

# 920P SERIES TRANSPORTABLE BIOGAS ANALYZERS





## **APPLICATIONS**

For monitoring biogas processes or atmospheres in any combination of oxygen  $(O_2)$ , carbon dioxide  $(CO_2)$ , hydrocarbons as methane  $(CH_4)$ , and hydrogen sulfide  $(H_2S)$ .

# FEATURES

- Field cleanable infrared detector for reliable measurement of CO<sub>2</sub> and CH<sub>4</sub>
- Long-life paramagnetic or electrochemical O2 sensor
- Electrochemical H<sub>2</sub>S sensor
- · Separate LCD displays with gas readouts
- · Upgraded chemical-resistant wetted sample train
- Stainless steel internal fittings (where prudent)
- Built-in sample pump, flow meter and filters
- Rugged bench top (BT) style cabinet
- Heavy Duty condensate removal for wet sample gases
- · Sensors temperature-controlled for maximum stability

#### **OPTIONS**

- Recorder outputs of 0-1V or 4-20 mA
- Methane-specific detector in place of standard hydrocarbons detector; allows more accurate CH4 analysis in mixed hydrocarbon sample streams
- High range analysis available up to 0-100% on CO2 / CH4 / O2 channels



## CALIBRATION

- Air for Zero and O<sub>2</sub> Span.
- Analyzed calibration gas mixture to span all readings except O<sub>2</sub>

### DESCRIPTION

The Nova 920P Series Biogas analyzers utilize a durable detectors for the simultaneous measurement of CO<sub>2</sub>, CH<sub>4</sub> and H<sub>2</sub>S in challenging applications such as biogas processes and anaerobic digestors. Paramagnetic or electrochemical O<sub>2</sub> detector can also be supplied for measuring percent levels of oxygen in the sample gas stream. The sample tubing and components are constructed of durable materials for best performance in the aggressive gas atmospheres commonly associated with biogas applications.

The 920P series analyzers are complete with integral sampling pump, water separator, filters, flow meter, and sampling hose. Recorder outputs and alarms are optional.

#### **SPECIFICATIONS**

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

Description	
Gases Measured:	CO <sub>2</sub> & CH <sub>4</sub> by infrared detector; O <sub>2</sub> by paramagnetic or electrochemical sensor $H_2S$ by electrochemical sensor
Ranges Available:	0 - 2.0 %, 0 - 25.0 %, 0 - 50.0 % O <sub>2</sub> 0 - 2.0 %, 0 - 50.0 % CO <sub>2</sub> 0 - 2.0 %, 0 - 50.0 % CH <sub>4</sub> 0 - 1000 PPM, 0 - 2000 PPM, 0 - 3000 PPM H <sub>2</sub> S
Resolution:	0.1% on % gases; 10 PPM on PPM gases
Accuracy and Repeatability:	±1.0-1.5% of full scale, depending on gas 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:	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:	115 VAC 60Hz (220 VAC 50Hz available)
Output Options:	4-20 mA for each gas measured. 0-1 VDC or 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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