

Be sure. **testo**



# Truly smart combustion measurement.

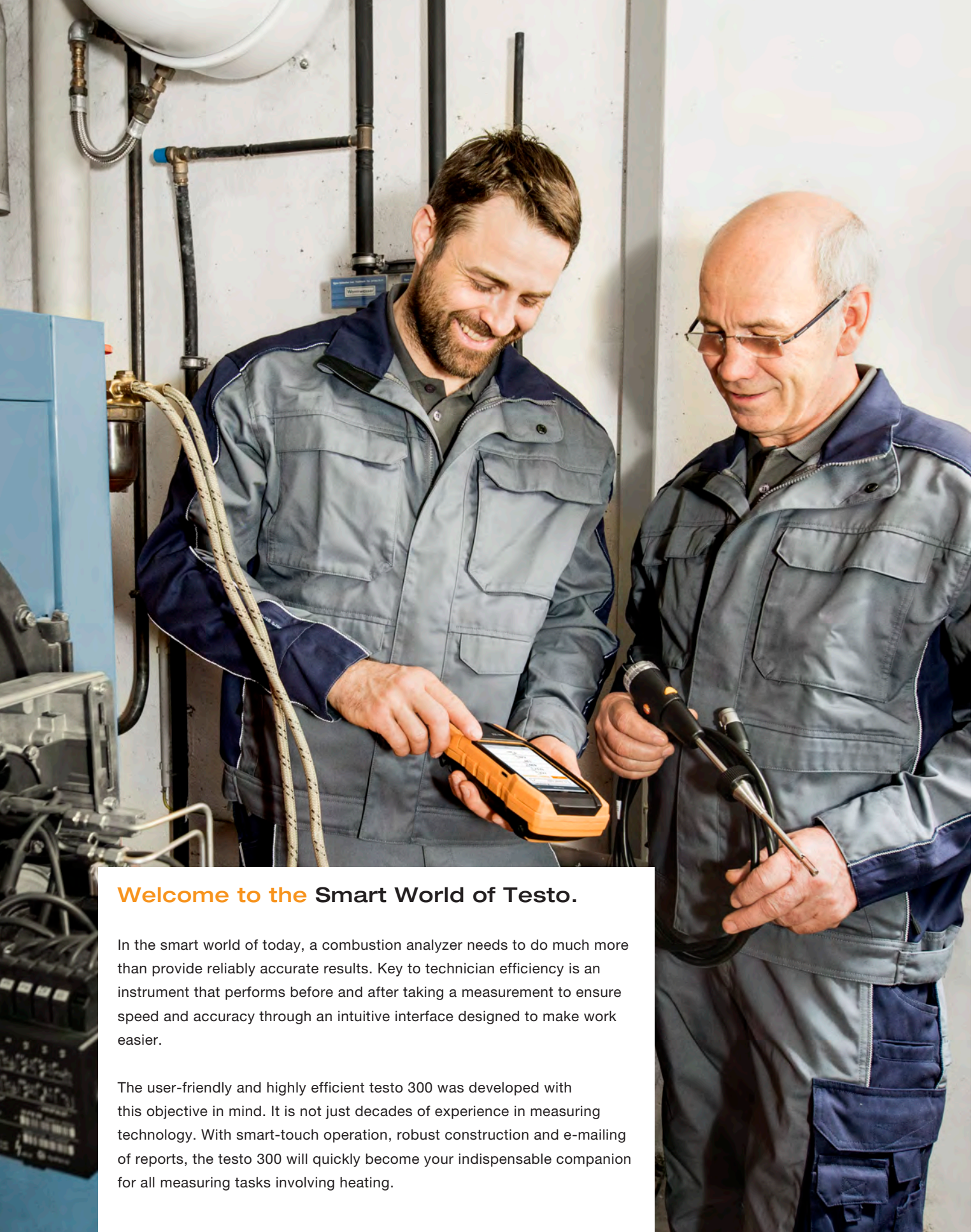
The new testo 300 combustion analyzer with smart-touch technology.

