## Advanced Instruments Inc.

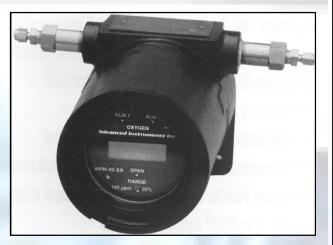
Gas analysis solutions through advanced analyzer and sensor technology

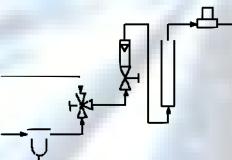
## **Technical Specifications**

Accuracy:	< 1% of FS range under constant conditions
Analysis:	0-100 ppm, 0-25% FS ranges
Application:	Oxygen analysis from 500 ppb to 1% in inert, hydrocarbon, helium, hydrogen, mixed and acid $(CO_2)$ gas streams
Approval <mark>s</mark> :	CE, manufacturer's explosion proof certifications applicable to enclosure, flame arrestors and fabrication
Area Classification:	Class 1, Division 1, Groups C, D hazardous areas
Alarms:	Two adjustable SPDT Form C non-latching relay contacts; configured as high, high; 2 ppm deadband, bypass for calibration purposes
Calibration:	Certified gas of $O_2$ balance $N_2$ approximating 80% of analysis range recommended for optimum results.
Compensation:	Temperature compensated
Connections:	1/8" compression tube fittings
Controls:	Integral 4-20mA zero and span pots, and, range selector
Display:	LCD 3-1/2 digits; resolution .1 ppm
Enclosures:	Painted aluminum explosion proof NEMA 4X wall mount certified for Class 1, Division 1, Groups B, C, D; standard flame arrestors certified for Groups C, D; 12x8x10"; 15 lbs
Flow Sensitivity:	None between 0.5-5 SCFH, 2 SCFH recommended
Linearity:	> .995 over all ranges
Pressure:	Inlet - regulate to 5-30 psig; vent - atmospheric
Power:	9-28VDC (suitable for solar powered battery systems)
Recovery Time:	60 seconds in air to < 10 ppm in < 2 hours on $N_{\rm 2}$ purge
Response Time:	90% of final FS reading in 15 seconds
Sample System:	None; optional H2S sample system(s) for natural gas ex- traction, transmission and processing
Sensitivity:	< 0.5% of FS range
Sensor Model:	XLT-12-100-M with > 0.5% $\rm CO_2$ present - no maintenance
Sensor Life:	24 months at 25°C and 1 atm; average $O_2 < 1,000$ ppm
Signal Output:	4-20mA
Temp. Range:	-20° to 45°C (XLT sensor); 5° to 45°C (GPR sensor),
Warranty:	12 months analyzer; 12 months sensor
Wetted Parts:	Stainless steel

## **Optional Equipment**

GPR-12-100-M sensor for gas streams without CO<sub>2</sub> present Sample conditioning accessories - contact factory





Optional H<sub>2</sub>S Scrubber System Diagram (P/N A-3237, B-2748)

## GPR-15 AXP Explosion Proof ppm Oxygen Transmitter

Approved for use in Class 1, Division 1, Group C, D Hazardous Areas

Tailored for Natural Gas Applications & Outdoor Battery Powered Installations

Advanced Sensor Technology Accuracy < 1% FS Range Fast Recovery to < 10 ppm No Maintenance, 24 Month Life Compatible in 0-100% CO<sub>2</sub>



4-20mA or 1-5V Signal Outputs 2 Standard Ranges

2 Adjustable Alarms with Relay Contacts

ISO 9001:2000 Approved QA System