

# 7900 FLEXINOVA+ SERIES SINGLE & MULTI-GAS LITE & MEDIUM-DUTY PROCESS GAS ANALYZERS



# APPLICATIONS

For continuous monitoring of any combination of gases such as oxygen (O<sub>2</sub>), methane (CH<sub>4</sub>), carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), and hydrogen (H<sub>2</sub>) for industrial processes including heat treating atmospheres.

# FEATURES

- Sensitive infra-red detectors for CO, CO<sub>2</sub>, and CH<sub>4</sub>
- Thermal-conductivity detector for H<sub>2</sub>
- Electrochemical O2 sensor; PPM or % ranges available
- Sensors / detectors temperature-controlled or compensated for maximum stability
- Easy single-button calibration
- Bright digital display for gas readings
- Built-in sample pump or pressure regulator
- Easy to maintain modular layout

#### OPTIONS

- · Hi/Low gas and low flow alarms available
- Isolated 4-20mA and MODBUS® outputs available
- Sample conditioning systems available for some applications with light moisture & dust
- Cabinet purge systems available for use in hazardous rated areas
- Cabinet coolers can be fitted to most models
- Pre-filters and high temperature probes available

NOVA ANALYTICAL SYSTEMS www.nova-gas.com



Standard NEMA4 wall-mount cabinet

# CALIBRATION

- Ambient air for O<sub>2</sub> span and to zero all other gases
- Analyzed calibration gas with representative concentrations for span of all other gases

#### DESCRIPTION

The Nova FlexiNova+ 7900 Series Heat Treat Analyzer System utilizes high-stability infrared detectors for the simultaneous measurement of a choice of CO, CO<sub>2</sub>, and CH<sub>4</sub>. In addition, the analyzer can also be supplied with a non-consumable, long-life thermal conductivity cell for H<sub>2</sub> that is compensated for the interference effects of CO, CO<sub>2</sub>, and CH<sub>4</sub>. This ensures that H<sub>2</sub> will always read correctly regardless of the background gas composition. A long-life eletrochemical sensor is used for PPM or % O<sub>2</sub> analysis. All sensors / detectors are temperature-controlled or temperature-compensated for maximum analytical stability. Easy calibration using touch-screen control. Depending on application, some light-duty sample conditioning features may be available.

### 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 <sub>2</sub> , & CH <sub>4</sub> ; thermal conductivity cell for H <sub>2</sub> ; Long life electrochemical sensor for O <sub>2</sub>	
Ranges Available: (Other gas ranges may also be available)	0 - 2,000 PPM to 0 - 25.0% O <sub>2</sub> 0 - 1.00%, 0 - 30.0% CO 0 - 1.00%, 0 - 50.0% CO <sub>2</sub>	0 - 1.00%, 0 - 50.0% CH <sub>4</sub> 0 - 2.0%, 0 - 50.0% H <sub>2</sub>
Resolution:	0.1%, 1 PPM	
Accuracy and Repeatability:	±1-2% of full scale on all gases	
Drift:	Less than 2% of full-scale per month	
Response Time (T-90):	20-30 seconds to 90% step change	
Ambient Temperature Range:	32-122°F (0-50°C)	
Linearity:	±1% of full scale	
<b>Size and Weight:</b> (Optional rack mount cabinet not available in some applications)	Physical data will vary depending on model and enclosure required. NEMA 4: approx. 61H x 51W x 30D cm (24"H x 20"W x 12"D) RACK MOUNT: approx. 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, MODBUS® output 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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