testo 300



# Combustion analyzer

testo 300 Combustion Analyzer

Large scratch-resistant 5" HD display with smart-touch operation and replaceable protective film

Stored, intuitive menus for all relevant measurements

4 strong magnets with rubber coating for material friendly mounting

Ready to measure at the touch of a button in standby mode

Optional: extremely durable  ${\rm O_2}$  sensor and automatic dilution up to 30,000 ppm CO

E-mailing of reports directly on site



Truly smart combustion analysis: that is what the testo 300 stands for. The compact combustion analyzer is fully operated via the large touch display - you can see all the measuring values without scrolling. The scratch-resistant screen in embedded in a robust housing which remains reliable even in tough day-to-day working conditions. Menus for the most important measurements are already stored in the testo 300 and reliably guide you through the relevant application.

The combustion analyzer is not familiar with waiting times or start-up phases, it is immediately ready to go at the touch of a button in standby mode. Documentation is dealt with just as quickly – with the testo 300, reports can be created and sent directly on site, with WiFi connection There is an optional NOx sensor available.

The  $\rm O_2$  sensor, is extremely durable and in the Pro models, an optional automatic dilution up to a maximum of 30,000 ppm CO protects the CO sensor.



5 Commonwealth Ave Woburn, MA 01801 Phone 781-665-1400 Toll Free 1-800-517-8431



# Truly smart: The new testo 300 combustion analyzer.

Providing reliably accurate results is not enough.

A contemporary combustion analyzer also makes all work steps as easy as possible for you, both before and after the measurement, as well as in terms of the measurement itself. The user-friendly testo 300 was developed with precisely this objective in mind. It is not just decades of experience in measuring technology. With smart-touch operation, robust construction, and e-mailing of reports, the testo 300 will quickly become your indispensable companion for all measuring tasks involving heating.

#### Operation via smart-touch

The smart-touch display responds immediately without any delay. That allows intuitive operation – just as easy as on your smartphone

#### E-mailing of reports

The testo 300 enables the convenient creation of documentation directly on site. And the dictation function even saves you typing in the process. You can send reports to the office or customers immediately via WiFi

#### Keep an eye on all the measuring values

You can see all the system's parameters right away on the large 5" HD display.

#### Get the result faster

Clearly structured menus for all relevant measurements are already stored in the measuring instrument and guide you efficiently through the application.

#### Ready to use right away

No more waiting time. In standby mode, the testo 300 is ready to measure at the touch of a button.

#### Completely worry-free

The testo 300 has quality sensor technology, measures high CO values up to 30,000 ppm and is future-proofed thanks to NO preparation.





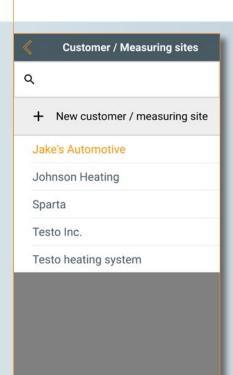
#### **Customers / Measuring site**

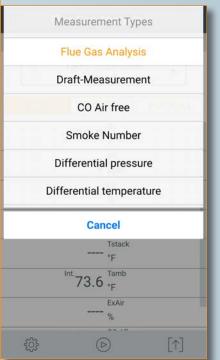
Integrated address book with details of the relevant heating system (e.g. manufacturer, system type, system name, serial no., fuel, etc.).

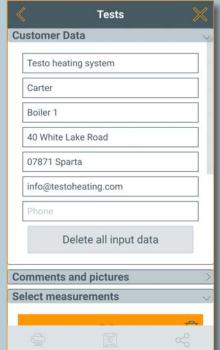


#### **Professional documentation**

Create measurement reports with all the information about readings, customers and heating systems directly on site, add comments to them, have the reports confirmed by the customer's signature and send the tests. You can also store your company logo. All PDF reports with all the important information are also saved in the instrument, so that they are always readily available.









#### Intuitive measurement menus

Clearly structured and explicit menus for all applications involving heating systems are already stored in the testo 300. This allows you to do your jobs even more efficiently.



Warranty



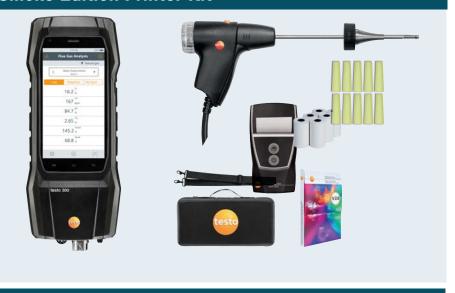
# **Combustion Analyzer kits**

2 years

## testo 300 Smoke Edition Kit testo 300 **Smoke Edition Kit** Order no. 0564 3002 82 O<sub>2</sub>, CO, Instrument, including power supply 4,000 ppm Probe, including 10 spare filters Compact flue gas probe (12 in, Ø 0.25 in.) Printer, including spare paper testo EasyHeat software **/** (free download - www.testo.com) Instrument bag **/**



