

We measure it.



# Flue gas analyser

testo 327 - The special class entry instrument

---

Simple menu structure

---

4-line segment display with LED illumination

---

Fast, single-plug probe connection

---

8 selectable fuels

---

Life expectancy of sensors up to 3 years

---

Easy IR printout

---

Memory for 20 measurement values in testo 327-2

---

Li-Ionen rech. battery (2,400 mA), life 10 hours

---

TÜV-tested according to 1. BImSchV / EN 50379

---



## The special class entry instrument

testo 327 is the entry measuring instrument for flue gas analysis. It measures combustion efficiency, °C, O<sub>2</sub>, CO<sub>2</sub>, CO and flue draught. A dual wall O<sub>2</sub> measurement as well as an ambient CO measurement are also possible. The powerful LED backlighting in the 4-line display guarantees good legibility even in unfavourable lighting. The measuring instrument stands out thanks to its ergonomic housing design as well as its durability (IP40). The integrated sensor and instrument diagnosis offers security and guarantees high availability of the instrument. The testo 327 is TÜV-tested according to BImSchV and fulfils the requirements of EN50379. The quick probe connection of the testo 327 allows easy and uncomplicated connection of the probe. For simpler applications, the single-sensor instrument versions testo 327-1 O<sub>2</sub> and testo 327-1 CO are suitable. The testo 327-1 O<sub>2</sub> measures the O<sub>2</sub> content of the flue gas, the flue gas temperature and the flue draught. The flue gas loss and the efficiency are calculated. The testo 327-1 measures the CO content of the flue gas, the flue gas temperature and the flue draught.



The "second skin" is integrated into the instrument design and protects from impact and shock during tough everyday use



Excellent display clearness even in unfavourable lighting conditions



Stable probes filter particles before they get into gas paths



Fast probe connection: All gas paths are connected with one "click"



Sensors are as easy to change as a battery



Latest Li-ion rechargeable batteries



Built-in condensate trap

## testo 327-1

### The starter instrument for flue gas analysis

- Contains all basic functions such as combustive effectivity, flue gas loss, O<sub>2</sub>, CO<sub>2</sub>, CO and flue draught
- Robust and protected from impact by Elastomer protection class
- Easy operational structure and procedure
- Ideal handling thanks to easy menu structure and ergonomic housing
- Stable measurement value within 30 sec.
- Compatible with the entire probe range of testo 330
- Low weight (ca. 500 g)
- TÜV-geprüft nach 1. BImSchV / EN 50379 Teil 2 für O<sub>2</sub>, °C, hPa und Teil 3 für CO



testo 327-1 is your introductory instrument to flue gas analysis. It measures combustion efficiency, °C, O<sub>2</sub>, CO<sub>2</sub>, CO and flue draught. The strong LED background light in the 4 line display guarantees an easy-to-read display even if

lighting conditions are unfavourable. The analyser stands out on account of its easy menu navigation and ergonomic housing as well as its durability.

## testo 327-2

### The service instrument for flue gas analysis

#### The additional functions of the testo 327-2

- Bluetooth wireless transfer (optional)
- IR & IRDA interface for easy readout of data to PC, printer or Pocket PC
- Life expectancy of the measurement cells up to 3 years
- Security thanks to instrument and sensor diagnosis
- Differential temperature measurement
- Differential pressure measurement with 2 measuring ranges
- Memory for 20 measurements
- Li-ion rechargeable battery (2,400 mA), life 10 Std.
- CO measurement with H<sub>2</sub>-compensation (optional)
- TÜV-tested according to 1. BImSchV / EN 50379 Part 2 for O<sub>2</sub>, °C, hPa and CO with H<sub>2</sub>-compensation



Bluetooth wireless transfer (optional)



H<sub>2</sub>-compensated CO measurement cell for official testing according to EN norm 50379-2 (optional)



Additional differential pressure measurement up to 200 mbar



Powerful Li-ion rechargeable battery with 10-hour lifetime with pump running

testo 327-2 is the convenient service instrument for flue gas analysis. The measurement cell has a lifetime of up to 3 years. The status diagnosis of wearing- and service-parts offers higher planning security in the conduction of

measurements. testo 327-2 can optionally be equipped with a CO measurement cell, in order to conduct official tests according to EN 50379-2.

