

NOVA

Dependable Gas Analysis Solutions



313 SERIES PORTABLE FLUE GAS ANALYZER FOR OXIDES OF NITROGEN

APPLICATIONS

Analysis of oxides of nitrogen (NO_x) such as nitric oxide (NO) and/or nitrogen dioxide (NO_2). For boiler, furnace, or engine exhaust monitoring and analysis.

FEATURES

- NO_x can be read as NO, NO_2 , or as total
- Rugged design that is easy to operate and maintain
- Disposable, long life electrochemical NO and NO_2 sensors
- Digital meter readout with backlight
- Rechargeable battery operation
- Built-in sample pump, filter, and flowmeter
- Active condensate removal
- Rapid reading recovery after NO_x 'overdose'
- Weatherproof (WP) cabinet with clear Lexan cover
- Stainless steel probe with sample hose

OPTIONS

- Recorder output 4-20 mA
- Stack temperature readout (313T)
- Sample pre-cooler
- Suitcase (K) style cabinet available
- NO, NO_2 or NO_x alarms with LED
- Detachable/portable data logger

CALIBRATION

- Air for zero.
- Analyzed calibration gas mixtures of PPM NO and PPM NO_2 in nitrogen for span.



Weatherproof (WP) Enclosure



Suitcase (K) Enclosure



Optional Precooler
for hot or wet
sample gases

NOVA ANALYTICAL SYSTEMS

www.nova-gas.com

DESCRIPTION

The Nova 313 Series Portable Flue Gas Analyzer for NO, NO₂, or NO_x utilizes reliable, stable NO and/or NO₂ sensors which respond quickly to the NO or NO₂ present in flue gases or engine exhaust. NO is the major component (90-95%) of the NO_x found in flue gases or engine exhaust (except diesel).

In operation, a built-in sample pump draws in the gas sample through the S.S. probe, 12 ft sample hose, condensate removal filter, secondary filter and flowmeter, then on to both sensors. The output of each sensor is then amplified and displayed on a large LCD digital meter with backlight. A selector switch allows the two gases to be read individually or as a total (NO_x).

The rechargeable battery provides enough power for about 20 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 plus a stainless steel probe with 12 ft. (4 m) hose is included.

SPECIFICATIONS

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

Description

Method of Detection: Customer replaceable electrochemical nitric oxide and nitrogen dioxide sensors
Expected life 2-3 year each

Ranges Available: 0-2000 PPM NO; 0-800 PPM NO₂; 0-2000 PPM NO_x (0-5000 PPM available)
Ranges switch selectable

Resolution: 1 PPM on 0-2000 PPM; 10 PPM on higher ranges

Accuracy and Repeatability: ±1-2% full scale

Drift: Within 1% of full scale per 8 hours of continuous operation

Response Time (T-90): 20-30 seconds

Ambient Temperature Range: 55° to 120°F (12° to 49°C)

Linearity: ± 2% 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)
K style - approx. 14" L x 10½" W x 6" H @ 12 lbs (36 x 27 x 15 cm @ 5.5 kg)

Power: AC/DC operation. 115VAC 60Hz for recharging (other voltages available)

Output Options: 4-20 mA or 0-1 VDC

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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