



Dependable Gas Analysis Solutions

7900P SERIES

PORTABLE INDUSTRIAL ANALYZERS



APPLICATIONS

For monitoring heat treating atmosphere or process gases in any combination of carbon monoxide (CO), carbon dioxide (CO₂), methane (CH₄), hydrogen (H₂), oxygen (O₂), and dew point.

FEATURES

- Best value multi-gas portable analyzer
- Fast warm-up and response time
- Long-life electrochemical O₂ sensor
- Sensitive infrared detectors for CO, CO₂, and CH₄
- Long-life thermal conductivity cell for H₂
- H₂ reading compensated for CO, CO₂ and CH₄
- Touch-screen display of gas readings
- Modular layout that is easy to maintain
- Rechargeable battery operation
- Built-in sample pump, flow meter and filters
- Suitcase (K) style cabinet

OPTIONS

- 4-20mA recorder output / data-logging
- Dew point measurement
- Rugged bench top (BT) style cabinet also available

CALIBRATION

- Air for Zero and O₂ Span.
- Analyzed calibration gas mixture to span all readings except O₂



7900P series with optional printer



Optional Bench-top cabinet

Optional Ice Bath Precooler



NOVA ANALYTICAL SYSTEMS INC.

www.nova-gas.com

DESCRIPTION

The Nova Model 7900P Series Heat Treat analyzers utilize a three channel high-stability infrared detector for the simultaneous measurement of CO, CO₂, and HCs as CH₄ in exothermic or endothermic gas mixtures. In addition, the analyzer can be supplied with a fully compensated thermal-conductivity cell for H₂. Electrochemical O₂ sensors can also be supplied for measuring either low (PPM) or percent levels of oxygen in the sample gas stream. Optional dew point is detected by a dielectric ceramic sensor and is available in standard and low ranges. Optional recorder outputs follow displayed readings. The 7900P series analyzers are complete with integral sampling pump, rechargeable battery, filters, flow meter, and sampling hose.

SPECIFICATIONS

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

Description

Gases Measured: CO, CO₂, CH₄ by infrared detector; O₂ by electrochemical sensor
H₂ by thermalconductivity detector; Dew point by dielectric ceramic sensor

Ranges Available: 0 - 1,000 PPM to 0 - 25.0% O₂
0 - 1.00%, 0 - 30.0% CO
0 - 1.00%, 0 - 50.0% CO₂
0 - 1.00%, 0 - 50.0% CH₄
0 - 2.0%, 0 - 50.0% H₂
Optional dew point -
Standard range: -40°F to +68°F (-40°C to +20°C)
Low range: -112°F to +68°F (-80°C to +20°C)

Resolution: 0.1% on % gases; 0.01% on some low ranges; 1 PPM on PPM O₂;
1°F or 1°C Dew Point

Accuracy and Repeatability: 1-2% of full scale, depending on ranges & gases measured

Drift: Less than 1% of full scale in 8 hours

Response Time (T-90): Approximately 20-30 seconds to 90% step range

Ambient Temperature Range: 32° to 122°F (0 to 50°C)

Linearity: ±1% of full scale for each gas measured

Size and Weight: K approx. 26 x 18 x 13 cm @ 3.4 kg (10" x 7" x 5" @ 7.5lbs)
BT approx. 10" H x 10" W x 14" D (25 x 25 x 35 cm) @ approx. 20 lbs (9 kg)
(Actual size may vary depending on model and options selected)

Power: 115VAC 60Hz (220VAC 50Hz available)

Output Options: 4-20mA non-isolated; USB serial output also available

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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