

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 ${\rm O_2}$ 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 in 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 warranty. There is also an optional NOx sensor available.



Truly smart: The new 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

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

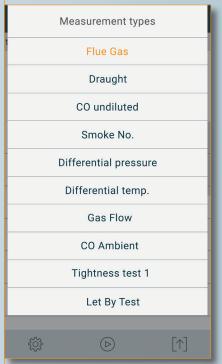
Integrated address book with details of the relevant heating system (e.g. manufacturer, system type, system name, serial no., fuel, etc.).



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.

Customer / Meausring sites Q H New customer / measuring site Ballardt AG Bill Smith Customer Johnson Heating Lee King Meier AG Mustermann Sam Sample Testo SE







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 - can be retrofitted | Zeroing with probe in flue gas |
| 0633 3002 70 | | | 4,000 ppm | | | 8 |
| 0633 3002 71 | | | 8,000 ppm | | | 8 |

| Spare gas sensors/retrofitting | Order no. |
|---|-----------|
| O ₂ sensor, with 4-year warranty | 0393 0023 |
| CO sensor (without H ₂ compensation), with 2-year warranty | 0393 0053 |
| CO sensor, H ₂ -compensated, with 2-year warranty | 0393 0105 |
| NO sensor | 0393 0151 |
| | |
| | |

| 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 0003 | |

| 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 2 |
| Order no. | 0564 3002 70 | 0564 3002 72 |
| Instrument, including mains unit | O ₂ , CO, 4,000 ppm, | O ₂ , CO, 8,000 ppm, |
| Probe, including 10 spare filters | Compact flue gas probe (180 mm, Ø 6 mm) | Compact flue gas probe (180 mm, Ø 6 mm) |
| testo EasyHeat PC software | ~ | |
| Instrument bag | | |
| Warranty | 2 years | 2 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 |
| 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 |
|--|--|---|---|
| O ₂ measurement | 0 to 21 vol. % | ±0.2 vol. % | 0.1 vol. % |
| CO measurement (without 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 ₂ 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 ${ m H_2}$ compensation and dilution) | 0 to 15,000 ppm | ±200 ppm or ± 20 % of m.v. | 1 ppm |
| CO measurement (with H ₂ 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 ₂ determination (digital calculation from O ₂) | 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 (BlmSchV) 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 | | |