

PI2-MS

ppb and ppm Oxygen Analyzer

The ultra trace PI2-MS oxygen analyzer delivers precise, stable, and reliable oxygen measurement in gases at ppb and low ppm levels. Using advanced electrochemical sensor technology, it ensures fast response times to fluctuations, while offering user-friendly operation and cost-efficient ownership. Versatile mounting options - bench/portable, wall or panel - ensure seamless integration for various locations, through a pure gas distribution system.



Highlights

- Trace oxygen measurement ranges:
0...500, 0...1000 ppb
0...1, 0...10, 0...100, 0...1000 ppm
- Bench/portable, wall or panel mounting options
- Fast recovery from upset conditions
- Long sensor-life and low cost of ownership
- Sensor bypass

Applications

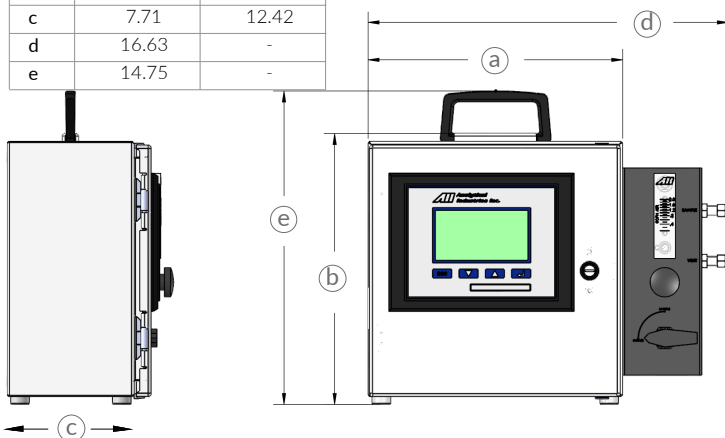
- Gas generation purity
- Process monitoring in semi-conductor and electronics industries
- Purge monitoring in space and aerospace industries
- Isolators and gloveboxes
- Specialist metal processing
- Purity verification of N₂, H₂ and Ar
- Field service gas line testing (bench unit)

Technical Specifications

Sensor	
Part Number	GPR-12-2000 MS2E
Measurement Range	0...500, 0...1000 ppb 0...1, 0...10, 0...100, 0...1000 ppm
Accuracy (at constant conditions, once thermal stability is achieved)	< 3 % of reading or +/- 5 ppb (whichever is greater)
Output Resolution	1 ppb
Lower Detection Limit (LDL)	< 2.5 ppb _v
Sample Flow Rate (application dependent)	1...2 SCFH (0.5...1 LPM)
Pressure Range	700...1400 mbar (10...20 psi)
Response Time (T ₉₀)	< 15 seconds
Recovery Time	See Recovery Time table below
Operating Temperature Range	0...+45 °C (+32...113 °F)
Life Expectancy (application dependent)	Up to 18 months
Shelf Life	6 months
Calibration Interval (application dependent)	Monthly (recommended)
Analyzer	
Electrical	
Display	LCD
Output Signal	4...20 mA isolated, 0...1 V and 0...5 V
Digital Communications	RS232
Relay Output Options	2-off user -adjustable alarms form C relay contacts non-latching
Range ID	1...5 V DC
Power Supply	100...240 V AC
Maximum Power Consumption	120 W
Mechanical	
Gas Connections	1/4" compression glands
Inlet Pressure	0.35...2.07 barg (5...30 psig) with atmospheric vent Max. 248 barg (3600 psig) with high pressure regulation option
Compensation	Temperature Heated sample system and sensor housing
Analyzer Housing Material	Painted sheet metal
Mounting	Bench/portable, wall, panel mount

Dimensions (inches)

	Bench/ Portable	Wall
a	12	10.79
b	13.13	7.47
c	7.71	12.42
d	16.63	-
e	14.75	-



CAUTION

Analytical Instruments Inc (Aii) is part of the Process Sensing Technologies Ltd. group (PST). As customer applications are outside of PST control, the information provided is given without legal responsibility. Customers should test under their own conditions to ensure the equipment is suitable for the intended application(s).

Recovery Time

O ₂ Level	Duration	O ₂ Target	Recovery N ₂
9 ppm	2 minutes	10 ppb	10 minutes
Air	30 seconds	1 ppm	45 minutes

*Bench/portable unit pictured with flow meter and bypass valve.

We adopt a continuous development program which sometimes necessitates specification changes without notice.
For technical assistance or enquiries about other options, please contact us here:
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