

# Flue gas analyser

testo 310 (2<sup>nd</sup> Gen) - Flue gas analysis the easy way

Simultaneous, individual measurement and display of all relevant measurement parameters in accordance with DIN EN 50379-1, -3. Display configurable via the testo Smart App.

Simultaneous, additional measurements via the testo Smart App (e.g. gas pressure, flow and return temperature)

Easy and intuitive menu guidance with large colour display

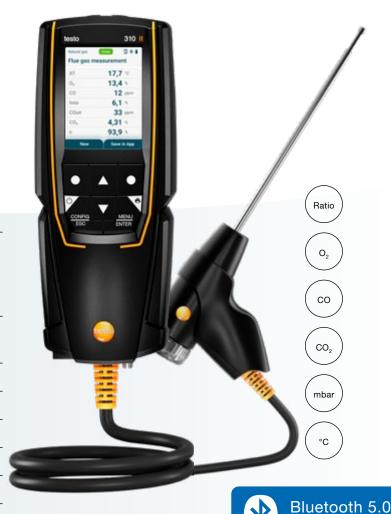
Data documented and sent digitally via testo Smart App

Digital customer data management via testo Smart App

Rechargeable Li-ion battery for over 8 hours of operation

Robust construction

Sensor zeroing in 30 seconds



The new testo 310 (2<sup>nd</sup> Gen) flue gas analyser combines simple functionality with a high level of measurement accuracy, and is perfect for all basic measurements on heating systems certified according to DIN EN 50379-1, -3. Long battery lifetimes of more than eight hours guarantee you high availability. Simultaneous, individual measurement and display of the measurement parameters in the instrument's high-resolution display are easily possible. The display can be easily configured via the testo Smart App and is individually settable for the user. Its easy handling and compact design make the testo 310 (2<sup>nd</sup> Gen) a robust tool for daily work – even when things get rough.

The printer with Bluetooth® interface for the testo 310 (2<sup>nd</sup> Gen) allows you to create clear reports on site as required. The current measurement value can be printed out of any measurement menu during or after the measurement. Via the simple connection to the testo Smart App, further measurements as well as digital documentation, data transfer and digital customer data management can be performed simultaneously. The testo 310 (2<sup>nd</sup> Gen) offers a perfect entry into combustion analysis and other measurements on boiler heating systems.

testo Smart App

Google Play



### **Product features**





#### testo Smart App

Additional, simultaneous measurements, digital documentation, data transfer and digital customer data management via the testo Smart App.



#### Configurable display

Seven-line display with clear menu structure. Easy to operate and clearly legible. Display configurable via the testo Smart App.



Robust and light instrument for daily use excellently suitable even for rough and dirty surroundings.



#### **Automatic zeroing of sensor**

Automatic zeroing of the gas sensor in only 30 seconds after starting, which can be cancelled if not required.



#### Rechargeable lithium battery

Operation with rechargeable Li-ion battery (1500 mAh) - no need to change battery, over eight hours running time, charging via USB-C possible.



#### **Condensate trap**

Integrated condensate trap very quick and easy to empty.



### Attachment

Integrated magnets for easy attachment to boiler.



#### **Probe filter**

Quickly and easily exchangeable.



Certified according to DIN EN 50379-1, -3



Documentation via the Bluetooth® interface.



## Order data

### testo 310 (2<sup>nd</sup> Gen) Standard kit

testo 310 (2<sup>nd</sup> Gen) incl. rech. battery and calibration protocol for the measurement of O<sub>2</sub>, CO; probe 180 mm with cone; case; mains unit incl. cable; silicon hose for pressure measurement, 5 x particle filters; USB-C cable



Order no. 0563 3106

### testo 310 (2<sup>nd</sup> Gen) Printer kit

testo 310 (2<sup>nd</sup> Gen) incl. rech. battery and calibration protocol for the measurement of O<sub>2</sub>, CO; Bluetooth®/IRDA Printer (0554 0621); probe 180 mm with cone; case; mains unit incl. cable; silicon hose for pressure measurement; 5 x particle filters; 1 x roll thermal paper for printer; USB-C cable



Order no. 0563 3107

### testo BT printer

testo BLUETOOTH®/IRDA printer with wireless infrared interface, 1 roll of thermal paper and 4 AA batteries



Order no. 0554 0621

## Accessories

Measuring instrument accessories	Order no.
USB C mains unit, including cable	0554 1108
testo BLUETOOTH®/IRDA printer	0554 0621
Spare thermal paper for printer, permanent ink	0554 0568
Spare dirt filter	0554 0040

testo Smart Probes	Order no.	
<b>testo 510i,</b> differential pressure measuring instrument with smartphone operation, including hose kit (Ø 4 mm and 5 mm) with adapter, batteries and calibration protocol	0560 1510	
<b>testo 115i,</b> 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

	Measuring range	Accuracy ±1 digit	Resolution	Adjustment time t <sub>90</sub>
Temperature (flue gas)	0 to +400 °C	±1 °C (0 to +100 °C) ±1.5% of m. v. (>100 °C)	0.1 °C	< 50 sec
Temperature (ambient temperature)	-20 to +100.0 °C	±1 °C	0.1 °C	< 50 sec
Draught measurement	-20 to +20 hPa	±0.02 hPa (-0,6 to +0,6 hPa) ±0.03 hPa (-3 to -0.6 hPa and +0.6 to +3 hPa) ±1.5% of m.v. (-20 to -3 hPa and +3 to +20 hPa)	0.01 hPa	
Pressure measurement	-40 to +100 hPa	±0.5 hPa (0 to 50 hPa) ±1% of m.v. (remaining measuring range)	0.1 hPa	
O <sub>2</sub> measurement	0 to 21 vol.%	±0.2 vol.%	0.1 vol.%	30 sec
CO measurement (without H <sub>2</sub> - compensation)	0 to 4000 ppm	±20 ppm (0 to 400 ppm) ±5% of m.v. (401 to 2000 ppm) ±10% of m.v. (2001 to 4000 ppm)	1 ppm	60 sec
Ambient CO measurement	0 to 4000 ppm	±20 ppm (0 to 400 ppm) ±5% of m.v. (401 to 2000 ppm) ±10% of m.v. (2001 to 4000 ppm)	1 ppm	60 sec
Efficiency testing (Eta)	0 to 120 %	-	0.1%	-
Flue gas loss	0 to 99.9%	-	0.1%	-

### General technical data

Storage temperature	-20 to +50 °C
Operating temperature	-5 to +45 °C
Power supply	Rechargeable battery 1500 mAh, mains unit 5V/2A
Memory	Storage option also via the connection to the testo Smart App
Display	Graphic 7-line display
Weight with probe	Approx. 690 g
Dimensions	203 x 83 x 46 mm
Battery life	> 8 h (pump on, 20 °C ambient temperature)
Humidity application range	0 to 80 %RH

0 to 80 %RH	IP40
BT range	60 m (without obstruction)
System requirements testo Smart App	Requires iOS 13.0 or newer; requires Andriod 8.0 or newer; requires mobile end device with Bluetooth 4.0
Warranty conditions	Please go to testo.co.uk for details.
Certification	according to DIN EN 50379-1, 3