

Flue gas analyzer

testo 300 - flue gas measurement truly smart.

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 O₂ sensor and automatic dilution up to 30,000 ppm CO

E-mailing of reports directly on site



Flue gas measurement truly smart: that is what the testo 300 stands for. The compact flue gas analyzer is fully operated via the large touch display. You can see all the measuring values straight away on this without scrolling. The particularly scratch-resistant screen is embedded in a robust plastic 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 flue gas 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. The testo 300 is available with a 2-year or 4-year warranty. The testo 300 can additionally be equipped with an optional NO, NO_{low} or CO_{low} sensor. The O₂ sensor, fitted in all Longlife models, is extremely durable and an optional automatic dilution up to a maximum of 30,000 ppm CO protects the CO sensor.

Truly smart: The testo 300 flue gas analyzer.

Providing reliably accurate results is not enough. A contemporary flue gas 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 the fruit of 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 straight away via WLAN.

Keep an eye on all the measuring values

You can see all the system's parameters straight 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 straight 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 with up to 6 years' service life, measures high CO values up to 30,000 ppm and is future-proofed thanks to NO preparation.



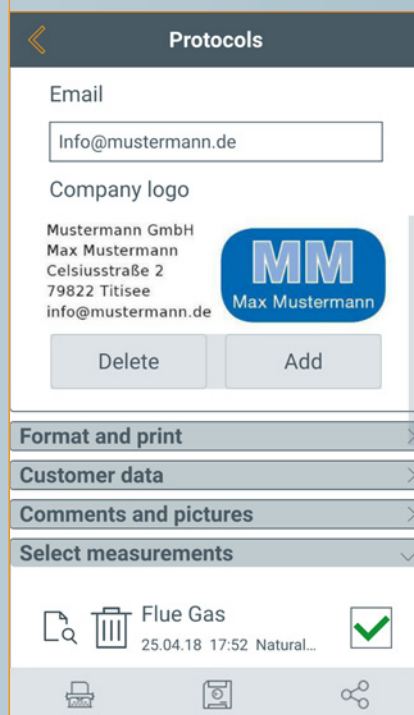
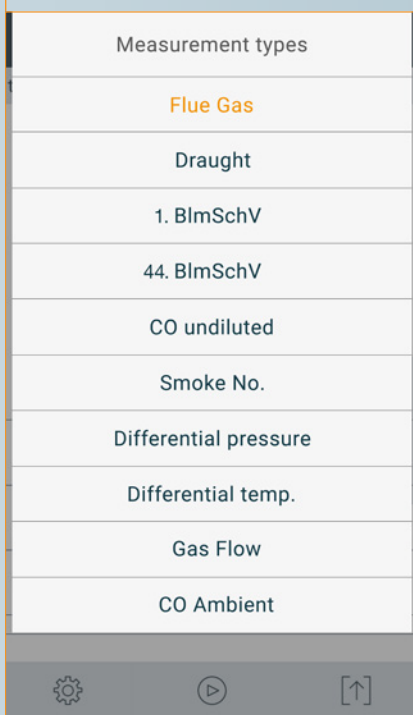
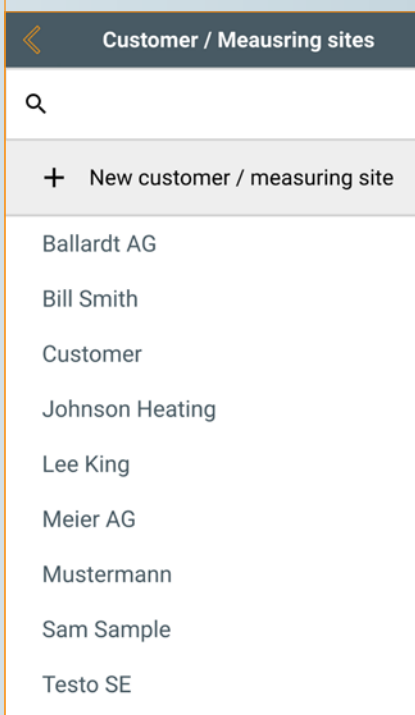
Customers/measuring points

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 protocols with all the information about readings, customers and heating systems directly on site, add comments to them, have the protocols confirmed by the customer's signature and send the protocols. 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 to hand.



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.



Instrument models and accessories

testo 300 flue gas analyzer						
Order no.	Longlife sensors	O ₂ sensor	CO sensor	CO H ₂ sensor	NO sensor, NO _{low} sensor and CO _{low} sensor - can be retrofitted	Zeroing with probe in flue gas
0633 3002 70	–	✓	4,000 ppm	–	–	–
0633 3002 71	–	✓	8,000 ppm	✓	–	–

testo 300 Longlife flue gas analyzer						
Order no.	Longlife sensors	O ₂ sensor	CO sensor	CO H ₂ sensor	NO sensor, NO _{low} sensor and CO _{low} sensor - can be retrofitted	Zeroing with probe in flue gas
0633 3004 72	✓	✓	4,000 ppm	–	✓	–
0633 3004 73	✓	✓	8,000 ppm	✓	✓	–
0633 3004 82	✓	✓	15,000 ppm	–	✓	✓
0633 3004 88	✓	✓	30,000 ppm	✓	✓	✓

Longlife sensors

High-end sensors with a service life of up to 6 years for intensive use (several times a day). At least one sensor replacement is saved in the course of a normal working life.

