GPR-1500 Series
Trace Oxygen Analyzers for General Purpose and Hazardous Areas

GPR-1500   **GPR-1500DA**

The GPR-1500 series from AII offers a flexible platform with two types of enclosure, 4 or 5 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 analyzer are mains power, barometric pressure compensation and two user configurable alarms.

Highlights

- 0-10*, 0-100, 0-1000, 1% and 0-25% (for calibration)
- 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

*Not available with 4 range models

Applications

- Oxygen analysis in inert, helium, mixed and acid (CO_2)
- Low level ppm O_2 in light bulb filling

Technical Specifications

Common Specifications	
Accuracy	<2% of full scale range under constant conditions
Analysis ranges	0-10*, 0-100, 0-1000, 1% and 0-25% (for calibration)
Approvals	See individual models on reverse
Area classification	General Purpose or ATEX approved**
Calibration	3 month interval using certified span gas (preferred for fastest online time) 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 (models denoted with an 'a')
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 Nl/min, 0.5 to 0.95 Nl/min recommended
Linearity	±1% of full scale
Pressure Inlet	Regulate to 0.3 to 2 barg to deliver 0.5 to 0.9 Nl/min flow to transmitter
Vent	Atmospheric
Power	12 to 24 V DC, loop powered for transmitters; 12 to 28 V DC or 110 to 220 V AC for analyzers
Response time	90% of final full scale reading in 10 seconds
Sensitivity	<0.5% of full scale range
Sensor model	See individual model numbers
Sensor life	24 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

CE 0080

MICHELL Instruments

GPR-1500
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Every GPR-1500 from AII has the following features as standard:

- 4 or 5 ranges from 0-10*, 0-100, 0-1000, 1% and 0-25% (for calibration)
- Standard sensor models are designated GPR, for gases containing >0.5% CO_2 the XLT sensor should be selected
- 12 to 24 V DC loop powered
- Temperature compensation (T)
- Barometric pressure (B) on analyzer models only
- 3 month calibration intervals
- Choice of sensors for standard gas streams containing >0.5% CO_2 (XLT version)
- 4 button user interface with LCD display

*Not available with 4 range models

Model	Ranges	Case type	Power	Alarms	Compensation	Sensor type
GPR-1500	5	1	12 to 24 V DC	None	T	GPR-12-333 or XLT-12-333*
GPR-1500D	4	1	12 to 24 V DC	None	T	GPR-12-100-M or XLT-12-100-M
GPR-1500N	5	2	12 to 24 V DC	None	T	GPR-12-333 or XLT-12-333*
GPR-1500DN	4	2	12 to 24 V DC	None	T	GPR-12-100-M or XLT-12-100-M
GPR-1500A	5	1	12 to 28 V DC or 110 to 220 V AC	2 user configurable alarms, field programmable***	T & B	GPR-12-333 or XLT-12-333*
GPR-1500DA	5	1	12 to 28 V DC or 110 to 220 V AC	2 user configurable alarms, field programmable***	T & B	GPR-12-100-M or XLT-12-100-M
GPR-1500 ATEX	5	1	12 to 24 V DC	None	T	GPR-12-333 or XLT-12-333*
GPR-1500N ATEX	5	2	12 to 24 V DC	None	T	GPR-12-333 or XLT-12-333*
GPR-1500D ATEX	4	1	12 to 24 V DC	None	T	GPR-12-100-M or XLT-12-100-M
GPR-1500DN ATEX	4	2	12 to 24 V DC	None	T	GPR-12-100-M or XLT-12-100-M

***Alarms are magnetic coils rated 3A @ 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)