

NOVA

Dependable Gas Analysis Solutions

309A SERIES PORTABLE ANALYZER FOR CARBON DIOXIDE & OXYGEN



APPLICATIONS

For checking carbon dioxide (CO₂) and oxygen (O₂) in controlled atmosphere (C/A) storage rooms, welding gas mixtures, and other process applications.

FEATURES

- Rugged design that is easy to operate and maintain
- Fast warm-up and response
- Solid state infrared detector for CO₂
- Long-life electrochemical sensor for O₂
- Digital readout meter with backlight
- Rechargeable battery operation
- Built-in sample pump, filter, and flow meter
- Weatherproof (WP) cabinet with clear Lexan cover

OPTIONS

- Recorder outputs, 4-20mA
- Sample pre-cooler for very moist samples
- Stainless steel probe with sample hose
- Detachable/portable data logger

CALIBRATION

- Air for CO₂ zero and O₂ span.
- Analyzed calibration gas for CO₂ span and O₂ zero.



Weatherproof (WP) Enclosure

NOVA ANALYTICAL SYSTEMS

www.nova-gas.com

DESCRIPTION

The Model 309A Series Portable CO₂ and O₂ Analyzer is a rugged, fast-responding, and accurate instrument for conveniently monitoring the controlled atmospheres in food storage rooms. The standard range of the analyzer is 0-10% CO₂ and 0-25% O₂. The Model 309A series utilizes a single cell infrared detector for CO₂ and a customer-replaceable electrochemical sensor for O₂. Neither sensor is affected by water vapor or other gas vapors in the sample gas. The O₂ sensor typically lasts 3-4 years. The CO₂ detector is not consumed during use.

In operation, a built-in sample pump draws in the gas sample through the sample hose, filters, and flow meter, then on to the CO₂ and O₂ detectors. You can walk around with the instrument or run tubing to it from the C/A room. The gas readings are displayed on separate LCD digital meters which have switchable backlights for use in dark areas.

A rechargeable battery provides enough power for about 8 hours of continuous operation and the analyzer can be used while it is being recharged. A red LED tells when to recharge and a green LED verifies that it is receiving recharging power. The recharger is included.

SPECIFICATIONS

Nova reserves the right to specification changes which may occur with advances in design without prior notice.

Method of Detection:	NDIR infrared detector for CO ₂ ; electrochemical O ₂ sensor
Ranges Available:	0-10% CO ₂ 0-25% O ₂
Resolution:	0.1 %
Accuracy and Repeatability:	Within ± 2% full scale
Drift:	Within 1% full scale per 8 hours of continuous operation
Response Time (T-90):	O ₂ less than 10 seconds; CO ₂ less than 30-40 seconds to T-90
Ambient Temperature Range:	40° to 120°F (4° to 49°C)
Linearity:	± 1.0% of full scale
Size and Weight:	WP style - approx. 11½" L x 8" W x 7¼" H @ 8 lbs (29 x 20 x 18 cm @ 3.6 kg)
Power:	AC/DC operation. 115VAC 60 Hz for recharging (other voltages available)
Output Options:	4-20mA

UNIQUE APPLICATIONS

All Nova analyzers are built using proven technologies and techniques. If this product does not suit your application, please contact Nova at 1-800-295-3771. In many cases, we are able to build an analyzer specific to your needs.



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