1.800.561.8187

www.**itm**.com

information@itm.com





## Welcome to the Smart World of Testo.

In the smart world of today, a combustion analyzer needs to do much more than provide reliably accurate results. Key to technician efficiency is an instrument that performs before and after taking a measurement to ensure speed and accuracy through an intuitive interface designed to make work easier.

The user-friendly and highly efficient testo 300 was developed with 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.

# Truly efficient: The advantages.



## 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 straight away via Wi-Fi.

## 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 comes standard with the longest warranty in the industry.

## 1 year of additional warranty!

Extended warranty includes instrument, sensors, & flue gas probe



# Truly robust: The construction.

Smart measuring technology is of little benefit if it can't keep going in tough day-to-day working conditions, because your measuring instrument is a partner that supports you every day in the efficient, problem-free performance of your tasks. This is precisely why the testo 300 has a particularly resilient and high-quality construction.

## Protected display

Scratch-resistant, recessed and with a special replaceable protective film.



## Secure mounting

4 strong magnets with rubber coating – particularly material friendly.



## Bolted housing

For that extra degree of stability when it really matters.



## Robust sensors

Optional: extremely durable O<sub>2</sub> sensor and automatic dilution up to 30,000 ppm CO.



# Truly flexible: Instrument configuration and probe system.

## A combustion analyzer perfectly tailored to your needs

The testo 300 doesn't just give you smart operation – the configuration also has that certain something. This means you can choose between a 2-year and 4-year warranty for the sensor technology. In addition to O<sub>2</sub> and CO, you can also add a third sensor slot for the measurement of NO<sub>x</sub> as an option. Various kits with special instrument configurations and individual accessories are available, specifically tailored to the requirements of your individual application.



## Versatile probes – quickly changed

### One handle for a variety of probes

A variety of probe shafts can easily be attached to the multi-functional handle. This ensures you enjoy a high level of flexibility in all applications. And you are ready to measure even more quickly, thanks to connection via a universal plug.



### Proven probes

You can use the testo 320, testo 330 and testo 330-1/-2 LL probes with their practical multiple plug for the testo 300 as well.



### New probes

New probes with anti-rotation USB C connection are available for temperature measurement, for example of flow and return temperatures, along with ambient CO measurement.



## testo interface function

The testo 300 provides an interface with a variety of industry software. This enables you to access the testo 300's readings with your terminal devices and tools and to document them or further process them in your industry software.

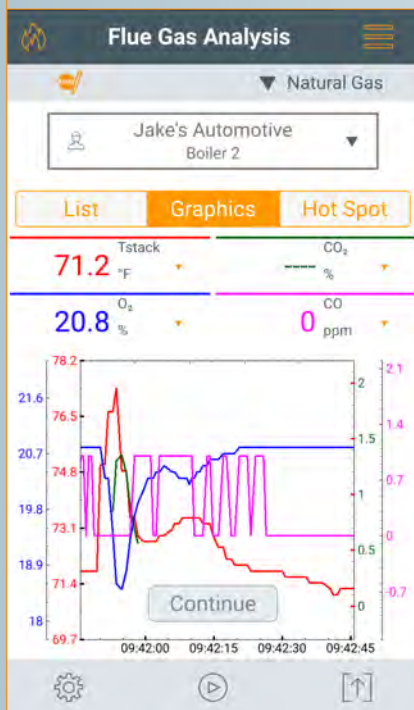




# Truly intuitive: The menus.

## Flue gas values as a graphic

See all the readings in a graphic progression display – and identify, for instance, how the flue gas loss relates to the CO value.



## Smart tracking of flue gas values

All the relevant values at a glance. The display can be individually configured and can easily be enlarged using the zoom-in function.



