Data sheet
testo 300

Be sure. testo

Flue gas analyzer

testo 300 NEXT LEVEL

°C
hPa
O_2
CO/H_2
NO
ΔP
ΔT

- 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
- Versatile probes and fast probe changes by the user

The compact testo 300 NEXT LEVEL flue gas analyzer 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 NEXT LEVEL 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 NEXT LEVEL and integration in the testo Smart App. You can easily call up the measurements stored on your testo 300 NEXT LEVEL and transfer them to your in-house software (via the previously programmed interface) using the new QR code. The testo 300 NEXT LEVEL is available with a 4-year or 2-year warranty. In addition, the testo 300 NEXT LEVEL can be equipped with an optional NO, NO_{low} or CO_{low} sensor. The O_2 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 NEXT LEVEL – THERE'S NO ALTERNATIVE

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 the new testo 300 NEXT LEVEL! 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

High-resolution colour display

TüV-tested
according to EN50379, part 1 and 3

ROBUST

testo SMART

testo Smart App
for free download

Intuitive measurement menus with fast-response Smart-Touch display

The testo 300 NEXT LEVEL 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:

- **Option 1:** via universal QR code (ZIV-compatible)
- **Option 2:** via WLAN/Bluetooth© / App-to-App with the testo 300

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 retrofittable**	**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 retrofittable**	**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.**
Mobile BT®/ IRDA printer, including 1 roll of thermal paper, rechargeable battery and mains unit, for instruments including the testo 300, testo 330i and testo 440	0554 0622
Spare thermal paper for printer, permanent ink	0554 0568
Smoke pump, including oil and soot paper, for measuring soot in flue gas, excluding probe stop 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, 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

testo Bluetooth® Connector	**Order no.**
testo Bluetooth® Connector for connecting the testo 300 flue gas analyzer to testo Smart Probes	0554 3004

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

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	✓	✓
Smart Probes compatible	✓	✓
Connection to Smart App	✓	✓
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 retrofittable	O_2, CO, 4,000 ppm, NO, NO_{low}, CO_{low} sensor retrofittable	O_2, CO H_2, 30,000 ppm, NO, NO_{low}, CO_{low} sensor retrofittable	O_2, CO H_2, 30,000 ppm, NO, NO_{low}, CO_{low} sensor retrofittable
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	✓	✓	✓	✓
Smart Probes compatible	✓	✓	✓	✓
Connection to Smart App	✓	✓	✓	✓
Warranty	4 years	4 years	4 years	4 years

Illustration may differ from original.

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 (Gas pipe test with the pressure test kit in conjunction with the testo 300, testo 330-2 LL is not DVGW TRGI 2018-compliant. For standard-compliant measurements, use of the testo 324 is recommended.)	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, 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	

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

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

Technical data

Measurement parameter	Measuring range	Accuracy (±1 digit)	Solution
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 H_2-compensation with 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
CO_{low} measurement (with H_2 compensation)	0 to 500 ppm	±2 ppm (0 to 40 ppm) ±5% of m.v. (remaining measuring 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%
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 measuring 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 +1200 °C	±0.5 °C (0.0 to +100.0 °C) ±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) ±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

Be sure. testo

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 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

1981 7114/dk/TT/01.2025

Subject to change, including technical modifications.

BUHL BONSØE
MÅLBAR VIDEN

Hassellunden 11A, 2765 Smørum
Tel. 45 95 04 10
info@buhl-bonsoe.dk
www.buhl-bonsoe.dk