309 SERIES
PORTABLE FLUE GAS ANALYZER FOR CARBON DIOXIDE & OXYGEN

APPLICATIONS
Analysis of oxygen (O₂) and carbon dioxide (CO₂). For checking combustion efficiency, and burner & control performance of furnaces, heaters and boilers in commercial, industrial, and residential applications.

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

OPTIONS
- Recorder outputs of 0-1V or 4-20 mA
- Sample pre-cooler for hot samples
- Special sampling probes
- Stack temperature readout (309T)
- Suitcase (K) style cabinet available
- CO₂ and O₂ alarms with LED
- Detachable/portable datalogger

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

The Nova 309 Series Portable Flue Gas Analyzers have been designed for accuracy, reliability, and ease of use and service. The 309 uses a long life electrochemical O₂ sensor and a solid state infra red CO₂ detector, both of which respond quickly to O₂ and CO₂ present in the flue gas sample.

In operation, a built-in sample pump draws in the flue gas sample through the S.S. probe, 12 ft sample hose, condensate removal filter, secondary filter and flow meter then on to the O₂ sensor and CO₂ detector. The detected gases are displayed on separate LCD digital meters which have a switchable backlight for use in dark areas.

The 309 can optionally indicate stack temperature (Model 309-T; 0-1800F or 0-1000C) for doing fuel efficiency calculations. The temperature sensor is built into the sampling probe. Efficiency charts for each fuel are provided.

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

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| **Size and Weight:** | WP style - approx. 11½” L x 8” W x 7½” H @ 8 lbs (29 x 20 x 18 cm @ 3.6 kg)  
K style - approx. 14” L x 10½” W x 6” H @ 12 lbs (36 x 27 x 15 cm @ 5.5 kg) |
| **Power:** | 115VAC 60 Hz for recharging (other voltages available) |
| **Output Options:** | 4-20 mA or 0-1 VDC |

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

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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