



# Advanced Instruments Inc.

Gas analysis solutions through advanced analyzer and sensor technology

## Technical Specifications

Accuracy:	< 1% of FS range under constant conditions
Analysis:	0-1%, 0-5%, 0-10%, 0-25% FS ranges; auto-ranging or manually lock on single range
Application:	Oxygen analysis from 0.05% to 100% in inert, helium, hydrogen, mixed and acid (CO <sub>2</sub> ) gas streams
Approvals:	CE, Intrinsic Safety (pending)
Area Classification:	Meets recognized intrinsic safety standards for use in Class 1, Division 1, Group B, C, D hazardous areas
Alarms:	Two user configurable alarms: magnetic coil relays rated 3A at 100VAC, field programmable time delays, 2 ppm deadband, bypass for calibration; sensor and system fail.
Calibration:	Certified gas of O <sub>2</sub> balance N <sub>2</sub> approximating 80% of range above analysis range recommended for optimum results.
Compensation:	Barometric pressure and temperature
Connections:	1/4" compression tube fittings
Controls:	Water resistant keypad; menu driven range selection, calibration, alarm and system functions
Display:	Graphical LCD 2.75" x 1.375"; resolution .001%; displays real time ambient temperature and pressure
Enclosures:	Painted aluminum NEMA 4X, 21"x5"x7", 15 lbs; with optional sample system panel shown 21"x15"x8", 25 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)
Response Time:	90% of final FS reading in 10 seconds
Sample System:	None; shown with optional H <sub>2</sub> S sample system for natural gas extraction and transmission
Sensitivity:	< 0.5% of FS range
Sensor Model:	XLT-11-24-4 - requires no maintenance
Sensor Life:	24 months in air at 25°C and 1 atm
Signal Output:	4-20mA isolated and 0-1V
Temp. Range:	-10° to 45°C (GPR sensor), -20° to 45°C (XLT sensor)
Warranty:	12 months analyzer; 12 months sensor
Wetted Parts:	Stainless steel

## Optional Equipment

- GPR-11-32-4 sensor for gas streams without CO<sub>2</sub> present; 36 month life
- Sample conditioning accessories - contact factory
- Outdoor wall mount (-W) enclosure recommended for stand alone installations



## GPR-2500 AIS Oxygen Transmitter

**Intrinsically Safe Design for Use in  
Class 1, Division 1, Group B, C, D Areas**

**Tailored for Natural Gas Applications &  
Outdoor Battery Powered Installations**

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

**4-20mA or 1-5V Signal Outputs**

**4 Standard Ranges**

**Auto or Manual Ranging**

**Field Selectable Alarms with Time Delay**

**ISO 9001:2000 Approved QA System**