### testo 300 Smoke Edition Printer Kit testo 300 **Smoke Edition Kit** with Printer Order no. 0564 3002 83 Instrument, including power supply O<sub>2</sub>, CO, 4,000 ppm Probe, including 10 spare filters Compact flue gas probe (12 in., Ø 0.25 in.) Printer, including spare paper **✓** testo EasyHeat software **/** (free download - www.testo.com) Instrument bag Warranty 2 years



	testo 300 Pro Kits			
Order no.	testo 300 Pro Commercial Kit 0564 3004 92	testo 300 Pro Commercial Kit with Printer 0564 3004 93	testo 300 Pro Commercial / Industrial Kit w/ CO (up to 30,000 ppm), NO, and Printer 0564 3004 96	
Instrument incl. power supply	O <sub>2</sub> , CO, 4,000 ppm, NO sensor - can be retrofitted	O <sub>2</sub> , CO, 4,000 ppm, NO sensor - can be retrofitted	O2, CO, 30,000 ppm, NO sensor	
Probe incl 10 spare filters	Modular flue gas probe (12 in, Ø 0.25 in)	Modular flue gas probe (12 in, Ø 0.25 in)	Modular flue gas probe (12 in, Ø 0.25 in)	
Printer incl spare paper	-	<b>~</b>		
testo EasyHeat software	(free download - www.testo.com)	(free download - www.testo.com)	(free download - www.testo.com)	
Instrument case		<b>~</b>	<b>~</b>	
Warranty	4 years	4 years	4 years	



Illustration differs depending on kit type



# Reference guide

Spare gas sensors/retrofitting	
O <sub>2</sub> sensor, with 4-year warranty	0393 0023
CO sensor (without H <sub>2</sub> compensation), with 4-year warranty	
CO sensor (without H <sub>2</sub> compensation), with 2-year warranty	
CO sensor, H <sub>2</sub> -compensated, with 4-year warranty	0393 0101
CO sensor, H <sub>2</sub> -compensated, with 2-year warranty **SPECIAL ORDER**	0393 0105
NO sensor	0393 0151
Accessories	Order no.
testo Bluetooth®printer, including 1 roll of thermal paper, rechargeable battery and power supply	0554 0621
Spare thermal paper for printer, permanent ink	0554 0568
Smoke tester, including oil and soot papers for measuring soot in flue gas, excluding cone (order no. 0554 9010)	0554 0307
Filter paper for determining soot number, 40 measuring strips for approx. 200 measurements	
USB power supply, including USB cable	
testo EasyHeat PC software for displaying measurement procedures as diagrams, tables and for customer data management (Free download available at www.testo.com)	
ISO calibration certificate for flue gas	0520 0003
Cases and carrying bags	Order no.
Instrument case (height: 5.11 inch (130 mm)) for instrument, probes and accessories	0516 3300
Instrument case with double base (height: 7.09 (180 mm)) for instrument, probes and accessories	
testo 300 instrument bag with carrying strap	





# Probes and accessories

Modular flue gas probes	Order no.
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 7.2 feet; dirt filter; length 7 inch; Ø 0.3125 inch; Tmax. 932 °F	0600 9760
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 7.2 feet; dirt filter; length 12 inch; Ø 0.3125 inch; Tmax. 932 °F	0600 9761
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 7.2 feet; dirt filter; length 7 inch; Ø 0.25 inch; Tmax. 932 °F	0600 9762
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 7.2 feet; dirt filter; length 12 inch; Ø 0.25 inch; Tmax. 932 °F	0600 9763
Flexible flue gas probe; thermocouple NiCr-Ni; hose 7.2 feet; dirt filter; length 13 inch; Ø .35 inch; Tmax. 356 °F; short-term 392 °F; ideal for measurements in difficult-to-access locations	0600 9770
Compact flue gas probes	Order no.
Compact basic flue gas probe, 7 inch, Ø 0.25 inch, Tmax. 932 °F	0600 9740
Compact basic flue gas probe, 12 inch, Ø 0.25 inch, Tmax. 932 °F	0600 9741
Probe accessories and probe filter	Order no.
Modular probe shaft; length 7 inch, Ø 0.3125 inch, Tmax. 932 °F	0554 9760
Modular probe shaft; length 12 inch, Ø 0.3125 inch, Tmax. 932 °F	0554 9761
Probe shaft; length 13.2 inch; including cone; Ø 0.3125 inch; Tmax. 1,832 °F	0554 8764
Flexible probe shaft; length 13 inch; Ø 0.35 inch; Tmax. 356 °F	0554 9770
Multi-hole probe shaft; length 12 inch; Ø 0.3125 inch; for CO mean value calculation	0554 5762
Multi-hole probe shaft; length 7 inch; Ø 0.3125 inch; for CO mean value calculation	0554 5763
Hose extension; 9 feet; probe-instrument extension tube	0554 1202
Spare dirt filter, modular probe, 10 count	0554 3385
Spare dirt filter, compact probe, 10 count	0554 0040
Cone with spring clamp and handle option, Tmax. 392 °F, Teflon material, Ø 0.25 inch	0554 3327
Cone with spring clamp and handle option, Tmax. 392 °F, Teflon material, Ø 0.3125 inch	0554 3328
More probes and accessories	Order no.
Dual wall clearance probe for O <sub>2</sub> air input measurement	0632 1260
Ambient CO probe (digital), fixed cable	0632 1272
Solid fuel kit, including probe shaft, adapter	0600 9765
Hose connection kit with adapter for testo 300 for separate gas pressure measurement	0554 1203
Pressure connection hose, single, Ø 0.15 inch / 0.24 inch	0554 0449
Pressure test kit for gas pipe test, testo 300, testo 330-1/-2 LL version 2010	0554 1213
Temperature probes	Order no.
Combustion air temperature probe with 7.5 inch probe shaft incl. cone and magnets for attachment	0600 9799
Clamp probe with NTC temperature sensor for measurements on pipes (Ø 0.25 inch to 1.38 inch)	0615 5505
Pipe wrap probe (NTC) for pipe diameters from 0.2 inch to 2.65 inch	0615 5605
Waterproof immersion/penetration probe with NTC temperature sensor	0615 1212
Temperature probe with Velcro (NTC)	0615 4611



