

GPR-1000/1100/1200/2000/3500

Portable Oxygen Analyzers for General Purpose and Hazardous Areas



GPR-2000

GPR-1200

The portable oxygen analyzer range from AII has several variants capable of measuring from parts per billion (ppb) to pure O₂.

Featuring advanced galvanic trace sensors for parts per million (ppm) analysis with proven life times of up to 24 months in normal operation. Percent level analyzers have a life time of up to 32 months.

User-friendly Human Machine Interface (HMI) with a common menu structure throughout the range. Compact and robust enclosures designed to withstand the demands of industrial field use.

Integrated bypass on selected models that isolates the sensor when not sampling allowing trace levels of O₂ to be measured quickly and vastly extends the life of the sensor.

Optional sample system items include flow meters, pumps, filters & scrubbers.

Highlights

- Fast recovery to <10 ppm from exposure to air
- Sensor life, warranty and performance is unmatched
- Excellent compatibility in CO₂ backgrounds
- Operating temperature down to -20°C
- Sensitivity 0.5% full scale

Applications

- Oxygen analysis in inert, helium, mixed and acid (CO₂) gases

Technical Specifications

Common Specifications					
Accuracy	<2% of full scale range under constant conditions				
Analysis ranges	See individual models on reverse				
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	Barometric pressure and temperature				
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	Painted aluminium NEMA 4X (see individual and models for 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
Inlet	Regulate to 0.3 to 2 barg to deliver 0.5 to 0.9 NI/min flow to transmitter				
Vent	Atmospheric				
Power	Rechargeable batteries with mains power adapter (charge in a safe area only)				
Response time	90% of final full scale reading in 10 seconds				
Sensitivity	<0.5% of full scale range				
Sensor model	See individual models				
Sensor life	24 months in <1000 ppm O ₂ @ +25°C and 1 atmosphere				
Signal output	0 to 1 V (GPR-3500 has 4-20 mA)				
Temperature range	+5 to +45°C (GPR sensor) -20 to +45°C (XLT sensor)				
Warranty	12 months analyzer, 12 months sensor				
Wetted parts	Stainless steel (optional on GPR-1000)				
Optional Equipment					
Carrying case with custom foam insert					
Sample conditioning - pump, filter, scrubbers - contact Michell Instruments					

*See certification box

ATEX Certified - Directive 94/9/EC
Examination Cert: INERIS 07ATEX0025X



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



0080

GPR-1000/1100/1200/2000/3500

Portable Oxygen Analyzers for General Purpose and Hazardous Areas

GPR-1000, GPR-1000 ATEX



Technical Specifications

Range	0-1000 ppm, 1%, 25% (Cal FS)
Area classification	GPR-1000: General Purpose GPR-1000 ATEX: Ex II 2 G Ex ib IIB T4 T _{amb} -20 to +50°C
Enclosure size	1.2 x 2.7 x 0.9m, 3.6kg
Sensor model	GPR-12-100-M XLT-12-100-M for CO ₂

GPR-1100, GPR-1100 ATEX



Technical Specifications

Range	0-10, 0-100, 0-1000 ppm, 0-1%, 0-25% (Cal FS)
Area classification	GPR-1100: General Purpose GPR-1100 ATEX: Ex II 2 G Ex ib IIB T4 T _{amb} -20 to +50°C
Enclosure size	1.2 x 2.7 x 0.9m, 3.6kg
Sensor model	GPR-12-333 XLT-12-333 for CO ₂

GPR-1200 MS, GPR-1200 MS ATEX/GPR 1200, GPR-1200 ATEX



Technical Specifications

Range	GPR-1200 & ATEX: 0-10, 0-100, 0-1000 ppm, 0-1%, 0-25% (Cal FS) GPR-1200 MS & MS ATEX: 0-1, 0-10, 0-100, 0-1000 ppm
Area classification	GPR-1200 & MS: General Purpose GPR-1200 ATEX & MS ATEX: Ex II 2 G Ex ib IIB T4 T _{amb} -20 to +50°C
Enclosure size	2.6 x 2.7 x 0.9m, 5.4kg
Sensor model	GPR-1200 MS & MS ATEX: GPR-12-2000 MS GPR-1200 & ATEX: GPR-12-333 XLT-12-333 for CO ₂

GPR-2000, GPR-2000 ATEX



Technical Specifications

Range	0 - 1%, 0-5%, 0-10%, 0-25% (Cal FS)
Area classification	GPR-2000: General Purpose GPR-2000 ATEX: Ex II 2 G Ex ib IIB T4 T _{amb} -20 to +50°C
Enclosure size	1.2 x 2.7 x 0.9m, 3.6kg
Sensor model	GPR-11-32-RTS XLT-11-32-RTS for CO ₂

GPR-3500 MO



Technical Specifications

Range	0-100% FS Note: for calibration 0-95% FS range balance N ₂
Area classification	General Purpose
Enclosure size	1.2 x 2.7 x 0.9m, 3.6kg
Sensor model	GPR-11-120-RTS