# Advanced Instruments Inc.

Gas analysis solutions through advanced analyzer and sensor technology

#### **Technical Specifications**

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	Accuracy:	< 1% of FS range under constant conditions
	Analysis:	0-10 ppm, 0-100, 0-1000, 0-1%, 0-25% FS ranges; auto ranging or manually lock on single range
	Application:	Oxygen analysis from 200 ppb to $1\%$ in inert, helium, hydrogen, mixed and acid (CO <sub>2</sub> ) gas streams
	Approvals:	CE / ATEX; Intrinsic Safety (pending)
	Area Classification:	Meets recognized intrinsic safety standards for use in Class 1, Division 1, Group A-D hazardous areas
	Alarms:	None
	Calibration:	Certified span gas of $O_2$ approximating 80-90% of FS balance $N_2$ above analysis range recommended
	Compensation:	Barometric pressure and temperature
	Connections:	1/8" quick disconnects (mating connectors supplied)
	Controls:	Water resistant keypad; menu driven range selection, calibration, alarm 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, 4x9x3", 8 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
	Recovery Time:	60 seconds in air to < 10 ppm in < 1 hr on $N_{\rm 2}$ purge
	Response Time:	90% of final FS reading in 10 seconds
	Sample System:	None
	Sensitivity:	< 0.5% of FS range
	Sensor:	GPR-12-333 ppm Oxygen Sensor - no maintenance
	Sensor Life:	24 months with average $O_2$ level < 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 sensor housing, tubing and fittings

#### **Optional Equipment**

XLT-12-333 sensor with > 0.5% CO<sub>2</sub> present Carrying case Sample conditioning accessories - contact factory



## GPR-1100 Portable ppm 0₂ Analyzer

Advanced Sensor Technology Sensitivity 50 ppb Fast Recovery 24 Month Life No Maintenance Compatible in 0-100% CO<sub>2</sub>

### Intrinsically Safe Design

5 Standard Analysis Ranges Auto-ranging or Manual

Stainless Steel Wetted Parts

0-1V Signal Output

Water Resistant Enclosure

Certified ISO 9001 QA System