Spare gas sensors/retrofitting	Order no.
O ₂ sensor, with 4-year warranty	0393 0023
CO sensor (without H ₂ compensation), with 4-year warranty	0393 0051
CO sensor (without H ₂ compensation), with 2-year warranty	0393 0053
CO sensor, H ₂ -compensated, with 4-year warranty	0393 0101
CO sensor, H ₂ -compensated, with 2-year warranty	0393 0105
CO _{low} sensor, H ₂ -compensated, with 2-year warranty	0393 0103
NO sensor	0393 0151
NO _{low} sensor	0393 0152

Accessories	Order no.
testo Bluetooth® printer, including 1 roll of thermal paper, rechargeable battery and mains unit, 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 mains unit, 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 0055

Cases and carrying bags	Order no.
Instrument case (height: 130 mm) for instrument, probes and accessories	0516 3300
Instrument case with double base (height: 180 mm) for instrument, probes and accessories	0516 3301
testo 300 instrument bag with carrying strap	0516 3001

Suitable kits

testo 300 kits		
	testo 300 Kit 1	testo 300 Kit 1 with printer
Order no.	0564 3002 70	0564 3002 71
Instrument, including mains unit	O ₂ , CO, 4,000 ppm,	O ₂ , CO, 4,000 ppm,
Probe, including 10 spare filters	Compact flue gas probe (180 mm, Ø 6 mm)	Compact flue gas probe (180 mm, Ø 6 mm)
Printer, including spare paper	✘	✔
testo EasyHeat PC software	✔	✔
Instrument bag	✔	✔
Warranty	2 years	2 years


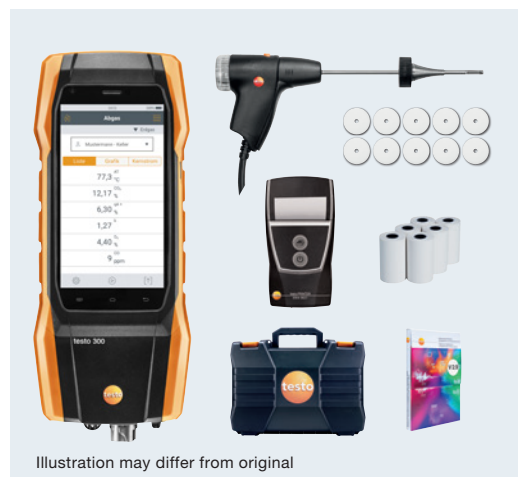


Illustration may differ from original

testo 300 Longlife kits				
	testo 300 Longlife kit 1	testo 300 Longlife kit 1 with printer	testo 300 Longlife kit 2	testo 300 Longlife kit 2 with printer
Order no.	0564 3004 70	0564 3004 71	0564 3004 82	0564 3004 89
Instrument, including mains unit	O ₂ , CO, 4,000 ppm, NO, NO _{low} CO _{low} sensor - can be retrofitted	O ₂ , CO, 4,000 ppm, NO, NO _{low} CO _{low} sensor - can be retrofitted	O ₂ , CO H ₂ , 30,000 ppm, NO, NO _{low} CO _{low} sensor - can be retrofitted	O ₂ , CO H ₂ , 30,000 ppm, NO, NO _{low} CO _{low} sensor - can be retrofitted
Probe, including 10 spare filters	Compact flue gas probe (180 mm, Ø 6 mm)	Compact flue gas probe (180 mm, Ø 6 mm)	Modular flue gas probe (180 mm, Ø 8 mm)	Modular flue gas probe (180 mm, Ø 8 mm)
Printer, including spare paper	✘	✔	✘	✔
testo EasyHeat PC software	✔	✔	✔	✔
Instrument case	✔	✔	✔	✔
Warranty	4 years	4 years	4 years	4 years



Probes and accessories

Modular flue gas probes	Order no.
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 2.2 m; dirt filter; length 180 mm; Ø 8 mm; Tmax. +500 °C, TÜV-tested	0600 9760
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 2.2 m; dirt filter; length 300 mm; Ø 8 mm; Tmax. +500 °C, TÜV-tested	0600 9761
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 2.2 m; dirt filter; length 180 mm; Ø 6 mm; Tmax. +500 °C	0600 9762
Modular flue gas probe, including cone for fixing; thermocouple NiCr-Ni; hose 2.2 m; dirt filter; length 300 mm; Ø 6 mm; Tmax. +500 °C	0600 9763
Flexible flue gas probe; thermocouple NiCr-Ni; hose 2.2 m; dirt filter; length 330 mm; Ø 9 mm; Tmax. +180 °C; short-term +200 °C; ideal for measurements in difficult-to-access locations	0600 9770

