

## Data sheet

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



# Flue gas analyzers – special anniversary models

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

5-year warranty without maintenance contract on O<sub>2</sub> and CO sensors

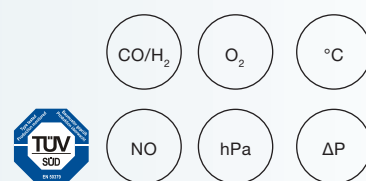
Dilution to 30,000 ppm CO (testo 330-2 LX / testo 330i LX)

Longlife sensors with up to 6 years' lifetime

Integrated sensor monitoring

TÜV-tested according to EN 50379, Parts 1-3

With Apps for operation and documentation



In 2018, 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. The sets are completed each with a flue gas probe, printer, mains unit and case. The three measuring instruments meet the highest requirements regarding longevity, precision and reliability. Numerous stored measurement menus and intuitive operation make your daily work easier than ever before.

On top of this, the comprehensive flue gas probe range and other accessories from Testo often replace an additional instrument.

The anniversary models stand out thanks to high-quality measurement cells for O<sub>2</sub>, CO and NO (optional), with an extended lifetime of up to 6 years. This saves at least one sensor replacement over the typical useful life. All 3 instruments have an App connection for more ease of operation and documentation.

## Ordering data

### Anniversary set testo 330-1 LX



- Set consists of
- Flue gas analyzer testo 330-1 LX with O<sub>2</sub> sensor, CO sensor and Bluetooth®
  - International mains unit
  - Basic flue gas probe, length 180 mm, Ø 6 mm
  - Spare dirt filter (10 off)
  - System case for instrument, probes and accessories

Order no. 0563 6033 70

### Anniversary set testo 330-1 LX with printer



- Set consists of
- Flue gas analyzer testo 330-1 LX with O<sub>2</sub> sensor, CO sensor and Bluetooth®
  - International mains unit
  - Basic flue gas probe, length 180 mm, Ø 6 mm
  - Spare dirt filter (10 off)
  - Testo fast printer IRDA
  - Spare thermal paper
  - System case for instrument, probes and accessories

Order no. 0563 6033 71

### Anniversary set testo 330-2 LX



- Set consists of
- Flue gas analyzer testo 330-2 LX with O<sub>2</sub> sensor, H<sub>2</sub>-compensated CO sensor and Bluetooth®
  - International mains unit
  - Modular flue gas probe, length 180 mm, Ø 8 mm
  - Spare dirt filter (10 off)
  - System case for instrument, probes and accessories

Order no. 0563 6034 70

### Anniversary set testo 330-2 LX with printer



- Set consists of
- Flue gas analyzer testo 330-2 LX with O<sub>2</sub> sensor, H<sub>2</sub>-compensated CO sensor and Bluetooth®
  - International mains unit
  - Modular flue gas probe, length 180 mm, Ø 8 mm
  - Spare dirt filter (10 off)
  - Testo fast printer IRDA
  - Spare thermal paper
  - System case for instrument, probes and accessories

Order no. 0563 6034 71

### Anniversary set testo 330i LX



- Set consists of
- Flue gas analyzer testo 330i LX with O<sub>2</sub> sensor, CO sensor and Bluetooth®
  - International mains unit
  - Basic flue gas probe, length 180 mm, Ø 6 mm
  - Spare dirt filter (10 off)
  - Instrument case testo 330i

Order no. 0563 6035 70




### Anniversary set testo 330i LX with CO H<sub>2</sub>-compensation



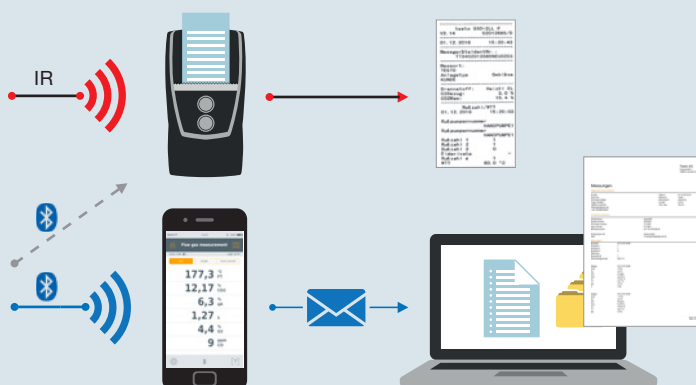
- Set consists of
- Flue gas analyzer testo 330i LX with O<sub>2</sub> sensor, H<sub>2</sub>-compensated CO sensor and Bluetooth®
  - International mains unit
  - testoFix probe mount
  - Modular flue gas probe, length 180 mm, Ø 8 mm
  - Spare dirt filter (10 off)
  - Instrument case testo 330i

Order no. 0563 6035 71

## 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	not H <sub>2</sub> -compensated: 0 to 4,000 ppm	H <sub>2</sub> -compensated: 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	✓	✓	✓
Draught measurement	✓	Parallel to flue gas measurement	Parallel to 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 colour graphic display	High-resolution colour graphic display	Smartphone, tablet
Memory	500,000 measurement protocols	500,000 measurement protocols	500,000 measurement protocols
Software/App	testo EasyHeat / testo flue gas App	testo EasyHeat / testo flue gas App	testo 330i App

## Measure more flexibly. Document more easily.



The testo 330-1/-2 LX transfers measurement results by infrared to the Testo IR printer, which you can use to print out the measurement report.

