

Flue gas analyser

testo 300

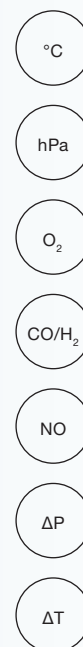
Intuitive measurement menus with fast-response Smart-Touch display

Efficient, wireless parallel measurement of up to four testo Smart Probes simultaneously

Practical second screen function and easy data integration into user-specific software

Documentation on site and reports sent by e-mail via testo Smart App

8,000 ppm H₂ compensation CO sensor, both O₂ & CO sensor with 5 year life span



The compact testo 300 flue gas analyser is operated completely 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 stands up reliably to the rigours of everyday use. From standby mode, the flue gas analyzer is ready to go at the touch of a button. Menus for the most important measurements are already stored and they guide you safely through the respective application. The testo Bluetooth® Connector enables the efficient, wireless measurement of up to four additional parameters in parallel. The testo Smart Probe 115i for flow and return temperature measurement, the testo Smart Probe 510i for gas flow and static gas pressure measurement and the Smart Probe testo 915i for combustion air temperature measurement are integrated into your testo 300 via the testo Bluetooth® Connector and the measurements can be carried out in parallel with the flue gas analysis. All measurements

appear automatically on the display and can be started and stopped in parallel. Thanks to the practical second-screen function via convenient integration into the testo Smart App, you can keep a constant eye on all the relevant measurement data, even over long distances between the measuring instrument and the burner control. Reports can be created and sent directly on site via the testo 300 and integration in the testo Smart App. You can easily call up the measurements stored on your testo 300 and transfer them to your in-house software (via the previously programmed interface) using the new QR code. In addition, the testo 300 can be equipped with an optional NO sensor. The O₂ sensor installed in all Longlife models is extremely durable and automatic dilution up to max. 30,000 ppm CO protects the CO sensor.

testo 300

Why make measurements complicated when you can keep them simple? The daily work routine is becoming more and more demanding. Time is getting scarcer, while processes are becoming more complex. However, on the other hand, some things unfortunately don't change: Instrument operation and documentation are cumbersome

and time-consuming. But it doesn't have to be that way! Efficient, wireless measurement of up to four additional parameters in parallel via the testo Smart Probes – thanks to testo 300. Featuring a practical second screen and intuitive operation – it really couldn't be easier.

Intuitive measurement menus
with responsive Smart-Touch display

Efficient, wireless parallel measurement
of up to 4 Smart Probes simultaneously

Practical 2nd screen function
and easy data integration into user-specific software

Documentation on site
and reports sent by e-mail (via App)

Versatile probes
and fast probe changes by the user

Magnetic holder to secure the instrument
and robust workmanship

Ready to measure immediately from standby mode at the touch of a button

Measurement report can be signed
on the instrument itself

8,000 ppm H₂ compensation CO sensor, both O₂ & CO sensor with 5 year life span

TüV-tested
according to EN50379, part 1 and 3



Intuitive measurement menus with fast-response Smart-Touch display

The testo 300 makes flue gas measurement unbelievably easy thanks to its intuitive operation. The Smart-Touch display responds immediately without any delay. That allows intuitive operation – just as easy as on your smartphone.



Efficient, wireless parallel measurement of up to 4 Smart Probes simultaneously

Wireless parallel measurements in record time

Efficient, wireless measurement of up to four additional parameters in parallel via the testo Smart Probes:

- **testo 510i:** Differential pressure measuring instrument (measurement of gas flow or static pressure)
- **testo 115i:** Temperature measuring instrument (measurement of flow/return temperature with 2 Smart Probes)
- **testo 915i:** Combustion air temperature measurement (time-saving without wired probes or additional measuring instruments)



Practical second screen function and easy data integration into user-specific software

Thanks to the practical second screen function and integration into the testo Smart App, you can keep a constant eye on all the relevant measurement data, even over long distances between the measuring instrument and the burner control – this saves time and unnecessary journeys. Integrating the data from all readings into your user-specific software is easy: via QR code option.



