

425 FLEXI-NOVA SERIES

CONTINUOUS LIGHT-DUTY GAS THERMAL-CONDUCTIVITY ANALYZERS



APPLICATIONS

Light-duty analyzers for applications or environments that are less intensive. For continuous analysis of a choice of many binary gas mixtures comprised of H_2 , CO_2 , O_2 , CH_4 , SO_2 , Ar, He, NH_3 , SF_6 , Air, and others. Applications include heat treating atmospheres, welding gas mixtures, blanketing gas mixtures, ammonia synthesis, gas purge monitoring, magnesium blanketing by SF_6 , and others.

FEATURES

- Bright digital readout
- Lower cost than infrared, GC, or mass spectrometer
- High stability, microprocessor-controlled, long-life thermal conductivity (TC) cell
- Easy-to-maintain modular layout
- Built-in sample pump or pressure regulator
- 4-20mA recorder output
- Sensors 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
- Rack mount cabinet available, depending on application
- Cabinet cooling available for NEMA4 cabinet

CALIBRATION

- In most cases, on bottled gas for Span and 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, of certain binary gas mixtures such as H₂ or He in Air. This analyzer utilizes a temperature-controlled, thermalconductivity (TC) cell for the required measurement. The cell produces a small millivoltage output which is directly proportional to the gas 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 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 425 - 0-2.0% to 0-100.0% and truncated ranges such as 85.0-100.0% Consult Nova regarding feasibility of measuring your specific gas mixture.
Resolution:	0.1%
Accuracy and Repeatability:	Usually $\pm 1\%$ of full scale
Drift:	Usually less than 1% of full scale per month
Response Time (T-90):	Usually 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:	Usually $\pm 1\%$ 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, USB serial output optional
Alarms:	High and/or low alarm contacts available, relay contacts SPDT 5A @ 220VAC rating. Low flow alarm optional

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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