



# 325 SERIES PORTABLE PPM OXYGEN ANALYZER

## **APPLICATIONS**

For high accuracy analysis of trace PPM oxygen (O<sub>2</sub>) in non-corrosive process gas.

#### **FEATURES**

- Rugged design that is light weight, compact, and easy to operate
- Fast warm-up and response
- Accurately measures PPM O<sub>2</sub> in gases including those containing hydrocarbons
- Any range between 0-500 and 0-9999 PPM available
- Customer replaceable electrochemical 'fuel cell' O<sub>2</sub> sensor
- Blocking solenoids used to trap PPM O<sub>2</sub> in cell for quick purge down and also protect cell during initial sample line purge
- Comes complete with flow control valve, filters and flow meter
- Digital meter readout with backlight
- Rechargeable battery operation
- Bench top style case

## **OPTIONS**

- Recorder outputs of 0-1V or 4-20 mA
- Sample pre-cooler for hot samples
- Condensate removal for wet applications
- Built-in sample pump or pressure regulator
- O<sub>2</sub> alarm with LED
- · Detachable data logger
- Type 'K' suitcase style cabinet

#### **CALIBRATION**

- Analyzed calibration gas of O<sub>2</sub> free nitrogen (N<sub>2</sub>) for zero
- Analyzed calibration gas of PPM O<sub>2</sub> in N<sub>2</sub> for span



Standard Bench Top (BT) Enclosure



Optional Suitcase (K) Enclosure



Optional Precooler for hot or wet sample gases

#### DESCRIPTION

The Nova 325 Portable Trace Oxygen Analyzer is designed for accurately measuring trace PPM oxygen in clean dry gas sample. The customer replaceable electrochemical sensor produces a small output current directly proportional to the O<sub>2</sub> in the sample and is capable of measuring PPM levels of O<sub>2</sub> in any range from 0-500 to 0-9999 PPM. The lowest readable level is 1 PPM. Bypass solenoid valves are used to trap low PPM oxygen in the O<sub>2</sub> cell to avoid exposure to ambient air. This allows for a rapid purge down and also protects the cell from momentary overexposure to high O₂ levels.

A flow control valve and flow meter are provided for regulating the flow of sample under positive pressure. A built-in sample pump and flow meter are provided for use on samples under atmospheric or slight negative pressure.

A rechargeable battery provides enough power for the pump and electronics for about 20 hours of continuous operation. The analyzer may still be operated while it is still being charged. A red LED indicates when to recharge the analyzer and a green LED indicates when it is receiving charging power. The battery recharger is included with the analyzer.

# **SPECIFICATIONS**

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

Method of Detection:	Low range electrochemical O <sub>2</sub> sensor
Ranges Available:	0-500 PPM to 0-9999 PPM O <sub>2</sub>
Resolution:	1 PPM
Accuracy and Repeatability:	±2% of full scale
Drift:	±1% of full scale per week
Response Time (T-90):	O <sub>2</sub> sensor may require an initial purge down from air to low PPM O2 which may last up to 6 hours. After purge down, T-90 response from 1000 to 500 PPM is 30 seconds.
Ambient Temperature Range:	32° to 122°F (0°-50°C)
Linearity:	±2% of full scale
Size and Weight:	BT style - approx. 8" W x 9½" H x 10" D @ 12 lbs (20 x 23 x 25 cm @ 5.5 kg) K style - approx. 14" W x 6" H x 6½" D @ 12 lbs (35 x 15 x 17 cm @ 5.5 kg)
Power:	AC/DC operation, 115VAC 60Hz for recharging (other voltages available)
Output Options:	4-20 mA or 0-1 VDC
Alarms:	One high or one low O2 alarm (optional)

## UNIQUE APPLICATIONS

The PPM O<sub>2</sub> sensor in Model 325 can be affected by the presence of other gases such as H<sub>2</sub>S.

Please provide Nova with detailed process information to ensure the most appropriate selection is made. 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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