Instrument models and accessories

| testo 300+ flue gas analyser | | | | | | |
|------------------------------|------------------|-----------------------|-----------|--------------------------|---------------|--------------------------------|
| Order no. | Longlife sensors | O ₂ sensor | CO sensor | CO H ₂ sensor | NO sensor | Zeroing with probe in flue gas |
| 0564 3004 12 | – | ✓ | 8,000 ppm | ✓ | Retrofittable | – |
| 0564 3004 13 | – | ✓ | 8,000 ppm | ✓ | Retrofittable | – |
| 300564 3004 01 | – | ✓ | 8,000 ppm | ✓ | Retrofittable | – |
| 300564 3004 02 | – | ✓ | 8,000 ppm | ✓ | Retrofittable | – |
| 300564 3004 04 | – | ✓ | 8,000 ppm | ✓ | Retrofittable | – |

| testo 300LL flue gas analyser | | | | | | |
|-------------------------------|------------------|-----------------------|---|--------------------------|---------------|--------------------------------|
| Order no. | Longlife sensors | O ₂ sensor | CO sensor | CO H ₂ sensor | NO sensor | Zeroing with probe in flue gas |
| 0564 3004 82 | ✓ | ✓ | 8,000 ppm (30,000 ppm via auto dilution) | ✓ | Retrofittable | ✓ |
| 0564 3004 89 | ✓ | ✓ | 8,000 ppm (30,000 ppm via auto dilution) | ✓ | Retrofittable | ✓ |
| 0564 3004 84 | ✓ | ✓ | 8,000 ppm (30,000 ppm via auto dilution) | ✓ | ✓ | ✓ |

Advantage of Longlife sensors in LL models

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.

| 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 |
| 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 |

| 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 |

| testo Bluetooth® Connector | Order no. |
|---|-----------|
| testo Bluetooth® Connector for connecting the testo 300 flue gas analyser to testo Smart Probes | 0554 3004 |

When you purchase a new testo 300, the testo Bluetooth® Connector is included in the scope of delivery. The testo Bluetooth® Connector is only designed for connecting testo Smart Probes.

testo 300+ Kits

testo 300+ Handset Only

testo 300+ flue gas analyser handset O₂, CO 8,000 ppm, USB bluetooth adaptor for smart probe connection, calibration protocol



Order no. **0633 3004 40**

testo 300+ Standard Kit

All items from testo 300+ handset, compact flue gas probe (180mm, Ø 6 mm) and soft transport case



Order no. **0564 3004 12**

testo 300+ Advanced Kit

All items from testo 300+ standard kit, 2x clamp probes (NTC) for temperature measurements on pipes (Ø 6-35 mm) cable length 1.4 m, Pressure connection kit with 2 silicone hoses



Order no. **0564 3004 13**

testo 300+ Smart Kit

All items from testo 300+ standard kit, 2x testo 115i bluetooth pipe thermometers, 1x testo 510i bluetooth manometer, 1x pressure connection set



Order no. **300564 3004 01**

testo 300+ Ultra Smart Kit

All items from testo 300+ smart kit, 1x gas leak detector



Order no. **300564 3004 02**

testo 300+ Smart Heat Pump Kit

All items from testo 300+ standard kit, 1x testo 550i digital manifold, 2x testo 115i bluetooth pipe thermometers, 1x testo 510i bluetooth manometer, 1x Bluetooth connector



Order no. **300564 3004 04**

testo 300LL Kits

testo 300LL Standard Kit

testo 300LL handset, USB bluetooth adaptor for smart probe connection, modular flue gas probe USB, mains unit, including cable, hard case, spare dirt filters for flue gas probe



Order no. **0564 3004 82**

testo 300LL Standard Kit + Printer

All items from testo 300LL standard kit, testo Bluetooth® printer, spare thermal paper



Order no. **0564 3004 89**

testo 300LL NOx Kit + Printer

All items from testo 300LL standard kit, testo Bluetooth® printer, spare thermal paper, NO ssensor



Order no. **0564 3004 84**

testo 300 Upgrade Kit

testo 300 Upgrade Kit

For testo 300 owners - testo USB bluetooth adaptor (allows smart probe connection,) 2x testo 115i clamp thermometers, testo 510i manometer



