

Model 905 Oxygen Analyzer

✓ Applications

- Meats
- Dairy Products
- Produce
- Snack Foods
- Baked Foods
- Prepared Meals
- Coffee
- Pet Foods
- Desserts
- Containers

✓ Features

- Portable, optional battery operation
- Fast response (8 seconds to final reading)
- Range 0.0 to 100% oxygen
- Long-life sensor (4-5 yrs)
- Internal sampling pump
- Economically priced
- Inexpensive to operate & maintain
- Calibrates with room air



✓ 5 YEAR SENSOR

✓ Includes: 200 foam septa, 4 liquid blocking filters, 2 needles, NIST traceable calibration certificate

Overview

The Quantek Model 905 is a benchtop, portable oxygen analyzer used for the measurement of residual oxygen in gas-flushed (CAP/MAP) food packages or other enclosed containers.

This hand-held unit can be used by non-technical personnel where you need it, in the lab or at the packaging line, or it can be easily transported to other locations.

The Model 905 is powered by a 12Vdc power supply, or an optional Ni-MH rechargeable battery pack, with 10-14 hours of operation before recharging is required.

Food Applications

The Model 905 oxygen analyzer design has proven itself in hundreds of installations for food applications such as meats, fresh produce, pasta, nuts, snack foods, dairy products and coffee. The sensor is unaffected by high levels of background gases such as nitrogen or carbon dioxide. The Model 905 can also be used for applications where the oxygen level is very high (50 to 100%), without overloading the sensor. It is unaffected by trace hydrocarbons or high levels of CO₂, which can poison other types of sensors.

Reliability

The Model 905 is a cost effective, reliable alternative to other analyzers. Our proprietary oxygen sensor lasts 4-5 years, unlike competitive analyzers which may only last 12-18 months.

Combined with a lower initial cost, the total cost of ownership – including operating, maintenance, and consumable costs, is much lower. When service is required, units are generally repaired and returned the same day as received to minimize down-time.

Easy Sampling and Analysis

The Model 905 sample probe is tipped with a liquid blocking filter and luer fit syringe needle with side-port holes to prevent plugging. Sample is drawn through the probe and tubing and then to the oxygen sensor. The pump turns on only to draw in sample required for analysis, and then turns itself off after the pre-set sampling time of 2 to 12 seconds. Final test results are achieved in 7-8 seconds.

Sensor Design

Unlike other units which require a new one in a year or less, the sensor in the Model 905 is designed to last 4-5 years without replacement. Unlike other sensors, it is not poisoned by high levels of CO₂ commonly found in gas-flushed food packs. The sensor is internally temperature compensated and will work in cold room temperatures at 25°F (-13°C). The sensor is also totally sealed and requires no maintenance.

Principle of Operation

The Model 905 uses a sample probe / syringe needle sampling assembly to pierce the package and draw a sample into the analyzer sensor for oxygen measurement. The sensor signal is converted to per-cent concentration and displayed on the LCD screen. The oxygen sensor used in the 905 was specifically designed for gas-flushed packaging measurements. The sensor is a proprietary electrochemical design which is inexpensive, quick to respond, requires minimal power and has excellent zero and span stability. Unlike zirconia sensors which are heated to 500-600°C, the 905 sensor will not crack when exposed to liquid water droplets and is unaffected by trace hydrocarbon gases.

Technical Specifications

Range	0.0 to 100% Oxygen
Resolution	0.1% Oxygen (optional upgrade to .01% resolution)
Accuracy	$\pm 0.1\%$ of reading below 10%, $\pm .02\%$ below 0.1% (when equipped with .01 resolution)
Minimum Detection Limit	0.00%
Response time	15-17 seconds to T95
Drift	less than 0.1% per month
Sensor	Proprietary electrochemical cell, expected lifetime 4-5 years
Sample Pump	Internal, with adjustable timer (2-12 seconds), draws ~5cc/sec
Sampling Assembly	Probe with male luer connection for side-port needle, PTFE tubing
Calibration	Calibrates with room air; adjusters on back of analyzer
Calibration Frequency	Two years after initial shipment, recommended once a year thereafter
Power Supply	100-240V Internationally compatible power supply/charger
Backup Power	(Optional) internal 12V NiMH battery pack
Input Voltage	100-240V, 50-60Hz
Battery Life	(if equipped) 10-14 hours before recharging
Size	9.8in x 4in x 10in. (249 x 102 x 254 mm)
Weight	8 lb. (3.6 Kg)
Warranty	2 years, parts and labor
Standards	 
Included Consumables	200 foam septas, 2 luer fit needles, 4 small liquid (and particulate) blocking PTFE filters, 2 large liquid (and particulate) blocking filters
Included Documentation	Owners manual (includes operating instructions with detailed calibration instructions, calibration certificate, precautions), NIST calibration certificate
Origin of Goods	Our products are manufactured in the U.S.A.



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