# Flue gas analyser testo 327-1

## testo 327-1

testo 327-1 flue gas analyser, incl. rech. battery and calibration protocol; measures O<sub>2</sub>, CO, hPa, °C

Part no. 0632 3201



### Technical data

Temperature measurement	-40 to +600 °C
Draught measurement	±40 hPa
Efficiency measurement (Eta)	0 to 120%
Flue gas loss (qA)	0 to 99.9%
O <sub>2</sub> measurement	0 to 21 Vol. %
CO <sub>2</sub> measurement	0 to CO <sub>2</sub> max
CO measurement	0 to 4000 ppm

## testo 327-1 CO

testo 327-1 CO flue gas analyser, incl. rech. battery and calibration protocol; measures CO, hPa, °C

Part no. 0632 3204

### General technical data

Storage temp.	-20 to +50 °C
Oper. temp.	-5 to +45 °C
Power supply	via Li-Ion rechargeable battery
Battery life	> 5 h
Weight	Approx. 500 g
Dimensions	216 x 68 x 47 mm
Warranty	2 years on instrument, probes and gas sensors 1 year on thermocouple and rechargeable battery (wearing parts excluded)

## testo 327-1 O<sub>2</sub>

testo 327-1 O<sub>2</sub> flue gas analyser, rech. battery and calibration protocol; measures O<sub>2</sub>, hPa, °C

Part no. 0632 3203

## testo 327-1 Advanced Set for heating and installation technicians

testo 327-1 flue gas set advanced for heating fitters and installation technicians, incl. rech. batteries and calibration protocol; mains unit 100-240 V for mains operation or battery charging in instrument; Differential hose and temperature kit; compact flue gas probe, length 180 mm, Ø 6mm; combustion air temperature probe, length 190 mm, fast printer with wireless infrared interface; instrument cleaner 100 ml, basic system case instrument, probes and accessories

Part no. 0563 3203 71



Illustration may differ from original

- Easy menu navigation
- 4 line segment display
- LED display light
- Easy IR printout
- Built-in condensate trap
- TÜV By RgG 253 acc. to 1. BImSchV
- EN 50379 Part 2 for O<sub>2</sub>, °C, hPa
- EN 50379 Part 3 for CO
- Small Li-ion rechargeable battery (1200 mA, lifetime of 5 h) can be recharged inside or outside instrument
- Fast probe connection using single probe plug
- Ambient CO measurement using flue gas probe
- O<sub>2</sub> dual wall measurement (can be stored)
- Separate AT temperature measurement
- Undiluted CO measurement (can be stored)
- Draught measurement
- 6-8 fuels (country-specific (e.g. UK=6))
- IP 40



# Flue gas analyser testo 327-2

## testo 327-2

testo 327-2 flue gas analyser, incl. rech. battery and calibration protocol; measures O<sub>2</sub>, CO, hPa, °C

Part no. 0632 3202



## testo 327-2 Set for heating fitters

testo 327-2 flue gas set service for heating fitters, incl. rech. battery and calibration protocol; including option: CO-H<sub>2</sub> measurement; mains unit 100-240 V for mains operation or battery charging in instrument; modular flue gas probe, length 300 mm, Ø 8 mm, TÜV approval; combustion air temperature probe, length 190 mm; hose connection set for separate gas pressure measurement; fast printer wireless infrared interface; flexible probe shaft, length 300 mm, Ø 10 mm, Tmax. 180 °C; instrument cleaner, 100 ml; basic system case for instrument, probes and accessories

Part no. 0563 3202 70

Illustration may differ from original



## Technical data

Temperature measurement	-40 to +600 °C
Draught measurement	±40 hPa
Efficiency measurement (Eta)	0 to 120%
Pressure measurement	±200 hPa
Flue gas loss (qA)	0 to 99.9%
O <sub>2</sub> measurement	0 to 21 Vol. %
CO <sub>2</sub> measurement	0 to CO <sub>2</sub> max
CO measurement	0 to 4000 ppm
Option CO measurement (H <sub>2</sub> -compensated)	0 to 8000 ppm

