Gas sampling	built-in inlet / outlet valve, flowmeter
Sample flow	min. 20 NI/h, max. 40 NI/h
Sample pressure (inlet)	min. 1,05 bar abs., max. 2 bar abs.
Sample pressure (measuring cell)	max. 50 mbar pressure
digital communication	serial interface RS 232
Ambient operating temp.	- 5 °C up to + 45 °C
Relative humidity of the gas	0 ... 99 % not condensing
Power supply	110...230 VAC, 24 VDC
Protection / Housing / Dimensions	2 x 1/9 19" cassette, IP 20
Ex-classification (*Option)	in IP 55 wall mounting housing with inert gas purge also qualified for applications in Ex-Zone 2
Weight	5 – 7 kg
Options	bypass- and purge valve, manual electronically flow control electrical/pneumatic gas pump auto-calibration, also with remote control particle filter 2-7µm pressure reducer max. 10 bar, out 50 mbar
Version: AMS 3186 E V-2019-01	

Specification subject to change.