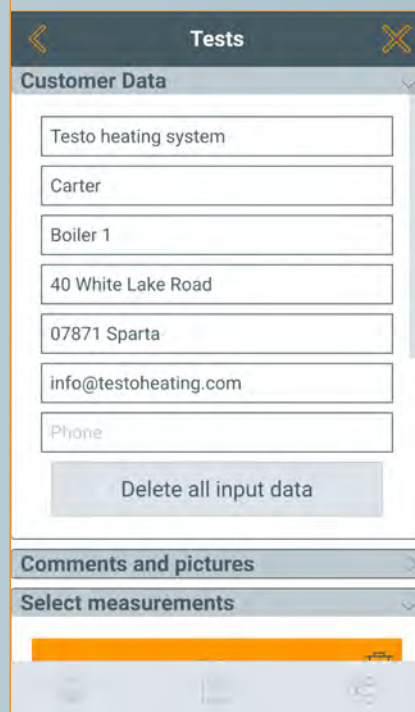
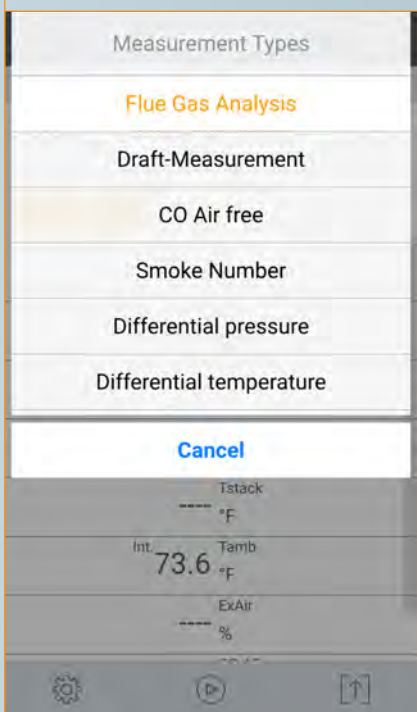
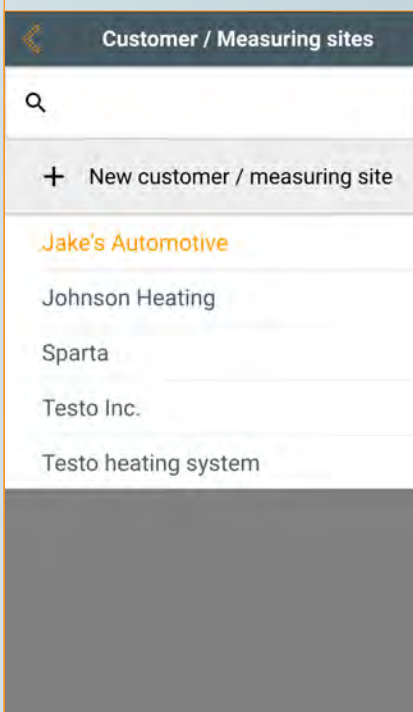
### Customer / measuring site

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



### Professional documentation

Create measurements with all the information about readings, customers and heating systems directly on site, add comments to them, have the measurements 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.



# Combustion Analyzer Kits.


testo 300 kits				
	testo 300 Residential / Commercial Kit	testo 300 Residential / Commercial Kit with printer		
Order no.	0564 3002 82	0564 3002 83		
Instrument, including power supply	O <sub>2</sub> , CO, 4,000 ppm,	O <sub>2</sub> , CO, 4,000 ppm,		
Probe, including 10 spare filters	Compact flue gas probe (12 in, Ø 0.25 in.)	Compact flue gas probe (12 in., Ø 0.25 in.)		
Printer, including spare paper	—	✓		
testo EasyHeat PC software	✓	✓		
Instrument bag	✓	✓		
Warranty	2 years	2 years		

