



# 430 FLEXI-NOVA SERIES

# CONTINUOUS LIGHT-DUTY HYDROGEN ANALYZERS









# **APPLICATIONS**

Light-duty analyzers for applications or environments that are less intensive. For continuous analysis of up to 100% hydrogen  $(H_2)$  in clean process gas streams.

#### **FEATURES**

- Best value continuous H2 analyzer
- · Local digital readout, 4-20mA recorder output
- Long life thermal conductivity (TC) detector with high accuracy and repeatability, cannot be burned out from loss of flow
- Easy-to-maintain, modular layout, fast response
- · Built-in sample pump or pressure regulator
- Sensor temperature-controlled for maximum stability

## **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 O2 gas for Span
- On bottled N2 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 H2 gas. This analyzer utilizes a temperature-controlled, thermalconductivity (TC) cell for the detection of  $H_2$  in process gas. The cell produces a small millivoltage output which is directly proportional to the  $H_2$  detected. The analyzer can be supplied with a pump or pressure regulator depending on customer requirement.

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

#### **SPECIFICATIONS**

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

Description	
Method of Detection:	Temperature-controlled TC cell. Expected life in excess of 10 years in some cases. Cell cannot be burned out due to loss of sample flow.
Ranges Available:	FLEX 430 - any range between 0-2.0% and 0-100.0% H <sub>2</sub>
Resolution:	0.1% H <sub>2</sub>
Accuracy and Repeatability:	±1% of full scale
Drift:	Less than 1% of full scale per month
Response Time (T-90):	10-15 seconds to 90% step change
Ambient Temperature Range:	40 to 104°F (4 to 40°C). Optional: up to 130°F (55°C) with cabinet cooler. Dew point should be at least 9°F (5°C) below lowest sample temperature.
Linearity:	±1% of full scale
Approximate Size:	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)
Power:	115VAC 60Hz (220VAC 50Hz available)
Output Options:	4-20mA into 500 ohms non-isolated standard Isolated 4-20mA, RS485, MODBUS® optional
Alarms:	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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