

## 412 FLEXI-NOVA SERIES

### CONTINUOUS LIGHT DUTY OXYGEN ANALYZER WITH PARAMAGNETIC DETECTOR



### APPLICATIONS

For continuous analysis of oxygen ( $O_2$ ) using a paramagnetic type detector, in clean dry process gas streams that contain gases that interfere with other methods of  $O_2$  measurement. For high accuracy or high purity applications.

### FEATURES

- Highest accuracy  $O_2$  analyzer, very stable
- Fast response ( $T_{90}$  - 4 to 5 seconds); linear over entire 0-100% range
- Touch-screen display for gas readings
- Non-consumable paramagnetic  $O_2$  detector, no periodic sensor replacement required; easy-to-maintain modular layout
- Built-in sample pump or pressure regulator
- Non-isolated 4-20mA recorder output
- To improve accuracy, detector can optionally be temperature-controlled and compensated for changes in barometric pressure in the vented sample

### OPTIONS

- Hi/Low gas and low flow alarms available
- Serial output & data-logger package available
- Light-duty pre-filter & condensate removal
- Up to 6 other gases measured (depending on application)
- Cabinet cooling available

### CALIBRATION

- On ambient air or bottled  $O_2$  gas for Span
- On bottled  $N_2$  for Zero



Standard NEMA4  
wall-mount cabinet



Optional rack-mount cabinet

## DESCRIPTION

The Nova FLEXI-NOVA Series Platform has been designed for continuous gas measurements in applications and environments that are less intensive. Lab work, research, clean processes, pre-treated / pre-cleaned produced gases, and others, may benefit from the FLEXI-NOVA series. Depending on application, some light-duty sample conditioning features may be available.

For clean process measurements, percent-level O<sub>2</sub> gas. This sensor utilizes a paramagnetic measuring cell and powerful selenium cobalt magnet assembly to make use of the principle that oxygen is drawn into a magnetic field, thereby offering a method of detection that is very specific to oxygen. Sample dew point should be at least 5°C (9°F) below lowest sample temperature.

All sensors / detectors are temperature-controlled or temperature-compensated for maximum analytical stability. Easy calibration using touch-screen controls. Serial Output Package allows connection & data-logging to personal computers via a choice of USB / RS-232 / RS-485.

## SPECIFICATIONS

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

### Description

<b>Method of Detection:</b>	Magneto-dynamic paramagnetic O <sub>2</sub> cell, heated and temperature-controlled
<b>Ranges Available:</b>	Without back-pressure control: 1.0, 2.0, 5.0 % O <sub>2</sub> With back-pressure control: 1.00, 2.00, 5.00, 25.00, 100.0 % O <sub>2</sub>
<b>Resolution:</b>	0.1% or 0.01% O <sub>2</sub> , depending on back-pressure control
<b>Accuracy and Repeatability:</b>	±1% of full scale
<b>Drift:</b>	±0.2% of full scale per month.
<b>Response Time (T-90):</b>	4 - 5 seconds at a sample flow of 1 LPM
<b>Ambient Temperature Range:</b>	40 to 104°F (4 to 40°C). Optional: up to 130°F (55°C) with cabinet cooler
<b>Linearity:</b>	±0.5% of full scale or 0.05%, whichever is greater
<b>Approximate Size:</b>	NEMA 4: 51H x 41W x 26D cm (20"H x 16"W x 10"D) RACK MOUNT: 22H x 48W x 47D cm (8.7"H x 19"W x 16"D)
<b>Power:</b>	115VAC 60Hz (220VAC 50Hz available)
<b>Output Options:</b>	4-20mA into 500 ohms non-isolated standard Isolated 4-20mA, RS232, RS485, MODBUS®, Ethernet outputs optional
<b>Alarms:</b>	High and/or low alarm contacts available, relay contacts SPDT 5A @ 220VAC rating. Low flow alarm optional

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## 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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