Illustration differs depending on kit type







testo 300 Longlife kits				
	testo 300 Residential / Commercial Kit with Printer	testo 300 Commercial Kit	testo 300 Commercial Kit with Printer	testo 300 Commercial Kit with NO and Printer
Order no.	0564 3004 79	0564 3004 92	0564 3004 93	0564 3004 94
Instrument including power supply	O <sub>2</sub> , CO, 4,000 ppm	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	O <sub>2</sub> , CO, 4,000 ppm, NO sensor
Probe including 10 spare filters	Compact flue gas probe (12 in, Ø 0.25 in)	Compact 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 including spare paper	✓	—	✓	✓
testo EasyHeat PC software	✓	✓	✓	✓
Instrument case	✓	✓	✓	✓
Warranty (excludes NO sensor)	4 years	4 years	4 years	4 years

testo 300 Longlife kits (CO, 30,000 ppm)				
	testo 300 Commercial / Industrial Kit	testo 300 Commercial / Industrial Kit with NO and Printer		
Order no.	0564 3004 95	0564 3004 96		
Instrument including power supply	O <sub>2</sub> , CO, 30,000 ppm. NO sensor - can be retrofitted	O <sub>2</sub> , CO, 30,000 ppm, NO sensor		
Probe including 10 spare filters	Modular flue gas probe (12 in, Ø 0.25 in)	Modular flue gas probe (12 in, Ø 0.25 in)		
Printer including spare paper	—	✓		
testo EasyHeat PC software	✓	✓		
Instrument case	✓	✓		
Warranty	4 years	4 year warranty on instrument, probe & sensors. ***Excludes NO Sensors***		

Illustration differs depending on kit type  
\*Printer kit shown (0564 3994 96)



# Reference Guide.

Previous		New	
testo 320		testo 300 Combustion Analyzer	Sensor warranty
	<b>testo 320 – Combustion analyzer kit</b> O <sub>2</sub> , CO (0-4,000 ppm), hard case Part No. 0563 3220 70	<b>testo 300 – Residential / Commercial Combustion Analyzer</b> O <sub>2</sub> , CO (0-4,000 ppm), soft case Part No. 0564 3002 82	2 years
	<b>testo 320 – Combustion analyzer kit</b> O <sub>2</sub> , CO (0-4,000 ppm), hard case, printer  Part No. 0563 3220 71	<b>testo 300 – Residential / Commercial Combustion Analyzer with printer</b> O <sub>2</sub> , CO (0-4,000 ppm), soft case, printer Part No. 0564 3002 83	2 years
	<b>testo 320 – Combustion analyzer kit</b> O <sub>2</sub> , CO (0-4,000 ppm), hard case, printer  Part No. 0563 3220 71	<b>testo 300 LL – Residential / Commercial Combustion Analyzer with printer</b> O <sub>2</sub> , CO, hard case, printer Part No. 0564 3004 79	4 years
			
testo 330-1		testo 300 Longlife Combustion Analyzer	Sensor warranty
	<b>testo 330-1 LX – Commercial combustion analyzer kit 1</b> O <sub>2</sub> , CO (0-4,000 ppm), 3rd socket, hard case Part No. 0563 3371 70	<b>testo 300 LL - Commercial Combustion Analyzer</b> O <sub>2</sub> , CO (0-4,000 ppm), 3rd socket, hard case Part No. 0564 3004 92	4 years
	<b>testo 330-1 LX – Commercial combustion analyzer kit 2 with printer</b> O <sub>2</sub> , CO (0-4,000 ppm), 3rd socket, hard case, printer Part No. 0563 3371 75	<b>testo 300 LL - Commercial Combustion Analyzer with printer</b> O <sub>2</sub> , CO (0-4,000 ppm), 3rd socket, hard case, printer  Part No. 0564 3004 93	4 years
	<b>testo 330-1 LX – Commercial combustion analyzer kit 4 with printer and NOx measurement</b> O <sub>2</sub> , CO (0-4,000 ppm), NOx sensor, hard case and printer Part No. 400563 3304	<b>testo 300 LL – Commercial Combustion Analyzer with printer and NOx measurement</b> O <sub>2</sub> , CO (0-4,000 ppm), NOx sensor, hard case and printer Part No. 0564 3004 94	4 years (NO sensor 2 years)
			
