

## Data sheet

testo 330-1/-2 LX  
testo 330i LX



# Commercial / light industrial Combustion Analyzers

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

Measures O<sub>2</sub>, 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<sub>2</sub>, 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 measurement.

testo Bluetooth / App for operation and documentation via smart device



In 2017, Testo is turning 60 – and we're celebrating with the testo 330-1 LX, testo 330-2 LX and testo 330i LX flue gas analyzers anniversary sets. They are the only models on the market with 5 years' warranty without a maintenance contract. All analyzers include a flue gas probe, printer, AC adaptor and case. The 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.

On top of this, the comprehensive flue gas probe selection and other accessories from Testo often eliminate the need to purchase an additional instrument.

The anniversary models stand out thanks to high-quality measurement cells for O<sub>2</sub>, CO and NO (optional), and extended life of up to 6 years. This prevents possible sensor replacement over the life of the cell. All 3 instruments include Bluetooth and 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



Kit with Printer and Paper shown above

includes testo 330-1 LX with O<sub>2</sub> 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** incl. printer and 6 rolls paper

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

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



Kit with Printer and Paper shown above

includes testo 330-2 LX with O<sub>2</sub> and H<sub>2</sub>-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. 0563 3372 70** incl. printer and 6 rolls paper

**Order no. 400563 3372** incl. NO sensor, printer and 6 rolls paper

### Bluetooth Combustion Analyzer kit testo 330i LX



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




includes Bluetooth Analyzer with O<sub>2</sub>, CO (H<sub>2</sub> compensated, 30,000 ppm) sensors, flue gas probe (5/16" dia., 12" long, 2 ft hose), Li-Ion rechargeable battery, universal AC adapter, particle filters (pack of 10), TestoFix probe mount, certificate of conformity, case

**Order no. 0563 3000 71**

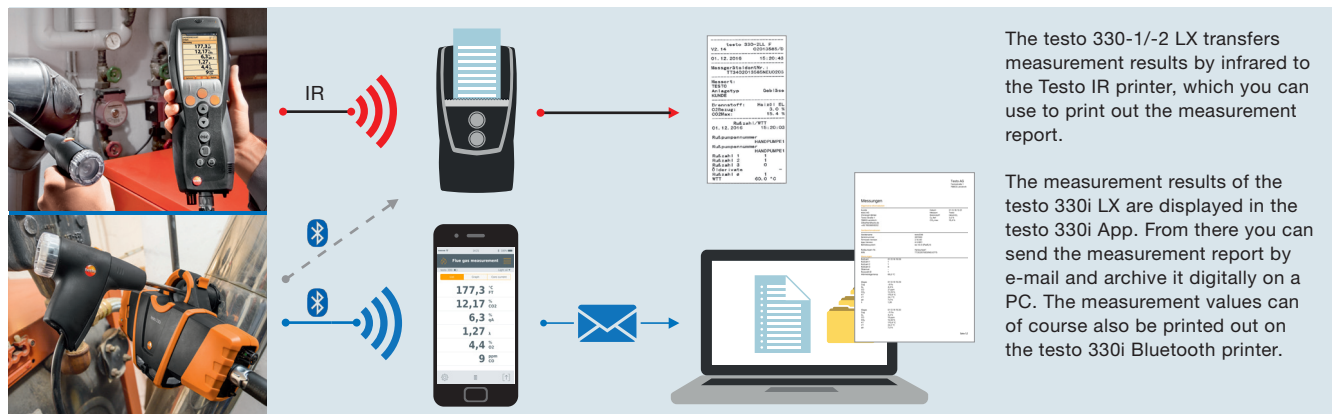
**Order no. 400563 3002** includes all components above PLUS: NO/NO<sub>x</sub> sensor

**Order no. 0563 3000 72** includes Bluetooth Analyzer with O<sub>2</sub>, CO (H<sub>2</sub> compensated, 30,000 ppm) sensors, Li-Ion rechargeable battery, universal AC adapter, particle filters (pack of 10), heavy duty carrying case, certificate of conformity (NOTE: Flue Gas Probe and TestoFix probe mount NOT Included)

# testo 330 flue gas analyzers in comparison

	testo 330-1 LX	testo 330-2 LX	testo 330i LX
			
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)	H <sub>2</sub> -compensated: 0 to 30,000 ppm not H <sub>2</sub> -compensated: 0 to 15,000 ppm (due to fresh air dilution)
CO measurement H <sub>2</sub> -compensated	—	✓	✓
Longlife CO sensor with up to 6 years' lifetime	✓	✓	✓
Flue gas loss measurement	✓	✓	✓
Draft measurement	✓	Simultaneous with flue gas measurement	Simultaneous with flue gas measurement
Differential/gas flow pressure measurement	✓	✓	✓
Error and sensor diagnosis	✓	✓	✓
Zeroing of the measurement cells and the sensor without probe removal	—	✓	✓
CO measurement with 15 min mean value calculation on solid fuel systems	—	✓	—
Warranty O <sub>2</sub> -/CO sensors	5 years	5 years	5 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	✓	✓	✓
Software/App	testo EasyHeat / testo Combustion App	testo EasyHeat / testo Combustion App	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>
<b>Temperature</b>	-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)	
<b>Draft measurement</b>	-4.01 to 16 inH <sub>2</sub> O	±0.008 inH <sub>2</sub> O or ± 5% of m.v. (-0.2 to 0.24 inH <sub>2</sub> O) ±0.01 inH <sub>2</sub> O (0.24 to 1.2 inH <sub>2</sub> O) ±1.5% of m.v. (1.2 to 16.00 inH <sub>2</sub> O)	0.004 inH <sub>2</sub> O	
<b>Pressure measurement</b>	0 to 120 inH <sub>2</sub> O	±0.2 inH <sub>2</sub> O (0.0 to 20.0 inH <sub>2</sub> O) ±1% of m.v. (20.0 to 40 inH <sub>2</sub> O) ±1.5 % of m.v. (remaining meas. range)	0.04 inH <sub>2</sub> O	
<b>O<sub>2</sub> measurement</b>	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
<b>CO measurement</b> (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 <sub>2</sub> -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	
<b>Efficiency testing (Eta)</b>	0 to 120%	0.1 %		
<b>Flue gas loss</b>	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
<b>Option NO measurement</b>	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
<b>Ambient CO<sub>2</sub> measurement</b> (with CO probe)	0 to 500 ppm	±5 ppm (0 to 100 ppm) ±5 % of m.v. (>100 ppm)	1 ppm	approx. 35 sec
<b>Gas leak measurement for combustible gases</b> (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<sub>2</sub> 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.v. (5,001 to 10,000 ppm)		approx. 35 sec
<b>Differential pressure, flow velocity and temperature</b> (via fine pressure probe)	±10,000 inH <sub>2</sub> O  0.15 to 3 m/s max. -40 to 2,192 °F (dependent on probe)	±0.001 inH <sub>2</sub> O (0 to 0.04 inH <sub>2</sub> O) plus ±1 digit ±3% of m.v. (0.04 to 40 inH <sub>2</sub> O) plus ±1 digit  ±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	

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Subject to change without notice.

### General technical data

Compatibility (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) 48 months Instrument/probe 24 months NO sensor 24 months Thermocouple and battery 12 months



To pair the combustion analyzer to your smart device, turn on the testo 320 with Bluetooth, and run the testo Combustion app. Once the app is running, select the correct serial number in the App, and the device will pair automatically.



testo Smart Probes App  
free download



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