

Commercial / light industrial Combustion Analyzers

testo 330-1 LX, testo 330-2 LX and testo 330i LX

Measures  $O_2$ , CO (330-1 LX up to 4,000 ppm; 330-2 LX / 330i LX up to 8,000 ppm), Nitric Oxide (optional sensor), diff. pressure, draft, ambient, and flue temperatures

Dilution to 30,000 ppm CO (testo 330-2 LX / testo 330i LX)

Calculates CO,, efficiency, excess air, CO air free

Longlife sensors with 4 year warranty

In-stack zeroing (330-2 / 330i only) feature eliminates climbing the stack to remove the probe and zero the instrument before restarting measurment.

testo Bluetooth / App for operation and documentation via smart device





















The testo 330-1 LX, testo 330-2 LX and testo 330i LX flue gas analyzers set the standard in flue gas testing. All 330 analyzers feature long life  $\rm O_2$  and CO sensors that come standard with a 4 year warranty. These three measuring instruments meet the highest requirements regarding quality, precision and reliability. Numerous measurement menus and intuitive operation make your daily work easier than ever before.

The comprehensive flue gas probe selection and other accessories from Testo eliminate the need to purchase an additional instrument.

In addition, all 3 combustion analyzers include Bluetooth and a free testo App, enabling wireless connection to your smart device for remote operation and paperless documentation.



#### Ordering data

## Commercial / Light Industrial Combustion Analyzer kit testo 330-1 LX



includes testo 330-1 LX with  $\rm O_2$  and CO sensors; Li-Ion battery; AC power adapter; 12" flue gas probe, 1/4" dia., w 7 ft. hose; particle filters (10); certificate of conformity; and case

Order no. 0563 3371 70

Order no. 0563 3371 75 includes printer and 6 rolls paper

Order no. 400563 3304 includes NO sensor, printer and 6 rolls paper

# Commercial / Light Industrial Combustion Analyzer kit testo 330-2 LX



includes testo 330-2 LX with  $\rm O_2$  and  $\rm H_2$ -compensated CO sensor; Li-Ion battery; AC power adapter; 12" flue gas probe, 5/16" dia., w 7 ft. hose; particle filters (10); certificate of conformity; and case

Order no. 0563 3372 71

Order no. 400563 3372 includes NO sensor

## Bluetooth Combustion Analyzer kit testo 330i LX



REQUIRED - Free testo 330i Combustion App for iOS or Android

includes testo 330i LX with O2, CO ( $\rm H_2$  compensated, 30,000 ppm) sensors, flue gas probe (5/16" dia., 12" long, 2 ft hose), Li-lon rechargeable battery, universal AC adapter, particle filters (pack of 10), TestoFix probe mount, certificate of conformity, case