testo 330-2		testo 300 Longlife Combustion Analyzer	Sensor warranty
	<b>testo 330-2 LX – Industrial combustion analyzer Kit 1</b> O <sub>2</sub> , CO (0-8,000 ppm w/ dilution to 30,000 ppm), 3rd socket, hard case Part No. 0563 3372 71	<b>testo 300 LL – Commercial / Industrial Combustion Analyzer</b> O <sub>2</sub> , CO (0-8,000 ppm w/ dilution to 30,000 ppm), 3rd socket, hard case  Part No. 0564 3004 95	4 years
	<b>testo 330-2 LX – Industrial combustion analyzer Kit 2 with NOx measurement</b> O <sub>2</sub> , CO (0-8,000 ppm w/ dilution to 30,000 ppm), NOx sensor, hard case Part No. 400563 3372	<b>testo 300 LL – Commercial / Industrial Combustion Analyzer with printer and NOx measurement</b> O <sub>2</sub> , CO (0-8,000 ppm w/ dilution to 30,000 ppm), NOx sensor, hard case, printer Part No. 0564 3004 96	4 years (NO sensor 2 years)
			

Spare gas sensors/retrofitting	Order no.
O <sub>2</sub> sensor, with 4 years' warranty	0393 0023
CO sensor (without H <sub>2</sub> compensation), with 4 years' warranty	0393 0051
CO sensor (without H <sub>2</sub> compensation), with 2 years' warranty	0393 0053
CO sensor, H <sub>2</sub> -compensated, with 4 years' warranty	0393 0101
CO sensor, H <sub>2</sub> -compensated, with 2 years' warranty <b>**Special Order**</b>	0393 0105
NO sensor, with 2 years' warranty	0393 0151
Accessories	Order no.
testo Bluetooth® printer, including 1 roll of thermal paper, rechargeable battery and power supply, for instruments including the testo 300, testo 330i and testo 440	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	0554 0308
USB power supply, including USB cable	0554 1106
testo EasyHeat PC software for displaying measurement procedures as diagrams, tables and for customer data management	0554 3332
ISO calibration certificate for flue gas	0520 0003
Cases and carrying bags	Order no.
Instrument case (height: 5.11 in. (130 mm)) for instrument, probes and accessories	0516 3300
Instrument case with double base (height: 7.09 in. (180 mm)) for instrument, probes and accessories	0516 3301
testo 300 instrument soft case with carrying strap	0516 3001

# Probes and accessories.

Modular flue gas probes	Order no.
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 7.2 ft; dirt filter; length 7 in; Ø 0.3125 in; Tmax. 932°F, tested	0600 9760
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 7.2 ft; dirt filter; length 12 in; Ø 0.3125 in; Tmax. 932°F, TÜV-tested	0600 9761
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 7.2 ft; dirt filter; length 7 in; Ø 0.25 in; Tmax. 932°F	0600 9762
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 7.2 ft; dirt filter; length 12 in; Ø 0.25 in; Tmax. 932°F	0600 9763
Flexible flue gas probe; thermocouple NiCr-Ni; hose 7.2 ft; dirt filter; length 13 in; Ø 0.35 in; 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 in, Ø 0.25 in, Tmax. 932°F	0600 9740
Compact basic flue gas probe, 12 in, Ø 0.25 in, Tmax. 932°F	0600 9741
Probe accessories and probe filter	Order no.
Modular probe shaft; length 7 in; Ø 0.3125 in; Tmax. 932°F	0554 9760
Modular probe shaft; length 12 in; Ø 0.3125 in; Tmax. 932°F	0554 9761
Probe shaft; length 13.19 in, including cone, Ø 0.3125 in, Tmax. 1,832°F	0554 8764
Flexible probe shaft; length 13 in; Ø 0.35 in; Tmax. 356°F	0554 9770
Multi-hole probe shaft; length 12 in; Ø 0.3125 in; for CO mean value calculation	0554 5762
Multi-hole probe shaft; length 7 in; Ø 0.3125 in; for CO mean value calculation	0554 5763
Hose extension; 9 ft; 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 in	0554 3327
Cone with spring clamp and handle option, Tmax. 392°F, Teflon material, Ø 0.3125 in	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 0.66 in	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 in. probe shaft incl. cone and magnets for attachment	0600 9799
Clamp probe with NTC temperature sensor for measurements on pipes (Ø 0.25 to 1.38 in)	0615 5505
Pipe wrap probe (NTC) for pipe diameters from 0.2 to 2.56 in	0615 5605
Waterproof immersion/penetration probe with NTC temperature sensor	0615 1212
Temperature probe with Velcro (NTC)	0615 4611



