



MODEL 376WP

PORTABLE FLUE GAS ANALYZER FOR OXYGEN, CO₂, CO AND NO_x

APPLICATIONS

For checking combustion efficiency, burner & control performance, detection of air infiltration and NO_x emissions from commercial, industrial & residential furnaces, heaters and boilers.



Optional Pre-cooler



OPTIONS

- Sample pre-cooler
- 0-1V recorder outputs
- Rugged carrying case
- Net stack temperature readout (Model 376TWP)

FEATURES

- Fast and accurate response
- Simple to operate - compact size
- Easy to maintain
- Use on any fuel
- Digital readouts with switchable backlight
- Built in sample pump
- Rechargeable 'gel cell' battery operation
- Long life detector cells for O₂, CO and NO_x
- **CO₂ actually measured by Infra red detector - not calculated**
- Dual CO range: 0-2000 PPM & 0-4% CO
- Rapid reading recovery on CO 'overdose'
- Pays for itself in months through fuel savings
- Rugged watertight - dusttight enclosure with carrying handle

DESCRIPTION

The Nova Model 376WP Series Portable Flue Gas Analyzers have been designed for accuracy, reliability, ease of use and ease of service, providing a detailed analysis of flue gas composition. They use customer replaceable sensors which respond quickly to the oxygen, CO₂, CO and NO_x (as NO) present in the flue gas sample. The O₂ sensor life expectancy is between 3 and 4 years. The CO and NO_x sensor life is 2-3 years. The infra red CO₂ sensor life is infinite under normal conditions of use.

In operation, a built in sample pump draws in the flue gas sample through the S.S. probe, 12 ft. sample hose, filter/condensate trap, secondary filter and flowmeter then on to the four sensors. The detected O₂, CO₂, CO and NO_x are displayed on LCD digital meters which have a switchable backlight for use in dark areas. The sensors do not require any special SO₂ scrubbing chemicals as do some types of analyzers.

The Nova 376TWP version also indicates net stack temperature for

doing fuel efficiency calculations. The temperature sensor is built into the sampling probe. Efficiency charts for each fuel are provided.

A rechargeable 'gel cell' battery provides enough power for about 16 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 376WP case is rugged, dust-tight and water resistant.

CALIBRATION

On air for O₂ span, CO₂ zero, CO zero and NO_x zero.

On analyzed gas mixtures of CO₂ and CO in nitrogen and NO in nitrogen for span.

SPECIFICATIONS

DESCRIPTION	
Method of Detection:	Customer replaceable electrochemical oxygen, CO and NO sensors. Solid state infra red detector for CO ₂ .
Ranges:	0-30.0% Oxygen 0-2000 PPM and 0-4.00% CO - Switch selectable 0-20.0% CO ₂ 0-200 to 0-2000 PPM NO _x (as NO) ranges available 0-1800°F (0-1000°C) net stack temperature (Model 376TWP)
Display:	LCD digital with switchable backlighting
Accuracy and Repeatability:	Within ± 0.1% O ₂ and CO ₂ , ± 10 PPM CO, ± 10 PPM NO _x
Drift:	1% full scale per 8 hours of continuous operation
Response Time:	< 30 seconds for 90% of O ₂ , CO ₂ , CO, < 60 seconds for 90% NO
Operating Temperature Range:	32° to 105°F (0-40°C)
Size:	15" L x 8" W x 7-1/2" H (38 x 20 x 19 cm), Polycarbonate case with clear cover
Weight:	Approx. 10 lbs. (4.5 kg)
Power:	AC/DC operation. 115VAC 60Hz for recharging (other voltages available)

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

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