



The testo 300 series

Setting the standard in portable compact combustion gas analysis instrumentation.

More features, such as,

- ° Gas Leak-Detector
- ° CO Ambient Measurement
- ° Large Internal Memory
- ° Bar-Code-Management option at a lower price than its predecessors.

The testo 300 offers more value than ever before for the

- ° Boiler technicians
- ° Chimney sweeps
- ° Maintenance technicians

Service: The savings continue after the instrument is purchased. Standard maintenance can be performed by the user. Smart replacement parts only need to be plugged in and - they are ready to go.

This means:

- less downtime
- lower cost
- greater flexibility to replace or upgrade in the field at any time.

Applications:

Tuning of Boilers, Burners and Heaters

Engine tuning

Emission tests of CO and NO

Differential Temperature measurements

Ambient CO detection

Advantages of testo 300 M:

User friendly operation via large display and rubber keyboard with exact action point

Freely assignable function buttons gives you total control on the instrument functions

Differential pressure measurement makes filter evaluation and maintenance easy

Internal memory for 20 complete measurements

Data transfer to PC (RS 232) with Testo software

Wireless printout on a standard infrared printer for easy on-site documentation

Fast measured values for evaluating and adjusting timed and modulating burners with a short combustion improves accuracy

Available with NO(x) measurement or can be upgraded at any time

Save time and money by changing the measuring cells and rechargeable battery yourself with no tools required

Battery operation with approx. 5 hours operating time for a full days sampling

Quick battery recharging

Additional advantages of testo 300 XL:

Cabelless printout on attachable Comfort printer

More memory space for the values measured in up to 100 systems
Option: Memory space up to 400 systems

Measurement of CO in ambient air via CO probe

Checks for leaks in gas pipes using the gas leak detection probe

CO switch-off function if concentrations are too high

Differential temperature measurement to adjust condensing burners and to measure flow and return temperatures

Measured value can be quickly allocated to the measuring location using the barcode pen for accurate documentation and control

Technical data

testo 300 M and 300 XL	
Temperature measurement	
Temperature Sensor	-40 to +1200°C(-40 to 2190°F) Type K thermocouple (NiCr-Ni) to DIN IEC 584, Part 2, Class 1
Accuracy	± 0.5°C/1°F (0 to +99.9°C /32 to 210°F) ± 0.5 % of m.v. (from +100°C/212°F))
Resolution	0.1°C / 1°C / 0.2/1.8°F (from +1000°C/1830°F)
Draft / pressure measurement D p measurement	
Meas. range	± 80 mbar (± 32 " H ₂ O)
Resolution	0.01 mbar (0.01 " H ₂ O)
Accuracy	± 0.03 mbar (±0.01 " H ₂ O)
max. overload	1 bar (400 " H ₂ O)
Gross/Net Efficiency (Eta)	
Meas. range	0 to 120 %
Resolution	0.1 %
O₂ measurement	
Meas. range	0 to 21 vol. %
Accuracy	± 0.2 vol. % absolute
Resolution	0.1 vol. %
Response time t ₉₀	Approx 40 s
CO₂ measurement	
Display range	0 to CO ₂ max
Accuracy	± 0.2 vol. %
Resolution	0.01 vol. %
Measurement	digital calculation from O ₂
Response time t ₉₀	Approx 40 s
CO measurement (with H2 compensation)	
Meas. range	0 to 8000 ppm
Accuracy	± 20ppm (to 400ppm) ± 5% of m.v. (to 2000ppm) ± 10% of m.v.(to 8000ppm)
Resolution	1 ppm

Response time t_{90}	Approx. 60 s
NO measurement	
Meas. range	0 to 3000 ppm
Accuracy	± 5ppm (to 100ppm) ± 5% of m.v. (to 2000ppm) ± 10% of m.v.(to 3000ppm)
Resolution	1 ppm
Response time t_{90}	Approx. 60 s
Additional measuring ranges in testo 300 XL	
Ambient CO measurement (with CO probe)	
Meas. range	0 to 500 ppm
Accuracy	± 5ppm (to 100ppm) ± 5% of m.v. (< 100ppm)
Resolution	± 1 ppm
Response time t_{90}	Approx. 35 s
Gas leak meas. for combustible gases (with gas leak detection probe)	
1 st alarm limit	200 ppm CH ₄
2 st alarm limit	10,000 ppm CH ₄
Optical display (LED) for 1 st and 2 nd alarm limit acoustic display via buzzer	
Response time t_{90}	> 2 sec.
General technical data for testo 300	
Weight:	700 g
Dimensions:	250x85x65 mm (l _x w _x h)
Transport/storage temp.:	-20 to +60°C (-4 to 140°F)
Ambient temp.:	+4 to +45°C (39,20 to 113°F)
Display:	Graphics display 128 x 100 pixels
Power supply:	Via plug mains unit, batteries or exchangeable rechargeable batteries
Technical data for printer	
Standard infrared printer	
Printer type:	Infrared thermal printer
Receiving radius:	max. 2 m
Dimensions:	186 x 91 x 61 mm
Weight:	430 g (incl. batteries)

Operating temp.:	0 to +50°C (32 to 122°F)
Storage temp.:	-40 to +60°C (-40 to 140°F)
Power supply:	4 round cell 1.5 V batteries or NC rechargeable batteries
Comfort printer (only for testo 300 XL)	
Printer type:	Infrared thermal printer, can be attached to testo 300 XL
Receiving radius:	max. 2 m
Dimensions:	115 x 78 x 78 mm
Weight:	290 g (incl. batteries)
Operating temp.:	0 to +45°C (32 to 113°F)
Storage temp.:	-20 to +60°C (-4 to 140°F)
Power supply:	4 round cell 1.5 V batteries or NC rechargeable batteries
Other features:	<ul style="list-style-type: none"> - Printout of company logo - autom. data check via bi-directional interface - Quick data transfer on account of buffer memory (70 cm text in 90 s)
Warranty	
Instruments	2 years (except working parts, measuring cells)
CO/NO meas. cell	1 year
O ₂ meas. cell	1 1/2 years
Probes	1 year (not including filters)
Rechargeable batteries	1 year
Accessories	6 months
Printer	1 year (except printing mechanism)



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