

Advanced Instruments Inc.

Technical Specifications *

Accuracy:	< $\pm 1\%$ 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_2) gas streams
Approvals:	CE
Area Classification:	General purpose
Alarms:	2 adjustable form C relay contacts non-latching; "weak sen- sor" indicator; power failure; system failure
Calibration:	Ambient or compressed air on 0-25% range; or certified span gas of O_2 balance N_2 approximating 80% of analysis range or one range higher than analysis range
Compensation:	Barometric pressure and temperature; optional temperature controlled heated sample system
Connections:	1/4" compression tube fittings
Controls:	Water resistant keypad; menu driven range selection, cali- bration, alarm and system functions
Data Acquisition:	Selectable data point intervals
Display:	Graphical LCD 5 x 2.75; resolution .001%; displays real time ambient temperature and pressure
Enclosure:	Painted aluminum 7.5" x 10.8" x 12.25" panel mount
Flow Sensitivity:	None between 1-5 SCFH, 2 SCFH recommended
Linearity:	> .995 over all ranges
Pressure:	Inlet - regulate to 5-30 psig, max 100 psig; vent - atmospheric
Power:	Universal; specify 110 or 220 VAC with optional heater
Range ID:	1-5V output with 1V representing the lowest range
Recovery Time:	Air to < 0.1% in < 30 seconds on N_2 purge
Response Time:	90% of final FS reading < 10 seconds
Sample System:	Wetted parts: corrosion resistant materials, stainless steel optional, includes flow meter with integral metering valve
Sensitivity:	< 0.5% of FS range
Sensor Model:	GPR-11-32-4 - requires no maintenance
Sensor Life:	36 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

Optional Equipment

XLT-11-24-4 Oxygen Sensor with > 0.5% CO₂ present; 24 month life
19" rack mount bezel; wall mount enclosures (see back page)
Temperature controlled heater system for elimination of drift and outdoor use
Range ID: 4-20mA or 4x form C relay contacts plus common

* Specifications subject to change without notice, may vary with analyzer

GPR-2600 Series Process 02 Analyzer



Advanced Sensor Technology
Accuracy < <u>+</u> 1% FS Range Sensitivity < 0.5% FS Range Fast Response Extended Operating Range 36 Month Expected Life No Maintenance Compatible in 0-100% CO ₂
Auto Zero, Span Calibration
Auto Zero, Span Calibration
4 Standard Analysis Ranges
Auto Ranging & Manual Selections
Custom Sample Systems

Remote Communication Link

Certified ISO 9001 QA System



GPR-2600 W Process ppm 02 Analyzer



Advanced Sensor Technology

The sensor is the heart of any analyzer, thus the caliber of sensor technology is the critical factor in analyzer performance. Advanced Instruments focuses on optimizing the sensor to meet specific application needs and has produced the first real advancements in sensor technology in decades. All sensors are manufactured under an independently certified QA system that complies with ISO 9001:2000.

Advancements: Innovative design, materials Control O₂ reaction Proprietary mfg process Extend operating temperature Insensitive to vibration Compact inexpensive design



Performance: Accuracy < <u>+</u> 1% FS Sensitivity 0.5% FS (500 ppm) Service life up to 10 yrs in air -40°C (GPR); -20°C (XLT) to 45°C Linear pressure comp to 1 atm No sensor maintenance