

GEN' AIR

Oxygen pump-gauge



The GEN' AIR is used to generate and measure various oxygen atmospheres. It operates according to the zirconia ionic conduction principle.

The GEN' AIR is made in two parts:

- The pump: using a low gas flow, between 1 and 13l/h, it raises or decreases the concentration of oxygen in the gas that passes inside its zirconia tube.
- The gauge: it measures the partial pressure produced by the pump. Thanks to MicroPoas¹ it gives a very accurate, very fast measurement.

¹Patented design (University of Grenoble - France)

- *Generation and analysis of atmospheres with controlled oxygen rates.*
- *Use of only small quantity of carrying gas.*
- *Limited cost owing to the use of a single gas.*
- *Large dynamic scale.*
- *Measurement completely independent from the outside ambient conditions.*
- *Almost maintenance-free and low servicing requirements.*
- *Extremely high reliability and high performance.*

TECHNICAL SPECIFICATION

Measurement principle	MicroPoas* (Document ref.S101GB), Zirconia sensor with built-in metallic reference
Range	10 ⁻³⁵ to 0.25 atm
	Ambient pressure adjustment
Accuracy	3 % relative
Gas flow rate	from 1 to 13 l/h
Output signals	<ul style="list-style-type: none">• 0-20 mA or 4-20 mA, linear signal, with galvanic insulation• RS 232 port
Alarms	2 thresholds alarms and 1 general fault alarm.
Power supply	230 V or 110 V - 50/60 Hz
Dimensions and Weight	430 x 170 x 430 mm (wxhxd) - 15 kg

EXAMPLES OF PERFORMANCES²

Voltage applied to the pump (mV)	Oxygen partial pressure (atm)
200	3.70E-02
400	2.30E-02
625	5.40E-03
900	1.10E-08
-1265	1.40E-01

² at 1.6 l/h and 800°C for a gas containing 5% of oxygen in nitrogen

OPTION

- Total pressure adjustment

Specifications are subject to change - for improvement purposes - without notice