## General technical data

Storage temp.	-20 to +50 °C
Oper. temp.	-5 to +45 °C
Power supply	via Li-ion rechargeable battery
Battery life	> 10 h
Weight	Approx. 500 g
Dimensions	216 x 68 x 47 mm
Warranty	2 years on instrument, probes and gas sensors 1 year on thermocouple and rechargeable battery (wearing parts excluded)

- Life expectancy of gas sensors up to 3 years
- Assurance thanks to instrument and sensor diagnosis
- IR and IRDA interface for easy reading out of data to printer or Pocket PC
- BLUETOOTH® wireless transfer (optional)
- Delta T measurement
- Delta P measurement: 2 measurement ranges
- Store (20 readings)

- Li-ion rechargeable battery (2,400 mA), 10 hr lifetime
- TÜV By RgG 254 acc. to 1. BImSchV
- CO option with H<sub>2</sub> compensation
- Official test in accordance with EN standard 50379-2 for °C; O<sub>2</sub>, hPa, Part 3 for CO
- Optional Part 2 for CO with H<sub>2</sub> compensation



\*Country permits: The BLUETOOTH® wireless module used by Testo has permits for the following listed countries, and can only be used in those countries, i. e. BLUETOOTH® wireless transfer may not be used in any other country! Europe including all EU member states: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and Turkey; European countries (EFTA): Iceland, Liechtenstein, Norway and Switzerland; Non-European countries: Ukraine, Colombia and El Salvador.

# Accessories

<b>Upgrade/Options</b>	<b>Part no.</b>
Option: CO-H <sub>2</sub> -measurement for testo 327	0440 3273
Option: fine draught measurement, resolution 0.1 Pa, measurement range up to 100 Pa (instead of standard draught measurement) - for testo 327-1, 327-1 O <sub>2</sub> /CO and testo 327-2	0440 3271
Option: fine differential pressure measurement, resolution 1 Pa; for testo 327-2 only	0440 3272
Option BLUETOOTH® module*	0344 0011

  

<b>Retrofits</b>	
Retrofit: O <sub>2</sub> measurement for testo 327-1 CO	

  

<b>Spare sensors</b>	<b>Part no.</b>
Spare O <sub>2</sub> sensor for testo 327-1, 327-1 O <sub>2</sub>	0390 0047
Spare CO sensor for testo 327-1, 327-1 CO	0390 0046
Spare O <sub>2</sub> sensor, Testo-specific	0390 0092
Spare CO sensor Testo-specific (without H <sub>2</sub> compensation)	0390 0095
Spare CO sensor testo-specific (H <sub>2</sub> compensated)	0390 0109

  

<b>Accessories</b>	<b>Part no.</b>
Mains unit international 100-240 V AC / 6,3V DC for mains operation or battery charging in instrument for mains operation or battery charging in instrument	0554 1096
Spare rech. batt. w/ charging station testo 327 / testo 330-1/-2	0554 1087
Testo fast printer IRDA with wireless infrared interface; 1 roll thermal paper; 4 AA batteries	0554 0549
Spare thermal paper for printer (6 rolls), permanent ink	0554 0568
Instrument cleaner, 100 ml	0554 1207
Smoke tester with oil; soot sheet; for measuring soot in flue gas	0554 0307
Hose connection set for separate gas pressure measurement testo 327 / testo 330-LL	0554 1203
Full version easyheat and easyheat.mobile . Software package for PC and Pocket PC. (for testo 327-2 only)	0554 1210
ISO calibration certificate/flue gas	0520 0003
Differential temperature set consisting of 2 Velcro probes and temperature adapter testo 327	0554 1208
Spare particle filter, 10 off	0554 3385
Spare soot filter paper; 8 paper rolls	0554 0146

  

<b>Cases</b>	<b>Part no.</b>
System case flat	0516 3334

\*Country permits: The BLUETOOTH® wireless module used by Testo has permits for the following listed countries, and can only be used in those countries, i. e. BLUETOOTH® wireless transfer may not be used in any other country! Europe including all EU member states: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and Turkey; European countries (EFTA): Iceland, Liechtenstein, Norway and Switzerland; Non-European countries: Ukraine, Colombia and El Salvador.

