

GPR-x8

Explosion-proof ppb, ppm and % Oxygen Analyzers

Our explosion-proof oxygen analyzers are designed specifically for petrochemical processes containing hydrogen and other flammable gases. Encased in robust Exd enclosures and fortified with flame arrestors, GPR-x8 analyzers are purpose-built for hazardous environments for your peace of mind.

Leveraging established technology, our unique advanced sensors have been developed and proven over three decades, and are optimized for use with our analyzers.

The oxygen sensitivity of our field-proven electrochemical sensor is a game-changer, enabling precise oxygen measurements ranging from an ultra-low 0...1 ppm to a robust 0...25% O₂. Analog electronics and user-configurable alarms ensure GPR-x8 analyzers deliver exactly what your process needs.



GPR-28 (left), GPR-18 (right)



Highlights

- Four standard measurement ranges
- Field-proven superior sensor stability
- Low-maintenance with long sensor-life
- 0.5 % full scale sensitivity
- 0...1 V/4...20 mA analog output
- Sensor options for different background gases
- Flame arrestors fitted as standard
- Temperature compensation

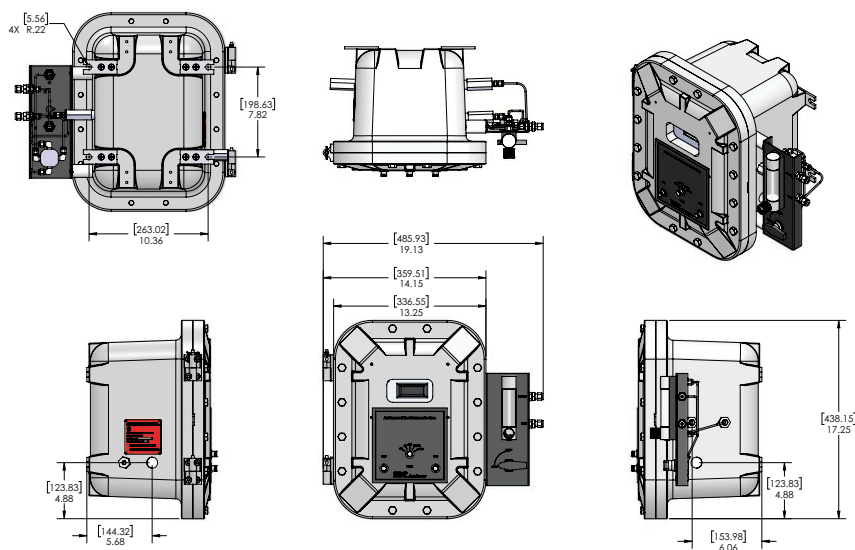
Applications

- Petrochemical catalyst monitoring
- Ensuring natural gas quality
- Hydrocarbon feedstock monitoring
- Ethylene pipeline quality
- Sodium benzoate production

Technical Specifications

Sensor					
	GPR-12-2000-MS2E (for GPR-18 MS2)	GPR-12-333 (- H) (for GPR-18)	XLT-12-333	GPR-11-60	XLT-11-24 (for GPR-28)
Measurement Range	0...1, 0...10, 0...100, 0...1,000 ppm _V	0...10, 0...100, 0...1,000 ppm _V 0...1, 0...25 % (for calibration)		0...1, 0...5, 0...10, 0...25 %	
Accuracy	+/- 1 % of selected range at constant conditions				
Output Resolution	0.001 ppm _V	0.01 ppm _V		0.001 %	
Lower Detection Limit (LDL)	0.005 ppm _V	0.05 ppm _V		0.01 %	
Sample Flow Rate (application dependent)	1.5...2 SCFH (0.75...1 LPM)				
Pressure Range	5...30 psi (0.3...2 bar)				
Response Time (T90)	< 20 seconds 90 % of final FSD reading	< 10 seconds 90 % of final FSD reading			
Operating Temperature Range	+5...+45 °C (+41...+113 °F)	+5...+45 °C (+41...+113 °F)	-10...+45 °C (+14...+113 °F)	+5...+45 °C (+41...+113 °F)	-10...+45 °C (+14...+113 °F)
Life Expectancy (application dependent)	12...18 months	Up to 24 months	Up to 24 months	60 months in air	24 months in air
Shelf Life	Up to 3 months				
Calibration Interval (application dependent)	30 days (recommended)				
Analyzer					
Electrical					
Display	LCD				
Output Signal	0...1 V and 4...20 mA				
Power Supply	100/120...220/240 V AC				
Relay Output	Two user-configurable alarms				
Power Requirement	30 W (without heater) 93 W (with heater)				
Mechanical					
Ingress Protection	NEMA 4				
Analyzer Housing Material	Unpainted aluminum				
Compliance					
Hazardous Area Classification					
ATEX: II 2 G Ex db IIB+H2 T6 Gb T _{amb} (-20 to +60 °C)					
IECEx: Ex db IIB+H2 T6 Gb T _{amb} (-20 to +60 °C)					

Dimensions inches [mm]



GPR-18 pictured

CAUTION

Analytical Instruments Inc (Aii) is part of the Process Sensing Technologies Group plc (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).

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: instruments.support@processsensing.com.