



# Advanced Instruments Inc.

Gas analysis solutions through advanced analyzer and sensor technology

## Technical Specifications

Accuracy:	< 1% of FS range under constant conditions
Analysis:	0-10 ppm, 0-100, 0-1000 ppm, 0-1%, 0-25% FS ranges; auto-ranging or manually lock on single range
Application:	Oxygen analysis from 100 ppb to 1% in inert, helium, hydrogen, mixed and acid (CO <sub>2</sub> ) gas streams
Approvals:	CE / ATEX; Intrinsic Safety
Area Classification:	Meets recognized intrinsic safety standards for use in Class 1, Division 1, Group A-D hazardous areas (see Options)
Alarms:	None
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:	1/8" compression tube fittings
Controls:	Water resistant keypad; menu driven range selection, calibration and system functions
Display:	Graphical LCD 2.75 x 1.375; resolution .01 ppm; displays real time ambient temperature and pressure
Enclosure:	Painted aluminum NEMA 4X, 8.6x9x3", 12 lbs.
Flow Sensitivity:	None between 0.5-5 SCFH, 2 SCFH recommended
LED Indicators:	LOW BATT (72 hr. warning); CHARGE mode
Linearity:	> .995 over all ranges
Pressure:	Inlet - regulate to 5-30 psig; vent - atmospheric
Power:	Rechargeable battery, 60 day duty cycle (pump 1 day)
Recovery Time:	60 seconds in air to < 10 ppm in < 1 hr on N <sub>2</sub> purge
Response Time:	90% of final FS reading in 10 seconds
Sample System:	Flow control, bypass and isolation valves; flow indicator
Sensitivity:	< 0.5% of FS range
Sensor Model:	GPR-12-333 - requires no maintenance
Sensor Life:	24 months at 25°C and 1 atm; average O <sub>2</sub> < 1,000 ppm
Signal Output:	0-1V
Temp. Range:	5° to 45°C (GPR sensor), -20° to 45°C (XLT sensor)
Warranty:	12 months analyzer; 12 months sensor
Wetted Parts:	Stainless steel

## Optional Equipment

- XLT-12-333 sensor with > 0.5% CO<sub>2</sub> present
- Integral sampling pump - general purpose or intrinsically safe designs
- Carrying case with custom foam insert
- Sample conditioning accessories - contact factory



**GPR-1200**  
**Portable ppm O<sub>2</sub> Analyzer**

**Advanced Sensor Technology**  
**Accuracy < 1% FS Range**  
**Sensitivity < 0.5% FS Range**  
**Fast Recovery to < 10 ppm**  
**24 Month Expected Life**  
**No Maintenance**  
**Compatible in 0-100% CO<sub>2</sub>**

**Intrinsically Safe Design**  
**5 Standard Analysis Ranges**  
**5S Bypass Sample System**  
**Water Resistant Enclosure**  
**Certified ISO 9001 QA System**