Order no. 0563 3000 71

Order no. 400563 3002 includes NO/NOx sensor

**Order no. 0563 3000 72** does NOT include Flue Gas Probe, TestoFix probe mount, or NO/NOx sensor.

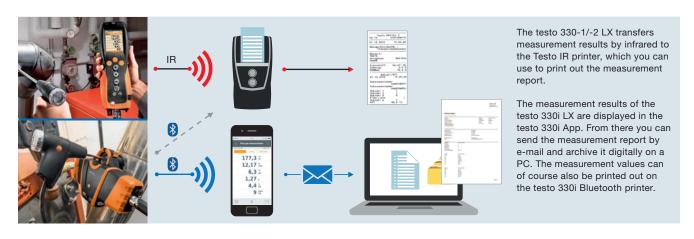
www.GlobalTestSupply.com



#### testo 330 flue gas analyzers in comparison

	testo 330-1 LX	testo 330-2 LX	testo 330i LX	
	00000°	00000°	App Only  177,13  127,13  127,13  127,14  4,15  9 T	
Fuels	Oil, gas, solid fuels	Oil, gas, solid fuels	Oil, gas, solid fuels	
The most important measurement parameters	O <sub>2</sub> , CO, NO	O <sub>2</sub> , CO H <sub>2</sub> -compensated, NO	O <sub>2</sub> , CO or CO H <sub>2</sub> -compensated, NO	
Measuring ranges CO measurement	0 to 4,000 ppm	H <sub>2</sub> -compensated: 0 to 8,000 0 to 30,000 ppm (due to fresh air dilution)	${ m H_2}$ -compensated: 0 to 30,000 ppm not ${ m H_2}$ -compensated: 0 to 15,000 ppm (due to fresh air dilution)	
CO measurement H <sub>2</sub> -compensated	-	<b>~</b>		
Longlife CO sensor with up to 6 years' lifetime		<b>✓</b>	<b></b>	
Flue gas loss measurement		<b>✓</b>		
Draft measurement	<b>~</b>	Simultaneous with flue gas measurement	Simultaneous with flue gas measurement	
Differential/gas flow pressure measurement		<b>/</b>		
Error and sensor diagnosis	<b></b>	<b>✓</b>		
Zeroing of the measurement cells and the sensor without probe removal	-	✓	<b>~</b>	
CO measurement with 15 min mean value calculation on solid fuel systems	-	✓	-	
Warranty O <sub>2</sub> -/CO sensors	4 years	4 years	4 years	
Display	High-resolution color graphic display	High-resolution color graphic display	Smartphone, tablet	
Memory	500,000 measurements	500,000 measurement protocols	500,000 measurement protocols	
Bluetooth		<b>✓</b>	<b>/</b>	
Software/App	testo Combustion App / testo EasyHeat	testo Combustion App / testo EasyHeat	testo 330i App	

