NOVA NOW
Dependable Gas Analysis Solutions

5300 SERIES

NEXT GENERATION PORTABLE FLUE GAS ANALYZER FOR O_2, CO, CO_2, NO, NO_2, SO_2, & STACK TEMPERATURE

APPLICATIONS

Analysis of oxygen (O_2), carbon monoxide (CO), carbon dioxide (CO_2), oxides of nitrogen (NO & NO_2) and sulfur dioxide (SO_2) emissions. For checking combustion efficiency, burner & control performance, and detection of air infiltration on furnaces, heaters and boilers. May be used in commercial, industrial and residential settings.

FEATURES

- Same rugged easy-to-use design as traditional Nova portable analyzers, but approx. 65% smaller and 50% lighter
- Fast warm-up and accurate response
- Built-in sample pump & condensate removal
- Rechargeable lithium ion battery; up to 8hrs use per charge
- Rugged touch-screen display of gas readings
- Calculated values e.g. combustion efficiency, O2 normalization, excess air, unit conversion ppm to mg/m3 for ppm gases measured
- Local USB data logging creates CSV files
- Built-in trouble-shooting prompts
- Electrochemical sensors for O_2, CO, NO, NO_2, and SO_2
- CO_2 actually measured by infrared detector - not calculated
- Rapid reading recovery on CO, NO, NO_2, or SO_2 'overdose'
- Use on flue gas from any fuel; pays for itself in months through fuel savings

5300 with optional printer

Optional Ice Bath Precooler

OPTIONS

- Stack temperature probe and readout
- RS-232 or RS-485 output and software
- Various sample probes; including high temperature
- iNova Android™ app (when ready)
- Built-in printer

CALIBRATION

- Ambient air for O_2 span and CO, CO_2, NO, NO_2, and SO_2 zero
- On analyzed gas mixtures of CO and CO_2 in nitrogen, NO & NO_2 in nitrogen, and SO_2 in nitrogen for span (also zeroes O_2)

NOVA ANALYTICAL SYSTEMS
www.nova-gas.com

DESCRIPTION

The Nova 5300 Series Portable Flue Gas analyzer is built on the NOVANOW next generation rugged portable platform. This series has been designed for accuracy, reliability, ease of use and ease of service, providing a detailed analysis of flue gas composition. The 5300 uses customer-replaceable electrochemical sensors that respond quickly to the O_2, CO, NO, NO_2, and SO_2 present in the flue gas sample. The O_2 sensor life expectancy is typically 3-4 years. The CO, NO, NO_2, and SO_2 sensor life is typically 2-3 years. The infrared CO_2 sensor should not need to be replaced under normal conditions of use.

A rechargeable lithium ion battery provides enough power for about 8 hours of continuous operation and the analyzer can be used while it is being recharged. The 5300 series case is small but rugged and dust & water resistant when closed. Stack temperature measurement and built-in printer that also shows date & time are optionally available on any model.

MODELS

- 5301-A: O_2 only
- 5301-B: CO only
- 5301-C: CO_2 only
- 5301-D: NO only
- 5302-A: O_2 & CO
- 5303-A: O_2, CO, & NO
- 5303-B: O_2, CO_2, & CO
- 5304-A: O_2, CO_2, CO, & NO
- 5304-B: O_2, CO, NO, & SO_2
- 5305-A: O_2, CO_2, CO, NO, & SO_2
- 5306-A: O_2, CO_2, CO, NO, NO_2, & SO_2
- Stack temperature, NO, NO_2, SO_2, CO_2, may be separately added to any model

SPECIFICATIONS

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

Description		
Gases Measured:	Customer replaceable electrochemical O_2, CO, SO_2, NO, & NO_2 sensors Solid state infrared detector for CO_2	
Ranges Available:	0-25.0% O_2 0-20.0% CO_2 0-200 up to 0-9999 PPM CO 0-200 up to 0-5000 PPM NO	0-200 up to 0-800 PPM NO_2 0-200 up to 0-2000 PPM SO_2 32-1800°F (0-1000 °C) net stack temperature
Resolution:	0.1% on percent ranges; 1 PPM on PPM ranges; 1°F (1°C) stack temperature	
Accuracy:	±1-2% of full scale	
Drift:	< 2% full scale per 8 hours of continuous operation	
Response Time (T-90):	< 30 seconds for 90% of O_2, CO, CO_2 and SO_2, < 60 seconds for 90% NO and NO_2	
Ambient Temperature Ranges:	32° to 122°F (0 to 50°C)	
Linearity:	±1% of full scale for each gas measured	
Size and Weight:	approx. 26 x 18 x 13 cm @ 3.4 kg (10" x 7" x 5" @ 7.5lbs)	
Power:	12V battery operation. 115VAC 60Hz for recharging (220VAC 50Hz available)	
Output options:	RS485 with sotware, USB, external module with 4-20mA or 0-1VDC outputs	

UNIQUE APPLICATIONS

All NOVANOW 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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