



E5500

Portable Industrial Flue Gas & Emissions Analyzer

Providing the latest in Combustion Gas & Emissions Analyzers for Boiler, Engine, Furnace, and other Combustion Applications

- External Water Trap Assembly with Internal Filters
- Wireless Remote Printer
- Draft & Differential Pressure Measurement
- 2 Channel Thermometer
- CO Dilution Auto-Range
- True NOx Measurements
- Up to 5 Total Gas Sensors
- Gas Velocity with Pitot Tube
- Rechargeable Battery
- Internal Memory
- PC Real-Time Software Package
- Bluetooth Module for PC



O₂

CO₂

CO

NO

NO₂

NO_x

SO₂

Flue Gas & Air Temp.

Draft & Diff. Pressure

Stack Gas Velocity



LOW NO_x Sensors Available with 0.1 ppm Resolution



Wireless Communications with Computer & Remote Printer



Light Weight, Durable, and Easy to Transport Design

E Instruments International

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E5500 Features

Water Trap Assembly

The external water trap efficiently removes the water vapor from the flue gas sample to prevent combustion gases from bubbling from the gas phase into the condensate. A mounting piece is included to keep the water trap in the proper vertical position.

Wireless Remote Printer

The E5500 has an optional wireless remote thermal printer for convenient, simple, and easy use to print real-time in the field or at a later time for saved tests and data.

Internal Data Memory

An extensive internal memory (up to 1000 tests) allows for data storage of all measured & calculated parameters. The memory can also be utilized for programmable longer term data storage.

Low NOx and True NOx

The E5500 can be configured with low range NOx gas sensors with 0.1 ppm resolution and greater accuracy for low NOx concentration measurements. True NOx, with direct measurements of both NO and NO2, is available with the E5500.



Real Time Software Package

The standard "EGAS" software package includes the ability to save & graph data in real-time in the field with a laptop or in a laboratory with a PC. Communications between the E5500 and a computer is done via Bluetooth wireless communications. A Bluetooth module for a PC comes standard with each E5500 gas analyzer. Data from the "EGAS" software can be exported to other spreadsheet programs for more user flexibility to create emissions reports.

E5500 Specifications

Gas Sensors

The E5500 can have a maximum of five total gas sensors, that are electrochemical type gas sensors. The chart below details each sensor.

Temperature Measurements

Temperature measurements for the flue gas and air as well as the differential temperature are standard features. The differential temperature is used as part of the efficiency calculation.

Draft, Pressure, & Velocity

An internal pressure sensor allows the analyzer to measure pressure and stack draft. With two pressure inputs, a differential pressure can also be measured. Gas velocity can be measured using the differential pressure and an optional Pitot tube.



Rotating Display with Zoom

The LCD display screen has a back light and can be rotated for greater ease and convenience. The parameters displayed can be zoomed in to view from a distance or zoomed out for more parameters at once on the display screen.

Calibration

The analyzer comes standard with a complete factory calibration. The analyzer can easily be recalibrated with span gas cylinders. Recalibration is recommended at least once each year to ensure analyzer accuracy.

Parameter	Sensor	Range	Res.	Accuracy
O ₂	Electrochemical	0 - 25%	0.1%	±0.1% vol
CO	Electrochemical	0 - 8000 ppm	1 ppm	<300 ppm=±10 ppm up to 2000 ppm=±4% >2000 ppm=±10%
CO Auto Range	Electrochemical	0 - 20,000 ppm	1 ppm	±10% rdg.
NO	Electrochemical	0 - 4000 ppm	1 ppm	<125 ppm=±5 ppm up to 4000 ppm=±4%
NO ₂	Electrochemical	0 - 1000 ppm	1 ppm	<125 ppm=±5 ppm up to 1000 ppm=±4%
Low NO and/or Low NO ₂	Electrochemical	0 - 500 ppm	0.1 ppm	<50 ppm=±2 ppm up to 500 ppm=±4%
NO _x	Calculated	0 - 5000 ppm	1 ppm	
SO ₂	Electrochemical	0 - 4000 ppm	1 ppm	<125 ppm=±5 ppm up to 4000 ppm=±4%
CO ₂	Calculated	0 - 99.9%	0.1%	
Tair	Pt100	-10 - 99.9°C 14.0 - 212.0°F	1°C 1°F	± 2°C ± 3°F
Tgas	Tc K	0 - 999.9°C 32.0 - 1830°F	1°C 1°F	± 3°C ± 5°F
ΔT	Calculated	0 - 999.9°C 32.0 - 1830°F	1°C 1°F	
Pressure/Draft	Bridge	±40.0 inH ₂ O	0.1 inH ₂ O	±1% rdg.
Excess Air	Calculated	1.00 - infinity	0.01	
Gas Velocity	Calculated	0 - 99.9 m/s 0 - 330 ft/s	0.1 m/s 0.1 ft/s	
Efficiency	Calculated	1 - 99.9%	0.1%	

E5500 Ordering Code

Part # E5500 - Table A - Table B

Table A - Electrochemical Gas Sensors

- N** O₂, CO, NO, & NO₂ Sensors (with CO Dilution Auto-Range up to 20,000 ppm)
- S** O₂, CO, NO, & SO₂ Sensors (with CO Dilution Auto-Range up to 20,000 ppm)
- 5** O₂, CO, NO, NO₂, & SO₂ Sensors (with CO Dilution Auto-Range up to 20,000 ppm)

Table B - Sampling Probes and Hoses

- 12** 12" (300mm) Probe, 1470F (800C) max, with 10' (3m) Dual Hose
- 30** 30" (750mm) Probe, 1470F (800C) max, with 10' (3m) Dual Hose
- 40HT** 40" (1m) Probe, 2190F (1200C) max, with 10' (3m) Hose for High Temperature Combustion Applications
- 60HT** 60" (1.5m) Probe, 2190F (1200C) max, with 10' (3m) Hose for High Temperature Combustion Applications

Standard E5500 Configuration Includes the following:

External water trap assembly with mounting piece, rechargeable battery pack, 110-240VAC/50-60Hz battery charger, stack gas & air temperature measurements, draft & differential measurements, calculated values for efficiency, excess air, & CO₂%, internal memory, real-time software package with Bluetooth module for PC, USB communications cable, wireless communications, protective carrying case, calibration certificate, and operations manual.

Weight: 11 lbs. (5 kg) Dimensions: 10x6x9.5" (26x15x24 cm)