# Technical data

Measurement parameter	Measuring range	Accuracy (±1 digit)	Resolution
O <sub>2</sub> measurement	0 to 21 vol. %	±0.2 vol. %	0.1 vol. %
CO measurement (without ${ m H_2}$ 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
CO measurement (with H <sub>2</sub> compensation)	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
CO measurement **SPECIAL ORDER** (without H₂ compensation and dilution)	0 to 15,000 ppm	±200 ppm or ±20% of m.v.	1 ppm
CO measurement (with H <sub>2</sub> compensation and dilution)	0 to 30,000 ppm	±100 ppm or ±10% of m.v.	1 ppm
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
Efficiency testing (Eta)	0 to 120%		0.1%
Flue gas loss	0 to 99.9%		0.1%
CO <sub>2</sub> determination (digital calculation from O <sub>2</sub> )	Display range 0 to CO <sub>2</sub> max.	±0.2 vol. %	0.1 vol. %
Draft measurement	-10 to 40 inH <sub>2</sub> O	±0.002 inH <sub>2</sub> O (0 to ±0.04 inH <sub>2</sub> O) ±0.02 hPa (±0.04 to ±1.2 inH <sub>2</sub> O) ±1.5% of m.v. (remaining meas. range)	0.0001 inH <sub>2</sub> O
Pressure measurement	-40 to 80 inH <sub>2</sub> O	$\pm 0.2 \text{ inH}_2\text{O}$ (0 to $\pm 20 \text{ inH}_2\text{O}$ ) $\pm 1\%$ of m.v. ( $\pm 20.1 \text{ to } \pm 40 \text{ inH}_2\text{O}$ ) $\pm 1.5\%$ of m.v. (remaining meas. range)	0.01 inH <sub>2</sub> O
Temperature (instrument)	-40 to 2,192 °F	±1 °F (32 to 212 °F) ±0.5 % of m.v. (remaining meas. range)	0.1 °F (-40 to 1,831.82 °F) 1 °F (remaining meas. range)
Ambient CO measurement (internal/flue gas probe)	0 to 2,000 ppm	±10 ppm (0 to 100 ppm) ±10 % of m.v. (101 to 2,000 ppm)	1 ppm
Ambient CO measurement (external with CO probe)	0 to 500 ppm	±3 ppm (0 to 29 ppm) ±10 % of m.v. (30 to 500 ppm)	1 ppm

## General technical data

Storage temperature	-4 to 122 °F		
Operating temperature	-23 to 113 °F		
Charging temperature	32 to 113 °F		
Humidity application range	15 to 90 %RH, not condensing		
Power supply	Rechargeable battery, USB power supply		
Rechargeable battery life	10 hrs		
Protection class	IP 40		
Memory	1 million measuring values		
Display	5.0" touch display, HD 1280*720 pixels, IPS (160 k)		
Weight	Approx. 1.76 lbs (0.8 kg)		
Dimensions	L: 9.6 inch (244 mm) (including probe connection) H: 2.32 inch (59 mm) W: 3.86 inch (98 mm)		
testo 300 warranty	Instrument/probe/gas sensors		
•	O <sub>3</sub> , CO sensor 24 months		
	Thermocouple and rechargeable battery 12 months		
testo 300 Pro warranty	Instrument/probe/gas sensors		
,	O <sub>3</sub> , CO sensor 48 months		
	NO sensor 24 months		
	Thermocouple and rechargeable battery 12 months		
Warranty terms	https://www.testo.com/quarantee		