#### Measure more flexibly. Document more easily.









**Download testo Combustion App and testo 330i App** for free



### Technical data

Measurement parameter	Measuring range	Accuracy (± 1 digit)	Resolution	t <sub>90</sub>
Temperature	-40° to 2,192 °F	±0.9 °C (0.0 to 212.0 °F) ±0.5 % of m.v. (remaining meas. range)	±0.1 °F (-40 - 1,832 °F) ±1 °F (remaining meas. range)	
Draft measurement	-4.01 to 16 inH <sub>2</sub> O	$ \begin{array}{l} \pm 0.008 \; \text{inH}_2 \text{0 or} \pm 5\% \; \text{of m.v.} \; (\text{-0.2 to } 0.24 \; \text{inH}_2 \text{0}) \\ \pm 0.01 \; \text{inH}_2 \tilde{0} \; (0.24 \; \text{to } 1.2 \; \text{inH}_2 \text{0}) \\ \pm 1.5\% \; \text{of m.v.} \; (1.2 \; \text{to } 16.00 \; \text{inH}_2 \text{0}) \end{array} $	0.004 inH <sub>2</sub> 0	
Pressure measurement	0 to 120 inH <sub>2</sub> 0	$\pm 0.2 \text{ inH}_2 0 \text{ (0.0 to 20.0 inH}_2 0)}$ $\pm 1\% \text{ of m.v. (20.0 to 40 inH}_2 0)}$ $\pm 1.5 \% \text{ of m.v. (remaining meas. range)}$	0.04 inH <sub>2</sub> 0	
O <sub>2</sub> measurement	0 to 21 vol.%	±0.2 vol.%	0.1 vol.%	< 20 sec
<b>CO measurement</b> (without H <sub>2</sub> compensation)	0 to 4,000 ppm	±20 ppm (0 to 400 ppm) ±5% of m.v. (401 to 2,000 ppm) ±10% of m.v. (2,001 to 4,000 ppm)	1 ppm	< 60 sec
CO measurement (H <sub>2</sub> -compensated)	0 to 8,000 ppm	±10 ppm or ±10% of m.v. (0 to 200 ppm) ±20 ppm or ±5% of m.v. (201 to 2,000 ppm) ±10% of m.v. (2,001 to 8,000 ppm)	1 ppm	< 60 sec
<b>CO measurement</b> ( $H_2$ -compensated) (testo 330-2 LX with automatic dilution)	0 to 30,000 ppm	±100 ppm (0 to 1000 ppm) ±10% of m.v. (1001 to 30,000 ppm)	1 ppm	
<b>CO measurement</b> (H <sub>2</sub> -compensated) with activated measuring range extension (testo 330i LX)	0 to 30,000 ppm	±200 ppm or ±20 % of m.v. (0 to 30,000 ppm)	1 ppm	
<b>CO measurement</b> (not H <sub>2</sub> -compensated) with activated measuring range extension (testo 330i LX)	0 to 15,000 ppm	±200 ppm or ±20 % of m.v. (0 to 15,000 ppm)	1 ppm	
Efficiency testing (Eta)	0 to 120%	0.1%		
Flue gas loss	0 to 99.9%		0.1%	
<b>CO<sub>2</sub> determination</b> (digital calculation from O <sub>2</sub> )	Display area 0 to CO <sub>2</sub> max	±0.2 vol.%	0.1 vol.%	< 40 sec
Option NO measurement	0 to 3,000 ppm	±5 ppm (0 to 100 ppm) ±5% of m.v. (101 to 2,000 ppm) ±10% of m.v. (2,001 to 3,000 ppm)	1 ppm	< 30 sec
Ambient CO2 measurement (with CO probe)	0 to 500 ppm	±5 ppm (0 to 100 ppm) ±5 % of m.v. (>100 ppm)	1 ppm	approx. 35 sec
Gas leak measurement for combustible gases (with gas leak detector probe)	Display range 0 to 10,000 ppm CH <sub>4</sub> /C <sub>3</sub> H <sub>8</sub>	Signal visual indication (LED) audible indication by buzzer		< 2 sec
<b>Ambient CO</b> <sub>2</sub> <b>measurement</b> (with ambient CO <sub>2</sub> probe)	0 to 1 vol.% 0 to 10,000 ppm	± 50 ppm or ± 2% of m.v. (0 to 5,000 ppm) ± 100 ppm or ± 3% of m.vl. (5,001 to 10,000 ppm)		approx. 35 sec
Differential pressure, flow velocity and temperature (via fine pressure probe)	±10,000 inH <sub>2</sub> 0	$\pm 0.001 \text{ inH}_2 0$ (0 to 0.04 inH <sub>2</sub> 0) plus $\pm 1$ digit $\pm 3\%$ of m.v. (0.04 to 40 inH <sub>2</sub> 0) plus $\pm 1$ digit		
,	0.15 to 3 m/s max40 to 2,192 °F (dependent on probe)	±0.9 °F (-40 to 212 °F) ±0.5 % of m.v. (remaining meas. range) plus probe accuracy	0.1 m/s 0.1 °F	

General	technical	data

Compatability (testo 330i LX)	requires iOS 7.1 or newer / Android 4.3 or newer	
	requires mobile end device with Bluetooth 4.0	
Weight (without battery)	testo 330i LX: 1.58 lbs. testo 330-1/-2 LX: 1.32 lbs	
Dimensions	testo 330i LX: 10.6 x 6.3 x 2.2 in. / testo 330-1/-2 LX: 10.6 x 3.5 x 2.5 in.	
Storage temperature	-4 to 122 °F	
Operating temp.	23 to 113 °F	

Power supply	Rechargeable battery pack 3.7 V / 2.6 Ah; AC Power Supply 6 V / 1.2 A		
Memory	500,000 readings		
Display testo 330-1/-2 LX	Color graphic display 240 x 320 Pixel		
Warranty	Gas sensors (O <sub>2</sub> , CO) Instrument/probe NO sensor Thermocouple and battery	48 months 24 months 24 months 12 months	



To pair the combustion analyzer to your smart device, turn on the Bluetooth featuand run the testo Combustion app. Once the app is running, select the correct