# The technical data.

Measurement parameter	Measuring range	Accuracy ( $\pm 1$ digit)	Resolution
<b>O<sub>2</sub> measurement</b>	0 to 21 vol. %	$\pm 0.2$ vol. %	0.1 vol. %
<b>CO measurement (without H<sub>2</sub> compensation)</b>	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. (2001 to 4,000 ppm)	1 ppm
<b>CO measurement (with H<sub>2</sub> compensation)</b>	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
<b>CO measurement (without H<sub>2</sub> compensation and dilution) **Special order**</b>	0 to 15,000 ppm	$\pm 200$ ppm or $\pm 20\%$ of m.v.	1 ppm
<b>CO measurement (with H<sub>2</sub> compensation and dilution)</b>	0 to 30,000 ppm	$\pm 100$ ppm or $\pm 10\%$ of m.v.	1 ppm
<b>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
<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 (digital calculation from O<sub>2</sub>)</b>	Display range 0 to CO <sub>2</sub> max.	$\pm 0.2$ vol. %	0.1 vol. %
<b>Draft measurement</b>	-10.00 to +40 lnH <sub>2</sub> O	$\pm 0.002$ lnH <sub>2</sub> O (0 to $\pm 0.04$ lnH <sub>2</sub> O) $\pm 0.008$ lnH <sub>2</sub> O ( $\pm 0.04$ to $\pm 1.20$ lnH <sub>2</sub> O) $\pm 1.5\%$ of m.v. (remaining meas.range)	0.0001 lnH <sub>2</sub> O
<b>Pressure measurement</b>	-40 to 80 lnH <sub>2</sub> O	$\pm 0.2$ lnH <sub>2</sub> O (0 to $\pm 20.0$ lnH <sub>2</sub> O) $\pm 1\%$ of m.v. ( $\pm 20.1$ to $\pm 40.0$ lnH <sub>2</sub> O) $\pm 1.5\%$ of m.v. (remaining meas. range)	0.01 lnH <sub>2</sub> O
<b>Temperature (instrument)</b>	-40 to 2,192°F	$\pm 1^\circ\text{F}$ (32 to 212.0°F) $\pm 0.5\%$ of m.v. (remaining meas. range)	0.1°F (-40 to 1831.82°F) 1°F (remaining meas. range)
<b>Ambient CO measurement (internal/flue gas probe)</b>	0 to 2,000 ppm	$\pm 10$ ppm (0 to 100 ppm) $\pm 10\%$ of m.v. (101 to 2,000 ppm)	1 ppm
<b>Ambient CO measurement (external with CO probe)</b>	0 to 500 ppm	$\pm 3$ ppm (0 to 29 ppm) $\pm 10\%$ 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 mio. measurement values
Display	5.0" touch display, HD 1280x720 pixels, IPS (160 k)
Weight	Approx. 1.76 lbs. (0.80 kg)
Dimensions	L: 9.60 in. (244 mm) (including probe connection) H: 2.32 in. (59 mm) W: 3.86 in. (98 mm)
testo 300 warranty	Instrument/probe/gas sensors O <sub>2</sub> , CO sensor 24 months Thermocouple and rechargeable battery 12 months
testo 300 Longlife warranty	Instrument/probe/gas sensors O <sub>2</sub> , CO sensor 48 months NO sensor 24 months Thermocouple and rechargeable battery 12 months