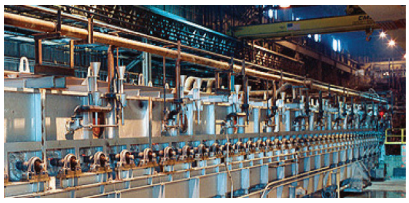
NOVA

Dependable Gas Analysis Solutions

7900 SERIES

SINGLE & MULTI-GAS INDUSTRIAL PROCESS GAS ANALYZERS



APPLICATIONS

For continuous monitoring of any combination of gases such as oxygen (O_2), methane (CH_4), carbon dioxide (CO_2), carbon monoxide (CO), and hydrogen (H_2) for industrial processes including heat treating atmospheres.

FEATURES

- Sensitive infra-red detectors for CO, CO_2, and CH_4
- Thermal conductivity detector for H_2
- Long life (4-5 years) electrochemical oxygen sensor; both PPM and % ranges available
- Sensors/detectors temperature-controlled or compensated for maximum stability
- Bright digital display for each gas
- Built-in sample pump or pressure regulator
- Easy to maintain modular layout

OPTIONS

- Dielectric ceramic sensor for standard or low range dew point
- Hi/Low gas, low flow, and diagnostic alarms available
- Isolated analog, RS232, RS485, MODBUS®, and Ethernet outputs available
- Sample conditioning systems available for removal of moisture, acidic gas, and dust
- Cabinet purge system available for use in hazardous areas
- Automatic calibration with touch screen LCD display
- Cabinet coolers / heaters can be fitted to most models
- Heated filters and high temperature probes

7903D 3 Gas with Automatic Calibration in NEMA 4 Enclosure

CALIBRATION

- Ambient air for O_2 span and to zero all other gases
- Analyzed calibration gas with representative concentrations for span off all other gases

NOVA ANALYTICAL SYSTEMS

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DESCRIPTION

The Nova 7900 Series Heat Treat Analyzer System utilizes high stability infrared detectors for the simultaneous measurement of CO, CO_2, and CH_4. In addition, the analyzer can also be supplied with a non-consumable, long life thermal conductivity cell for H_2 that is compensated for the interference effects of CO, CO_2, and CH_4. This ensures that H_2 will always read correctly regardless of the background gas composition. A long-life eletrochemical sensor is used for PPM or % O_2 analysis. Sensors are temperature-controlled or temperature-compensated for maximum stability. All detected gases have a separate digital readout and linear recorder output. Various versions available for either exothermic or endothermic atmosphere gases, or for other industrial process gases. Calculations can be displayed such as gas ratios and heating value of flammable gases.

ENCLOSURES

Three types of enclosures are available. All tubing connections are 1/4" SS FPT.

- 7900N4 - Wall mounted NEMA4 (IP65) enclosure rating
- 7900N4X - Wall mounted corrosion-resistant NEMA4X (IP65) enclosure rating
- 7900RM - 19" (483mm) rack mounted, on sliding rails

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, & CH_4; thermal conductivity cell for H_2; Long life electrochemical sensor for O_2	
Ranges Available: *(Other gas ranges may also be available)*	0 - 2,000 PPM to 0 - 25.0% O_2 0 - 1.00%, 0 - 30.0% CO 0 - 1.00%, 0 - 50.0% CO_2	0 - 1.00%, 0 - 50.0% CH_4 0 - 2.0%, 0 - 50.0% H_2
Resolution:	0.1%, 1 PPM	
Accuracy and Repeatability:	± 1% 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). Lower temperatures -5°F (-20°C) with Cold Weather Package.	
Linearity:	± 1% 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 non-isolated standard Isolated 4-20mA, RS232, RS485, MODBUS®, Ethernet outputs optional	
Alarms:	High and/or low alarm contacts available, relay contacts SPDT 5A @ 220VAC rating. Low flow alarm optional	

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