E9000

Transportable Emissions Analyzer for Boiler, Engine, Furnace, Kiln, and other Combustion Applications

E INSTRUMENTS™

Built with Quality in Mind

Portable Industrial Flue Gas & Emissions Analyzer

CO_2 (NDIR) NO_2

CxHy(HC) NO

SO_2 CO

H_2S O_2

Low NOx

- Up to 9 Total Gas Sensors
- Software with Automatic Data Logging
- Built-In Thermoelectric Chiller
- Automatic Condensate Drain
- Upgraded Memory (16,000 Tests)
- Color Graphic Display
- Built-In Printer
- CO Dilution Auto-Range
- Pre-Calibrated Gas Sensors
- High Accuracy NDIR Sensors Including CO_2 Sensor to 50%
- True NOx & Low NOx Measurements
- Android App to Monitor & Save Data
- Heavy Duty Case

Customize to Meet Your Emissions Monitoring Requirements

Bluetooth®

Accuracy • Emissions • Indoor Air Quality • Efficiency

- Heated Probe Head & Sample Hose
- US EPA CTM-030 & CTM-034 Compliant
- Software Package with Automatic Data Logging

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E9000 Specifications

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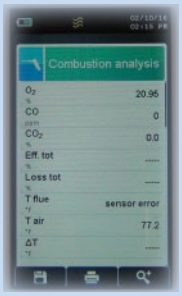
Display Screen & Keypad

The large multi-color graphic display screen includes a zoom function. The capacitive touch sensing keypad guides the operator through the user friendly menus on the display screen. The measured & calculated parameters on the display screen can be fully customized as the operator requires.



Built-In Printer

The internal printer is included with each E9000 and prints on a special non-fading polymer paper so it can still be easily read even when exposed to water, heat, or light. As with the display screen, the parameters on the print-out can be customized by each operator.

Heated Sample Hose & Probe Head

The E9000 has an optional heated probe head and flexible heated sample line. This feature maintains the sample gas at a temperature higher than the dew point to prevent condensation from occurring before the stack gas reaches the internal thermoelectric chiller. The water vapor condenses very rapidly at the chiller so the gases do not have ample opportunity time to dissolve into the condensate. This sample conditioning system maintains the integrity of the gas composition especially for the most water soluble gases such as NO_2 and SO_2.

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Superior Sample Conditioning for Semi-Continuous Use

Each E9000 includes an internal high efficiency Peltier thermoelectric chiller with a built-in condensate drain pump that automatically pumps the accumulated water out through the bottom of the unit for greater convenience. Along with the optional heated sample hose & probe head, this sample conditioning system allows for longer test periods while maximizing the integrity and composition of the sampled stack gas so the gases measured by the analyzer are representative of the actual stack/flue gases.

E9000 Specifications

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Parameter	Sensor	Range	Res.	Accuracy
O_2	Electrochemical	0 - 25%	0.1%	±0.1% vol
CO	Electrochemical	0 - 8000 ppm	1 ppm	<200 ppm=±5 ppm up to 2000 ppm=±4% >2000 ppm=±10%
CO Auto Range	Electrochemical	0 - 10.00%	0.01%	±10% rdg.
CO	NDIR	0 - 15.00%	0.01%	±3% rdg.
NO	Electrochemical	0 - 5000 ppm	1 ppm	<125 ppm=±5 ppm up to 5000 ppm=±4%
Low NO	Electrochemical	0 - 100.0 ppm	0.1 ppm	<50.0 ppm=±1.5 ppm up to 100.0 ppm=±4%
NO_2	Electrochemical	0 - 1000 ppm	1 ppm	<125 ppm=±5 ppm up to 1000 ppm=±4%
Low NO_2	Electrochemical	0 - 100.0 ppm	0.1 ppm	<50.0 ppm=±1.5 ppm up to 100.0 ppm=±4%
NO_x	Calculated	0 - 5000 ppm	1 ppm	
SO_2	Electrochemical	0 - 5000 ppm	1 ppm	<125 ppm=±5 ppm up to 5000 ppm=±4%
Low SO_2	Electrochemical	0 - 100.0 ppm	0.1 ppm	<50.0 ppm=±1.5 ppm up to 100.0 ppm=±4%
CO_2	Calculated	0 - 99.9%	0.1%	
CO_2	NDIR	0 - 50.0%	0.1%	<8%=±3% rdg. up to 50%=±5% rdg.
C_xH_y	NDIR	0 - 50,000 ppm	1 ppm	<1000 ppm=±50 ppm up to 50,000 ppm=±2%
C_xH_y	Pellistor	0 - 5.00%	0.01%	±5 % Full Scale
H_2S	Electrochemical	0 - 500 ppm	0.1 ppm	<125 ppm=±5 ppm up to 500 ppm=±4%

Accuracy • Emissions • Indoor Air Quality • Efficiency

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E9000

E9000 Ordering Code

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Part # 9000 - Table A - Table B - Table C

Table A - Electrochemical Sensors (Maximum of Six)

O	O_2 Sensor (0 - 25 %)
C	CO Sensor (0 - 8000 ppm) with Dilution Auto-Range up to 10%
N	NO Sensor (0 - 5000 ppm)
NL	Low NO Sensor (0 - 100.0 ppm)
D	NO_2 Sensor (0 - 1000 ppm)
DL	Low NO_2 Sensor (0 - 100.0 ppm)
S	SO_2 Sensor (0 - 5000 ppm)
SL	Low SO_2 Sensor (0 - 100.0 ppm)
H	H_2S Sensor (0 - 500 ppm)

Table B - NDIR (non-dispersive infrared) Sensors

IR	CO_2 Sensor (0 - 50 %), CxHy Sensor (0 - 5 %), and High CO Sensor (0 - 15 %)
0	No NDIR sensors

Table C - Sampling Probes and Hoses

12	12” (300mm) Probe, 1470°F (800°C) max, with 10’ (3m) Dual Hose
30	30” (750mm) Probe, 1470°F (800°C) max, with 10’ (3m) Dual Hose
40	40” (1m) Probe, 2190°F (1200°C) max, with 10’ (3m) Hose for High Temperature Combustion Applications
60	60” (1.5m) Probe, 2190°F (1200°C) max, with 10’ (3m) Hose for High Temperature Combustion Applications
12H	12” (300mm) Probe, 1470°F (800°C) max, with 10’ (3m) Heated Sample Hose & Probe Head
40H	40” (1m) Probe, 2190°F (1200°C) max, with 10’ (3m) Heated Sample Hose & Probe Head
SINT1	Sintered Filter with Half Shield for Probe Tip

Standard E9000 Configuration (E9000-OCN-0-12) Includes:

- O_2, CO, and NO Gas Sensors, Upgradeable to 9 Gas Sensors Total
- Thermoelectric Chiller with Automatic Condensate Drain Pump
- Rechargeable Battery Pack
- 110-240VAC/50-60Hz Battery Charger
- 12”/300mm Probe with 10’/3m Dual Hose
- Stack Gas & Air Temperature Measurements
- Draft & Differential Pressure Measurements
- Calculated Values for Efficiency, Excess Air, & CO_2%
- Internal Memory (16,000 Tests)
- Software Package with USB & Bluetooth Interface
- Wireless Bluetooth Communications
- Heavy Duty Aluminum Carrying Case
- Calibration Certificate
- Operations Manual

Weight: 29 lbs. (13 kg) Dimensions: 20x14x8” (50x36x20 cm)

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