# Probes

<b>Compact basic flue gas probes available in two lengths, probe stop, NiCr-Ni thermocouple, 1.5 m hose and particle filter included</b>	<b>Part no.</b>	
Flue gas probe compact; length 180 mm; Ø 6 mm; Tmax. 500 °C; probe stop; NiCr-Ni thermocouple, 2.2 m hose and particle filter included	0600 9740	
Flue gas probe compact; length 300 mm; Ø 6 mm; Tmax. 500 °C; probe stop; NiCr-Ni thermocouple, 2.2 m hose and particle filter included	0600 9741	
<b>Modular flue gas probe from the testo 330 product line, available in 2 lengths, probe stop, NiCr-Ni thermocouple, 2.2 m hose and particle filter included</b>	<b>Part no.</b>	
Flue gas probe; length 180 mm; Ø 8 mm; Tmax. 500 °C; TÜV approval; probe stop; NiCr-Ni thermocouple; 2.2 m hose and particle filter included	0600 9760	
Flue gas probe; length 300 mm; Ø 8 mm; Tmax. 500 °C; TÜV approval; probe stop; NiCr-Ni thermocouple; 2.2 m hose and particle filter included	0600 9761	
Flue gas probe; length 180 mm; Ø 6 mm; Tmax. 500 °C; probe stop; NiCr-Ni thermocouple; 2.2 m hose and particle filter included	0600 9762	
Flue gas probe; length 300 mm; Ø 6 mm; Tmax. 500 °C; probe stop; NiCr-Ni thermocouple; 2.2 m hose and particle filter included	0600 9763	
Flue gas probe flexible; length 330 mm; Tmax. 180 °C; short-term 200 °C; bending radius max. 90 °C for measuring at inaccessible points; probe stop; NiCr-Ni-thermocouple; 2,2 m hose and particle filter included	0600 9764	
<b>Probe accessories</b>	<b>Part no.</b>	
Probe shaft; length 180 mm; 8 mm; Tmax. 500 °C	0554 9760	
Probe shaft; length 180 mm; Ø 6 mm; Tmax. 500 °C	0554 9762	
Probe shaft; length 300 mm; Ø 8 mm; Tmax. 500 °C	0554 9761	
Probe shaft with probe stop, length probe shaft 335 mm, Tmax probe shaft 1000 °C, Ø probe shaft 8 mm	0554 8764	
Probe shaft flexible; length 330 mm; Ø 10 mm; Tmax. 180 °C	0554 9764	
Probe shaft multi-hole; length 300 mm; Ø 8 mm; for mean CO calculation	0554 5762	
Probe shaft multi-hole; length 180 mm; Ø 8 mm; for mean CO calculation	0554 5763	
Hose extension; 2.8 m; extension cable for probe and analyser	0554 1202	
6 mm probe stop, PTFE, with spring clamp and handle, Tmax 200 °C	0554 3327	
8 mm probe stop, PTFE, with spring clamp and handle, Tmax 200 °C	0554 3328	
Probe stop 8 mm; steel; with spring clamp and handle; Tmax. 500 °C	0554 3330	
Probe stop 6 mm; steel; with spring clamp and handle; Tmax. 500 °C	0554 3329	
Modular flue gas probe handle	0440 3334	
<b>Additional probes</b>	<b>Part no.</b>	
Dual wall clearance probe for O2 supply air measurement	0632 1260	
<b>Combustion air temperature probes</b>	<b>Part no.</b>	
Combustion air temperature probe, immersion depth 300 mm	0600 9791	
Combustion air temperature probe, immersion depth 190 mm	0600 9787	
Combustion air temperature probe, immersion depth 60 mm	0600 9797	
Quick-action surface probe	0604 0194	