Order no. **300564 3002 03**

Probes and accessories

| Modular flue gas probes | Order no. |
|---|------------------|
| Modular flue gas probe, including probe stop 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 probe stop 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 probe stop 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 probe stop 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 filters | 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 probe stop cone; Ø 8 mm; Tmax. +1,000 °C | 0554 8764 |
| Probe shaft; length 700 mm; including probe stop 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 averaging | 0554 5762 |
| Multi-hole probe shaft; length 180 mm; Ø 8 mm; for CO averaging | 0554 5763 |
| Hose extension; 2.8 m; probe-instrument extension line | 0554 1202 |
| Spare dirt filter, modular probe, 10 off | 0554 3385 |
| Spare dirt filter, compact probe, 10 off | 0554 0040 |
| Probe stop cone with spring clamp and handle, Tmax. +200 °C, material Teflon, Ø 6 mm | 0554 3327 |
| Probe stop cone with spring clamp and handle, Tmax. +200 °C, material Teflon, 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 |
| Temperature probes | Order no. |
| Combustion air temperature probe with 190 mm probe shaft, including probe stop cone and magnetic holder for securing | 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 |

testo Smart Probes

| testo Smart Probes | Order no. |
|---|--------------|
| testo 510i , differential pressure measuring instrument with smartphone operation, including hose kit (Ø 4 mm and 5 mm) with adapter, batteries and calibration protocol | 0560 1510 |
| testo 115i , clamp thermometer with smartphone operation, for measurements on pipes of 6 to max. 35 mm diameter, including batteries and calibration protocol | 0560 2115 02 |
| Wireless Smart Probe testo 915i with air probe (TC Type K), including batteries and calibration protocol | 0563 3915 |

Technical data

| Measurement parameter | Measuring range | Accuracy (± 1 digit) | Solution |
|--|--|--|---|
| O₂ measurement | 0 to 21 vol.% | ± 0.2 vol.% | 0.1 vol.% |
| CO measurement (with H₂ compensation) | 0 to 8,000 ppm | ± 10 ppm or $\pm 10\%$ of m.v. (0 to 200 ppm) ± 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 |
| CO measurement (with H₂ compensation and dilution) | 0 to 30,000 ppm | ± 100 ppm or $\pm 10\%$ of m.v. | 1 ppm |
| CO_{low} measurement (with H₂ compensation) | 0 to 500 ppm | ± 2 ppm (0 to 40 ppm) $\pm 5\%$ of m.v. (remaining measuring range) | 0.1 ppm |
| NO measurement | 0 to 3,000 ppm | ± 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 |
| NO_{low} measurement | 0 to 300 ppm | ± 2 ppm (0 to 39.9 ppm) $\pm 5\%$ 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) $\pm 1.5\%$ 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) $\pm 3\%$ of m.v. (remaining measuring range) | 0.1 Pa |
| Pressure measurement | -100 to +200 hPa | ± 0.5 hPa (0 to +50.0 hPa) $\pm 1\%$ of m.v. (+50.1 to +100.0 hPa) $\pm 1.5\%$ of m.v. (+100.1 to +200 hPa) | 0.01 hPa |
| Temperature (instrument) | -40 to +1200 °C | ± 0.5 °C (0.0 to +100.0 °C) $\pm 0.5\%$ of m.v. (remaining measuring range) | 0.1 °C (-40 to +999.9 °C) 1 °C (remaining measuring range) |
| Ambient CO measurement (internal/flue gas probe) | 0 to 2,000 ppm | ± 10 ppm (0 to 100 ppm) $\pm 10\%$ 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) $\pm 10\%$ of m.v. (30 to 500 ppm) | 1 ppm |

Technical data

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, non-condensing |
| Power supply | Rechargeable battery, USB mains unit |
| Rechargeable battery life | 10 h |
| Protection class | IP 40 |
| System requirements | Requires iOS 11.0 or newer, Android 6.0 or newer, mobile device with Bluetooth 4.0 |
| Wireless range | Up to 100m with no obstructions |
| Testo BT Connector | Interface for connecting testo Smart Probes to the measuring instrument |
| 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 60 months Thermocouple and rechargeable battery 12 months |
| testo 300LL warranty | Instrument/probe/gas sensors O ₂ , CO sensor 60 months NO, NO _{low} , CO _{low} sensor 60 months Thermocouple and rechargeable battery 12 months |
| Warranty terms and conditions | https://www.testo.com/guarantee |

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Subject to change, including technical modifications.