



Technical Specifications *

Accuracy:	< 1% of FS range under constant conditions
Analysis:	0-10 PPM, 0-100 PPM, 0-1000 PPM, 0-1%, 0-25% FS ranges; auto-ranging or manually lock on single range
Application:	Oxygen analysis in inert, hydrocarbon, helium, hydrogen, mixed and acid (CO ₂) gas streams
Approvals:	CE
Area Classification:	Meets recognized intrinsic safety standards for use in Class 1, Division 2, Group C, D hazardous areas
Calibration:	Air ** 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
Connections:	1/4" compression tube fittings
Controls:	Water resistant keypad; menu driven range selection, calibration and system functions
Display:	Graphical LCD 2.75" x 1.375"; resolution 0.01 PPM; displays real time ambient temperature and pressure
Enclosure:	Fiberglass NEMA 4X, 4"x9"x3", 8 lbs.
Flow Sensitivity:	None between 0.5-5 SCFH, 1-2 SCFH recommended
Linearity:	±1% of full scale
Operating Range:	-20° to 45°C (XLT sensor)
Pressure:	Inlet - regulate to 5-30 psig (see Flow), max 100 psig; vent - atmospheric
Power:	24 VDC two wire loop power
Recovery Time:	60 sec in air to < 10 PPM in < 1 hour on N ₂ purge **
Response Time:	90% of final reading in 10 seconds
Sample System:	Flow meter and sample/bypass valve
Sensitivity:	< 0.5% of FS range
Sensor Model:	XLT-12-333 for gases containing >0.5% CO ₂
Sensor Life:	24 months at 25°C and 1 atm.
Signal Output:	4-20mA
Warranty:	12 months analyzer; 12 months sensor
Wetted Parts:	Stainless steel

Optional Equipment

GPR-12-333 for inert (non-acid) gases; -10° to 45°C Operating Range

* Subject to change without notice, may vary with analyzer

GPR-1500 DK 2 Wire Loop Powered ppm Oxygen Transmitter



**Suitable for use in
Class 1, Div 2, Group C, D
Hazardous Areas**

Advanced Sensor Technology

**Accuracy < ±1% FS Range
Fast Recovery to < 10 ppm
24 Month Expected Life
No Maintenance
Compatible in 0-100% CO₂
Extended Operating Temperature -20°C**

Auto Ranging & Fixed Range Selection

SS Bypass Sample System

Certified ISO 9001 QA System





Advanced Sensor Technology

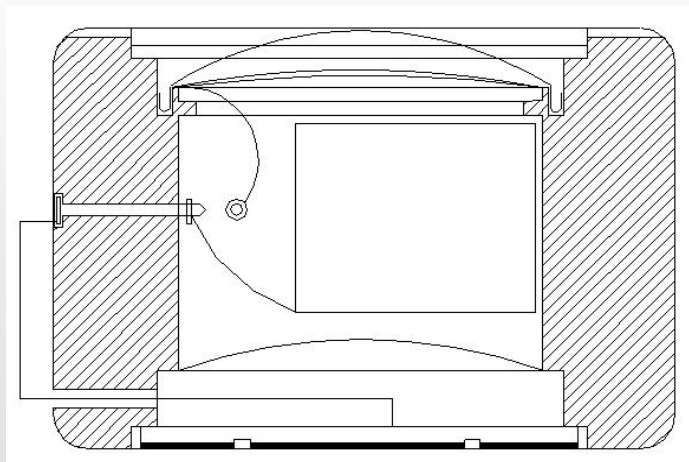
The sensor is the heart of any analyzer, thus sensor technology is the critical factor in analyzer performance. Analytical Industries Inc. dba Advanced Instruments focuses on optimizing the sensor to meet specific application needs and has produced the first real advancements in sensor technology in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

Advancements:

- Signal output 2x higher than conventional
- Eliminate sources of internal contamination
- Innovative design, materials
- Proprietary manufacturing process
- Compact design
- Low cost of ownership

Performance:

- Accuracy $< \pm 1\%$ FS
- Sensitivity 0.5% FS (50 ppb)
- Service life 24 mos < 1000 ppm
- Recovery air to 10 ppm < 1 hr on N₂ purge
- Superior stability in 0-100% CO₂
- No sensor maintenance

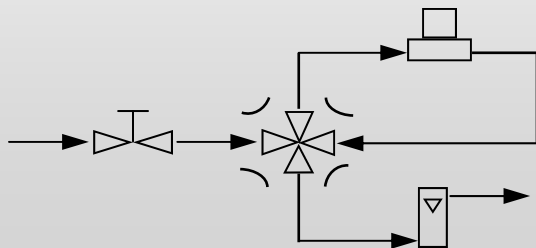


Galvanic ppm Oxygen Sensor

Bypass Sample System

Increased user productivity alone justifies purchase. Cost of ownership is reduced because the bypass feature protects the sensor's ppm capability, extends sensor life and eliminates conditioning purge gases. The bypass feature enables the analyzer to come online at low ppm levels in a matter of minutes following:

- Transport (qualified sensor installed for shipment)
- Changing gas line connections (trapped air is purged)
- Exposure to high O₂ levels during upset conditions



Sensor Housing

Constructed from stainless steel as are all wetted parts, this unique design features a compression type o-ring seal that virtually eliminate air leaks.

An APIMS mass spectrometer verified that the Bypass Sample System including this housing is capable of accurately and repeatedly distinguishing hourly changes of 1 ppb oxygen concentration.

