

NOVA

Dependable Gas Analysis Solutions

860 SERIES

CONTINUOUS GAS ANALYZERS FOR FLUE GAS ANALYSIS IN HEAVY INDUSTRIES



APPLICATIONS

For continuous monitoring of flue gases and exhaust emissions associated with steel-making, power generation, heating, and other industrial combustion processes. Analysis of any combination of oxygen (O_2), carbon dioxide (CO_2), carbon monoxide (CO), nitrogen oxide (NO), sulfur dioxide (SO_2), and combustibles as methane (CH_4). Offers a viable and more economical alternative to large CEM systems and mass spectrometer analysis for these gases.

FEATURES

- Infrared detectors for reliable measurement of CO , CO_2 , and SO_2
- Catalytic style sensor for combustibles analysis
- Electrochemical sensors for O_2 and NO
- Sensors/detectors temperature-controlled or compensated for maximum analytical stability
- Touch-screen display for gas readings and alarms
- Built-in sample pump or pressure regulator
- Automatic calibration & serial output package
- Isolated 4-20mA analog recorder outputs
- Durable stainless steel tubing & sample components
- Automatic moisture removal system included

OPTIONS

- Calculations performed on gas readings such as gas ratios and heating value of flammable gases
- Sample conditioning systems available for acidic gas and dust
- Cabinet purge system available for use in hazardous areas
- Environmental management packages for operation in extreme temperatures, outdoors, or in dusty environments



NOVA ANALYTICAL SYSTEMS

www.nova-gas.com



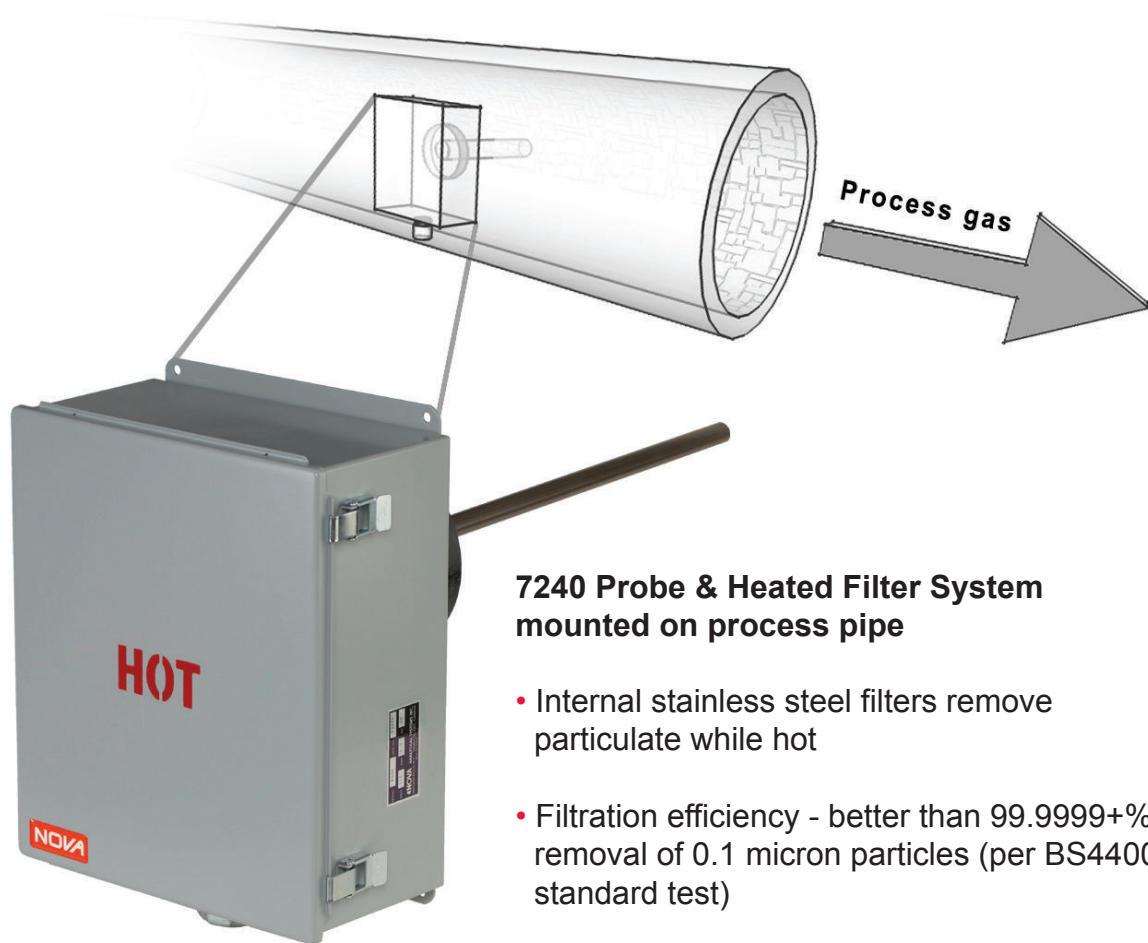
DESCRIPTION

The Nova 860 Series Flue Gas Analyzer System has been designed with the flexibility and robustness required in the industrial environments that characterize the steel-making, power, and other industries.

The Nova 860 Series utilizes high-stability infrared detectors for the simultaneous measurement of CO, CO₂, and SO₂. In addition, the analyzer can be supplied with a long-life electrochemical sensor for O₂ and NO analysis. Sensors / detectors are temperature-controlled or temperature compensated for maximum analytical stability as required.

Autocalibration functionality allows easy calibration without user intervention. The included Serial Output Package allows connection of analyzer to personal computers via a choice of USB / RS-232 / RS-485. Data recording software is also included. Isolated 4-20mA analog outputs are scaled to each gas analysis range.





**Sample gas
to analyzer**

**860 Series Analyzer
in NEMA 4 Wall-Mounted
Enclosure**



ENCLOSURES

- NEMA4 Weather-proof (IP65) and NEMA4X weather-proof and corrosion resistant (IP65) enclosures are available. All tubing connections are 1/4" SS FPT.
- Cabinet Purge Kits available for Hazardous rated areas.
- Cabinet temperature management packages available for analyzer operation in hot or cold environments indoors or outdoors.

SPECIFICATIONS

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

Description

Method of Detection:	NDIR infrared detector for CO, CO ₂ , SO ₂ , Electrochemical sensor for O ₂ , NO Catalytic sensor for Combustibles	
Ranges Available: <small>(Other gas ranges may also be available)</small>	0 - 2.0%, 0 - 25.0%, O ₂ 0 - 2,000 PPM to 0 - 10.0% CO 0 - 20.0% CO ₂	0 - 2,000 PPM NO 0 - 2,000 PPM SO ₂ 0 - 2.0 %, 0 - 5.0%, 0 - 10.0% Combustibles
Resolution:	0.1% on percent ranges; 1 PPM on PPM ranges	
Accuracy and Repeatability:	±1.0-1.5% of full scale, depending on gas measured and specific application	
Drift:	Less than 2% of full scale per month	
Response Time (T-90):	20-30 seconds to 90% step change (excluding sample transport time)	
Ambient Temperature Range:	40 to 104°F (4 to 40°C). Optional: -22 to 158°F (-30 to 70°C) with Outdoor Packages.	
Linearity:	±1.5% of full scale	
Size and Weight:	Physical data will vary depending on model and enclosure required	
Power:	115VAC 60Hz (220VAC 50Hz available)	
Output Options:	4-20mA into 500 ohms isolated; choice of RS232 / RS485 / USB serial connection	
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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