Compact flue gas probes	Order no.
Compact basic flue gas probe, 180 mm, Ø 6 mm, Tmax. +500 °C	0600 9740
Compact basic flue gas probe, 300 mm, Ø 6 mm, Tmax. +500 °C	0600 9741

Probe accessories and probe filter	Order no.
Modular probe shaft; length 180 mm; Ø 8 mm; Tmax. +500 °C	0554 9760
Modular probe shaft; length 300 mm; Ø 8 mm; Tmax. +500 °C	0554 9761
Probe shaft; length 335 mm; including cone; Ø 8 mm; Tmax. +1,000 °C	0554 8764
Probe shaft; length 700 mm; including cone; Ø 8 mm; Tmax. +1,000 °C	0554 8765
Flexible probe shaft; length 330 mm; Ø 9 mm; Tmax. +180 °C	0554 9770
Multi-hole probe shaft; length 300 mm; Ø 8 mm; for CO mean value calculation	0554 5762
Multi-hole probe shaft; length 180 mm; Ø 8 mm; for CO mean value calculation	0554 5763
Hose extension; 2.8 m; probe-instrument extension tube	0554 1202
Spare dirt filter, modular probe, 10 off	0554 3385
Spare dirt filter, compact probe, 10 off	0554 0040
Cone with spring clamp and handle option, Tmax. +200 °C, Teflon material, Ø 6 mm	0554 3327
Cone with spring clamp and handle option, Tmax. +200 °C, Teflon material, Ø 8 mm	0554 3328

More probes and accessories	Order no.
Dual wall clearance probe for O ₂ 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 4/6 mm	0554 0449
Capillary hose kit for 4 Pa measurement (can only be used in combination with 0554 1203)	0554 1215
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 190 mm probe shaft incl. cone and magnets for attachment	0600 9799
Clamp probe with NTC temperature sensor for measurements on pipes (Ø 6 to 35 mm)	0615 5505
Pipe wrap probe (NTC) for pipe diameters from 5 to 65 mm	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
O₂ measurement	0 to 21 vol. %	± 0.2 vol. %	0.1 vol. %
CO measurement (without H₂ 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 H₂ 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 (without H₂ compensation with dilution)	0 to 15,000 ppm	± 200 ppm or ± 20 % of m.v.	1 ppm
CO measurement (with H₂ compensation and dilution)	0 to 30,000 ppm	± 100 ppm or ± 10 % of m.v.	1 ppm
CO_{low} measurement (with H₂ compensation)	0 to 500 ppm	± 2 ppm (0 to 40 ppm) ± 5 % of m.v. (remaining meas. range)	0.1 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
NO_{low} measurement	0 to 300 ppm	± 2 ppm (0 to 39.9 ppm) ± 5 % of m.v. (40 to 300 ppm)	0.1 ppm
Efficiency testing (Eta)	0 to 120 %		0.1 %
Flue gas loss	0 to 99.9 %		0.1 %
CO₂ determination (digital calculation from O₂)	Display range 0 to CO ₂ max.	± 0.2 vol. %	0.1 vol. %
Draught measurement	-9.99 to +40 hPa	± 0.005 hPa (0 to 0.1 hPa) ± 0.02 hPa (0.1 to +3.00 hPa) ± 1.5 % of m.v. (+3.01 to +40 hPa)	0.001 hPa (0 to 0.1 hPa) 0.01 hPa (remaining meas. range)
4 Pa measurement (for instruments with dilution)	-50 to +50 Pa	± 0.3 Pa (< 10 Pa) ± 3 % of m.v. (remaining meas. range)	0.1 Pa
Pressure measurement	-100 to +200 hPa	± 0.5 hPa (0 to +50.0 hPa) ± 1 % of m.v. (+50.1 to +100.0 hPa) ± 1.5 % of m.v. (+100.1 to +200 hPa)	0.01 hPa
Temperature (instrument)	-40 to +1,200 °C	± 0.5 °C (0.0 to +100.0 °C) ± 0.5 % of m.v. (remaining meas. range)	0.1 °C (-40 to +999.9 °C) 1 °C (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

Certification	The testo 300 is TÜV-tested according to 1st German Federal Immission Control Ordinance (BImSchV) EN 50379, Parts 1-3
Storage temperature	-20 to +50 °C
Operating temperature	-5 to +45 °C
Charging temperature	0 to +45 °C
Humidity application range	15 to 90 %RH, not condensing
Power supply	Rechargeable battery, USB mains unit
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. 800 g
Dimensions	L: 244 mm (including probe connection) H: 59 mm W: 98 mm
testo 300 warranty	Instrument/probe/gas sensors O ₂ , CO sensor 24 months Thermocouple and rechargeable battery 12 months
testo 300 Longlife warranty	Instrument/probe/gas sensors O ₂ , CO sensor 48 months NO, NO _{low} , CO _{low} sensor 24 months Thermocouple and rechargeable battery 12 months
Warranty terms	https://www.testo.com/guarantee

