

GPR-2500 Series

Percent Level Oxygen Analyzers for General Purpose and Hazardous Areas



The GPR-2500 series from AII offers a flexible platform with two types of enclosure, 4 ranges and General Purpose or ATEX certified units available.

All units are capable of auto-ranging or being manually locked on a single range.

Additional features included in the GPR-2500A are mains power, barometric pressure compensation and two user configurable alarms.

Highlights

- 0-1%, 0-5%, 0-10%, 0-25%**
- ATEX certified to EX II 2G EX ia IIB T4
- 12 to 24 V DC, loop powered transmitters
- Sensor life, warranty and performance is unmatched
- Temperature compensation as standard
- Stainless steel wetted parts
- Excellent operating temperature, -20°C
- Sensitivity 0.5% full scale

**The GPR-2500 AMO is ranged 0-100% full scale

Applications

- Oxygen analysis in inert, helium, mixed and acid (CO₂) gases
- O₂ in nitrogen blankets for artefacts in museums
- Modified atmosphere packaging

Technical Specifications

Common Specifications					
Accuracy	<2% of full scale range under constant conditions				
Analysis ranges	0-1%, 0-5%, 0-10%, 0-25%				
Approvals	See individual models on reverse				
Area classification	General Purpose or ATEX approved*				
Calibration	3 month interval using air or certified span gas or air with O ₂ value approximating 80% of full scale range balance N ₂				
Compensation	Temperature compensation as standard; barometric pressure compensation on analyzer versions (GPR-2500A only)				
Connections	1/8" compression tube fittings				
Controls	Water resistant keypad; menu driven range selection, calibration and system functions				
Display	Graphical LCD 70 x 35mm; resolution .01 ppm				
Enclosure	See individual models on reverse for material, size and weight				
Flow sensitivity	None between 0.2 to 2.4 NI/min, 0.5 to 0.95 NI/min recommended				
Linearity	±1% of full scale				
Pressure	<table border="0"> <tr> <td>Inlet</td> <td>Regulate to 0.3 to 2 barg to deliver 0.5 to 0.9 NI/min flow to transmitter</td> </tr> <tr> <td>Vent</td> <td>Atmospheric</td> </tr> </table>	Inlet	Regulate to 0.3 to 2 barg to deliver 0.5 to 0.9 NI/min flow to transmitter	Vent	Atmospheric
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Vent	Atmospheric				
Power	12 to 24 V DC, loop powered for transmitters; 12 to 28 V DC or 110 to 220 V AC (GPR-2500A only)				
Response time	90% of final full scale reading in 13 seconds				
Sensitivity	<0.5% of full scale range				
Sensor model	See individual model numbers				
Sensor life	24 to 32 months in <1000 ppm O ₂ @ +25°C and 1 atmosphere				
Signal output	4-20 mA				
Temperature range	-10 to +45°C (GPR sensor) -20 to +45°C (XLT sensor)				
Warranty	12 months analyzer, 12 months sensor				
Wetted parts	Stainless steel				
Optional Equipment					
Sample conditioning - pump, filter, scrubbers - contact Michell Instruments					

*See certification box

ATEX Certified - Directive 94/9/EC
Examination Cert: INERIS 08ATEX0036



II 2 G
Ex ib IIB T4
T_{amb} -20°C to +50°C



0080

GPR-2500 Series

Percent Level Oxygen Analyzers for General Purpose and Hazardous Areas

Every GPR-2500 from AII has the following features as standard (unless otherwise stated):

- 4 ranges from 0-1%, 0-5%, 0-10%, 0-25%**
- Standard sensor models are designated GPR, for gases containing >0.5% CO₂ the XLT sensor should be selected
- 12 to 24 V DC loop powered
- Temperature compensation (T)
- Stainless steel wetted parts
- 3 month calibration intervals
- 4 button user interface with LCD display
- ATEX versions require intrinsic safety barrier MTL7706+ or equivalent

Model	Case type	Sensor type	Sensor life (months)	Model specific features
GPR-2500	1	GPR-11-32-RTS or XLT-11-24-RTS	GPR = 32 XLT = 24	N/A
GPR-2500N	2	GPR-11-32-4 or XLT-11-24-4	GPR = 32 XLT = 24	N/A
GPR-2500S	1	GPR-11-32-RTS or XLT-11-24-RTS	GPR = 32 XLT = 24	Atmospheric sampling; Inlet pressure for cal gas as per standard spec;
GPR-2500SN	2	GPR-11-32-4 or XLT-11-24-4	GPR = 32 XLT = 24	Atmospheric sampling; Inlet pressure for cal gas as per standard spec;
GPR-2500A	2	GPR-11-32-4 or XLT-11-24-4	GPR = 32 XLT = 32	Barometric pressure compensation; 2 user configurable alarms, field programmable***; 12 to 28 V DC 2 wire loop or 110 to 220 V AC (mains powered)
GPR-2500 ATEX	1	GPR-11-32-RTS or XLT-11-24-RTS	GPR = 32 XLT = 24	N/A
GPR-2500N ATEX	2	GPR-11-32-4 or XLT-11-24-4	GPR = 32 XLT = 24	N/A
GPR-2500S ATEX	1	GPR-11-32-RTS or XLT-11-24-RTS	GPR = 32 XLT = 24	Atmospheric sampling; Inlet pressure for cal gas as per standard spec;
GPR-2500SN ATEX	2	GPR-11-32-4 or XLT-11-24-4	GPR = 32 XLT = 24	Atmospheric sampling; Inlet pressure for cal gas as per standard spec;
GPR-2500 AMO	2	GPR-11-120-4	GPR = 24	0-100% full scale range; Barometric pressure compensation; 2 user configurable alarms, field programmable***; 12 to 28 V DC 2 wire loop or 110 to 220 V AC (mains powered)

**The GPR-2500 AMO is ranged 0-100% full scale

***Alarms are magnetic coils rated 3 A @ 100 V A C, field programmable alarm time delays, alarm bypass for calibration and system fail alarm

Case Type 1



Technical Specifications

Material	Painted aluminium
Weight	3.6kg
Dimensions	23 x 10 x 8cm (h x w x d)

Case Type 2



Technical Specifications

Material	Fiberglass NEMA 4X
Weight	4.5kg
Dimensions	21 x 17 x 11cm (h x w x d)