

GPR-1800/2800 AIS/IS

Intrinsically Safe ATEX Analyzers



GPR-1800 ATEX Intrinsically Safe Oxygen Analyzer from AII

The GPR-1800 measures ppm levels of oxygen and offers optional Modbus RTU Communication and modular sampling system. It is available with alarm relays (GPR-1800 AIS) or without (GPR-1800 IS).

GPR-2800 ATEX Intrinsically Safe Oxygen Analyzer from AII

The GPR-2800 measures percent oxygen and offers optional Modbus RTU Communication and modular sampling system. As with the GPR-1800, it is available with or without alarm relays.

Highlights

- 2 sensor options available
- 12 to 28 V DC power or mains power (AIS only)
- 2 x field selectable concentration alarms
- Modbus communication (AIS only)
- Standard sample includes sample/span valve, moisture filter, flow meters
- Optional fully automated sample system

Applications

- Oxygen analysis in inert, hydrocarbon, helium, hydrogen, mixed and acid (CO₂) gas streams
- Landfill gas - percent level O₂ measurement to monitor the quality of the gas as it is used to power incinerators and boilers
- Processing of 'cleaned' natural gas

ATEX Certified - Directive 94/9/EC
Examination Cert: INERIS 10ATEX0020



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



Technical Specifications

	GPR-1800	GPR-2800
Accuracy	<2% of full scale range under constant conditions	
Analysis ranges	0-10 ppm, 0-100 ppm, 0-1000 ppm, 0.1%, 0-25% full scale ranges; auto-ranging or manually lock on a single range	0-1%, 0-5%, 0-10%, 0-25% full scale ranges; auto-ranging or manually lock on a single range
Approvals	Certified for use in hazardous areas UL: United States: UL 1203, UL 913, UL 508 Canada: CAN/CSA C22.2 No. 30-M1986, CAN/CSA C22.2 No. 157-92, CAN/CSA C22.2 No. 14-10 ATEX: Directive 94/9/EC	
Area classification	ATEX certified, EX II 2 G, Exd [ib] IIB T4, T _{amb} -20 to +50°C	
Alarms	Two user configurable alarms - AIS versions only	
Calibration	3 month interval using air or certified span gas with O ₂ value approx 80% of full scale range balance N ₂	
Compensation	Temperature as standard; barometric pressure AIS 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 0.01 ppm; displays real time ambient temperature and pressure	
Enclosure	NEMA type 3R suitable for rain in outdoor applications	
Flow	Not flow sensitive; recommended flow rate 0.4 to 0.9 NI/min	
Linearity	±1% of full scale	
Pressure	Inlet	Regulate to 0.3 to 2 barg to deliver 0.4 to 0.9 NI/min flow;
	Vent	Atmospheric
Power	12 to 28 V DC 110 to 220 V AC (AIS version only)	
Response time	90% of final reading in 10 seconds	
Sample system	Sample flow meter; options available	
Sensitivity	<0.5% of full scale range	
Sensor model	GPR-12-333 or XLT-12-333 (for gases containing >0.5% CO ₂)	GPR-11-32 or XLT-11-24 (for gases containing >0.5% CO ₂)
Sensor life	24 months in normal operating conditions O ₂ @ +25°C and 1 atmosphere	GPR-11-32 32 months in normal operating conditions @ +25°C and 1 atmosphere XLT-11-24 24 months in normal operating conditions @ +25°C and 1 atmosphere
Signal output	4-20 mA; Modbus RTU communication (AIS only)	
Temperature range	-10 to +45°C (GPR sensor); -20 to +45°C (XLT)	
Warranty	12 months analyzer; 12 months sensor	
Wetted parts	Stainless steel	

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