



Analytical Industries Inc.
Advanced Instruments Inc.

Galvanic Percent Oxygen Sensors

Applying this advanced technology derived from the Pico-Ion and electrochemical oxygen purity innovations to traditional sensors produced a new generation of percent sensors that can be readily applied to a wide range of applications in the industrial process control, natural gas, medical, diving and personnel safety markets.

All products are manufactured under an independently certified Quality Assurance System that complies with ISO 9001:2008, FDA, MDD 93/42/EEC Annex II (European CE) and ISO 13485:2003 (Health Canada) standards.

Galvanic Oxygen Sensors for 0-1% Range

Most applications for percentage range oxygen analysis emphasize the need for longer life in order to minimize service requirements. However, the transitioning from high PPM to low percent oxygen analysis area presents a grey area that adds additional considerations.

The design of sensors for low level measurements involves a delicate balance between a higher signal output that improves stability by reducing the influence of temperature and expected life. The ability to recognize this issue and offer a number of solutions, see chart below, differentiates Analytical Industries Inc. from our competitors and enables users to select the best option for their particular application.

Sensor	Output	Response	Stability	Life
GPR-11-32	50 uA	13 sec	± 0.05%	36 mos.
XLT-11-24	50 uA	13 sec	± 0.05%	24 mos.
XLT-11-15	180 uA	30 sec	± 0.03%	15 mos.
XLT-11-1523	300 uA	13 sec	± 0.02%	10 mos.
XLT-11-1513	500 uA	10 sec	± 0.01%	5 mos.

Galvanic % Oxygen Sensor

Exhibit superior performance, reliability, extended life and an extended operating temperature range which are critical to meeting the need for oxygen measurements imposed by today's industrial process, medical, diving, natural gas, safety and welding applications.

XLT sensors further extend the operating temperature range to -20°C, demonstrate excellent compatibility with carbon dioxide concentrations up to 100% and are required for continuous exposure to carbon dioxide levels above 0.5%.

- Accuracy: ±1% FS under constant conditions
- Sensitivity: 0.5% of full scale range
- Low range: 0-1% full scale
- Response time: 90% of full scale: < 13 seconds
- Recovery to: 0.1% (1000 PPM) from exposure to air < 30 seconds
- Expected life: 24-120 months in normal applications

