Oxygen Analyzer

GPR-x800 (A)IS

ppm and % Oxygen Analyzers
Electrochemical

GPR-x800 (A)IS analyzers are engineered for precision trace oxygen detection and percentage analysis in demanding environments. With high capability to excel in rigorous processes, GPR-x800 (A)IS uses our industry-leading industrial sensors to deliver unparalleled precision and your best solution.

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

We offer seamless integration of Human-Machine Interface (HMI) across our online and portable analyzers. This intuitive concept ensures effortless switching between instruments. Our analyzers are streamlined, user-friendly, and built for accuracy because ease-of-use matters as much as results.

Highlights

- Wide variety of measurement ranges from 0...10 ppm to 0...25 %

- Hazardous area-rated for key global markets

- Lower Detection Limit of 0.05 ppm_V (GPR-1800 series)

- Two user-configurable alarms

- Analog and digital output signals

- Sensor options for different background gases

Applications

- Inertization and blanketing gases

- Natural gas quality

- O_2 in pharmaceutical reactors and centrifuges

- Gas quality in steel production, heat-treatment furnaces and solder re-flow processes

- Pure gas quality on feed gases for food & beverage packaging and production, and N_2 generators

nbn Austria GmbH   nbn

Technical Specifications

Sensor				
Electrochemical	**GPR-1800 (A)IS** ppm		**GPR-2800 (A)IS** %	
Model Number	GPR-12-333 GPR-12-333-LD GPR-12-33-H	XLT-12-333 XLT-12-333-LD	GPR-11-60 GPR-11-60-LD	XLT-11-24 XLT-11-24-LD
Measuring Range	0...10, 0...100, 0...1000 ppm$_V$, 0...1 % 0...25 % (calibration only)		0...1, 0...5, 0...10, 0...25 %	
Accuracy	< 2 % of selected range at constant conditions			
Output Resolution	0.01 ppm$_V$		0.001 %	
Lower Detection Limit (LDL)	0.05 ppm$_V$		0.01 %	
Sample Flow Rate (application dependent)	1...2 SCFH (0.5...1 LPM)			
Pressure Range	5...30 psi (0.3...2 bar)			
Response Time (T90)	< 2 minutes		< 30 seconds	
Operating Temperature Range	+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)	24 months in 1000 ppm$_V$		60 months in air	24 months in air
Calibration Interval (application dependent)	30 days			

Analyzer	
Electrical	
Display	LCD
Output Signal	4...20 mA
Digital Communications	Modbus (AIS only)
Relay Output Options	Two user configurable alarms (AIS only)
Power Supply	18...24 V DC (IS) loop-powered 12...24 V DC (AIS) line-powered
Maximum Power Consumption	1 W (IS) 28 W (AIS)
Mechanical	
Ingress Protection	NEMA 3R
Analyzer Housing Material	Fiberglass and painted aluminum
Mounting	Wall / vertical surface

Compliance
Complies with EMC Directive: 2014/30/EU Standard Details: EN 50270:2015, EN 61000-4-2:2009

Hazardous Area Classification
ATEX: II 2 G Ex db ia IIC T4 Gb T$_{amb}$ (−20 °C...+50 °C)
cMETus: Class I, Division 1, Groups B, C & D, T4 Class I, Zone 1, AEx db ia IIB+H2 T4 Gb, Ex db ia IIB+H2 T4 Gb T$_{amb}$ (−20 °C...+50 °C)
IECEx: Ex db ia IIC T4 Gb T$_{amb}$ (−20 °C...+50 °C)

Dimensions in inches [mm]
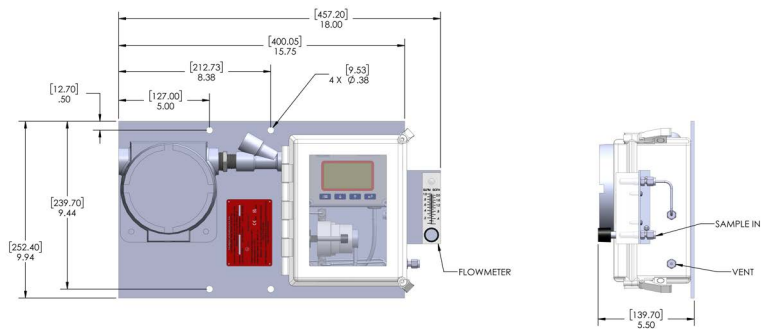
GPR-1800 pictured

⚠ 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.