The measurement results of the testo 330i LX are displayed in the testo 330i App. From there you can send the measurement report by e-mail and archive it digitally on a PC. The measurement values can of course also be printed out on the testo 330i Bluetooth printer.



**Download testo flue gas App and testo 330i App**  
for free

# Technical data

Measurement parameter	Measuring range	Accuracy ( $\pm 1$ digit)	Resolution	t <sub>90</sub>
<b>Temperature</b>	-40 to +1,200 °C	$\pm 0.5$ °C (0.0 to +100.0 °C) $\pm 0.5$ % of m.v. (remaining meas. range)	$\pm 0.1$ °C (-40 - 999.9 °C) $\pm 1$ °C (remaining meas. range)	
<b>Draught measurement</b>	-9.99 to +40 hPa	$\pm 0.02$ hPa or $\pm 5$ % of m.v. (-0.50 to +0.60 hPa) $\pm 0.03$ hPa (+0.61 to +3.00 hPa) $\pm 1.5$ % of m.v. (+3.01 to +40.00 hPa)	0.01 hPa	
<b>Pressure measurement</b>	0 to 300 hPa	$\pm 0.5$ hPa (0.0 to 50.0 hPa) $\pm 1$ % of m.v. (50.1 to 100.0 hPa) $\pm 1.5$ % of m.v. (remaining meas. range)	0.1 hPa	
<b>O<sub>2</sub> measurement</b>	0 to 21 vol. %	$\pm 0.2$ vol. %	0.1 vol. %	< 20 sec
<b>CO measurement</b> (without H <sub>2</sub> compensation)	0 to 4,000 ppm	$\pm 20$ ppm (0 to 400 ppm) $\pm 5$ % of m.v. (401 to 2,000 ppm) $\pm 10$ % 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	$\pm 10$ ppm or $\pm 10$ % of m.v. (0 to 200 ppm) $\pm 20$ ppm or $\pm 5$ % of m.v. (201 to 2,000 ppm) $\pm 10$ % 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	$\pm 100$ ppm (0 to 1000 ppm) $\pm 10$ % 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	$\pm 200$ ppm or $\pm 20$ % 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	$\pm 200$ ppm or $\pm 20$ % 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	$\pm 0.2$ vol. %	0.1 vol. %	< 40 sec
<b>Option NO measurement</b>	0 to 3,000 ppm	$\pm 5$ ppm (0 to 100 ppm) $\pm 5$ % of m.v. (101 to 2,000 ppm) $\pm 10$ % 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	$\pm 5$ ppm (0 to 100 ppm) $\pm 5$ % 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	$\pm 50$ ppm or $\pm 2$ % of m.v. (0 to 5,000 ppm) $\pm 100$ ppm or $\pm 3$ % of m.v. (5,001 to 10,000 ppm)		approx. 35 sec
<b>Differential pressure, flow velocity and temperature</b> (via fine pressure probe)	$\pm 10,000$ Pa  0.15 to 3 m/s max. -40 to +1,200 °C (dependent on probe)	$\pm 0.3$ Pa (0 to 9.99 Pa) plus $\pm 1$ digit $\pm 3$ % of m.v. (10 to 10,000 Pa) plus $\pm 1$ digit  $\pm 0.5$ °C (-40 to 100 °C) $\pm 0.5$ % of m.v. (remaining meas. range) plus probe accuracy	0.1 m/s 0.1 °C	

## 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: 720 g testo 330-1/-2 LX: 600 g
Dimensions	testo 330i LX: 270 x 160 x 57 mm testo 330-1/-2 LX: 270 x 90 x 65 mm
Storage temperature	-20 to +50 °C
Operating temp.	-5 to +45 °C

Power supply	Rechargeable battery pack 3.7 V / 2.6 Ah; mains unit 6 V / 1.2 A
Memory	500,000 readings
Display testo 330-1/-2 LX	Colour graphic display 240 x 320 Pixel
Guarantee	Gas sensors (O <sub>2</sub> , CO) 60 months Instrument/probe 48 months NO sensor 24 months Thermocouple and battery 12 months
Guarantee conditions	<a href="https://www.testo.com/guarantee">https://www.testo.com/guarantee</a>