



# Testo - the complete instrument supplier for heating engineers

Helping you work quicker and efficiently with smart technology.



## Testo: global leader in flue gas analysis

Testo is the global leader in flue gas analysis. Our broad range of analysers covers entry level through to domestic and commercial analysers and even up to MCERTS-approved emissions analysers for environmental compliance. This breadth of experience has resulted in a range which is unparalleled in terms of accuracy, durability and usability.

Testo understands that every engineer and every boiler have unique requirements from a flue gas analyser. The information in this brochure should help you to choose the flue gas analyser to fit your needs. Before you choose, here are a few important considerations.

Testo flue gas analysers all conform to the required UK standard, which is EN 50379 (2012).

All Testo flue gas analysers use O<sub>2</sub> and CO sensors to sample combustion gases and then calculate the corresponding level of CO<sub>2</sub> using the CO<sub>2</sub>max coefficient of the fuel type. This creates a more reliable measurement, especially in the event of increased CO<sub>2</sub> levels being blended into future gas supplies.

Combined with the measured CO value, the analysers all display a calculated CO:CO<sub>2</sub> combustion ratio to four decimal places in accordance with EN 50379.

Furthermore, in accordance with TB157 our flue gas analyser range which uses an 'indirect' calculation of CO<sub>2</sub> values are suitable for use with natural gas blended with hydrogen up to 20% volume.



## Indispensable instruments for heating engineers

Gas engineers depend on a wide range of instruments to carry out their work. Testo provide a complete range of instruments for all these measurement requirements.

Testo instruments are designed to ensure exceptional ease of use, accuracy and integration with other Testo instruments. Our instruments are built to last and provide years of reliable use, making them excellent value for money.

The Testo instrument range includes:

- Gas leak, ambient CO and CO<sub>2</sub> detection
- Smart Probes: wireless probes operated via Smartphone or tablet
- Thermometers
- Anemometers
- Pressure meters
- Electrical measurement
- Thermal imaging cameras
- Digital manifolds for heat pump measurement
- Data loggers

## Fast, simple and reliable flue gas analyser service

At Testo we understand that you need simple and reliable flue gas analyser service, completed as quickly as possible. Our flue gas analyser service plan offers our lowest ever cost of ownership over a 5 year period.

Whether you return your flue gas analyser direct to Testo or opt to use a Testo Approved Service Centre, you will benefit from the same pricing.

Instruments serviced by Testo are typically turned around in just 2 working days, or you can opt for our optional 24 Hour Express service.

For further information and pricing, please see page 31.



## Your advantages with Testo

### Largest portfolio:

With Testo, you find all the measuring instruments you need for installation, servicing and maintenance of heating systems.

### Worry-free working:



With Testo, you don't just get the right measuring instruments, but also services such as regular maintenance and calibration from one provider.



### Innovative technology:

With measurement technology from testo you can leave your competitors behind you – and all at an attractive price.



# Testo flue gas analysers overview

	<b>testo 310 (2nd Gen)</b>  <b>NEW</b>	<b>testo 327</b> 
Fuels available	Gas, Heating Oils, solid fuels	Gas, Heating Oils, solid fuels
Measurement sensors	O <sub>2</sub> , CO	O <sub>2</sub> , CO
Measuring ranges	CO: 0 to 4000 ppm CO <sub>2</sub> : 0 to CO <sub>2</sub> max	CO: 0 to 4000 ppm CO <sub>2</sub> : 0 to CO <sub>2</sub> max
CO measurement (H <sub>2</sub> -compensated)	-	-
Long-life CO sensor with up to 6 years' service life	-	-
Gas pressure testing	✓	✓
Pressure measurement	Separate from flue gas measurement	Separate from flue gas measurement
Flow/return temperature measurement	-	✓
Error and sensor diagnosis	✓	✓
Zeroing of analyser in flue possible	-	✓
Create digital measurement protocol directly in the App and send via email	✓	-
Sensor Warranty	3 years	3 years
Instrument Warranty	2 years	2 years
Display	2-line LCD display	4-line alphanumeric LCD display
Memory	-	-
Software/App	✓	-
Bluetooth connectivity to testo Smart Probes	-	-

	<b>testo 300+</b>  <b>NEW</b>	<b>testo 300LL</b> 
Fuels available	Gas, Heating Oils, solid fuels	Gas, Heating Oils, solid fuels
Measurement sensors	O <sub>2</sub> , CO NO optional	O <sub>2</sub> , CO H <sub>2</sub> -compensated, NO optional
Measuring ranges	CO: 0 to 8,000 ppm CO <sub>2</sub> : 0 to CO <sub>2</sub> max	CO H <sub>2</sub> -compensated: 0 to 30,000 ppm (via fresh air dilution)
CO measurement (H <sub>2</sub> -compensated)	✓	✓
Service life of CO sensor	5 years	6 years
Gas pressure testing	✓	✓
Pressure measurement	Parallel to flue gas measurement (only with testo 510i smart probe)	Parallel to flue gas measurement (only with testo 510i smart probe)
Flow/return temperature measurement	✓	✓
Error and sensor diagnosis	✓	✓
Zeroing of analyser in flue possible	✓	✓
Create digital measurement protocol directly in the App and send via email	✓	✓
Sensor Warranty	5 years	6 years
Instrument Warranty	4 years (display only 1 year)	4 years (display only 1 year)
Display	5" HD touchscreen display	5" HD touchscreen display
Memory	1 million measured values	1 million measured values
Software/App	testo Smart App	testo Smart App
Bluetooth connectivity to testo Smart Probes	✓	✓

# testo 310 (2<sup>nd</sup> Generation) flue gas analyser

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.

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

Technical Data	
Temperature	0 to +400 °C
Draught	-20 to +20 mbar
Pressure	-40 to +100 mbar
O <sub>2</sub>	0 to 21 Vol. %
CO	0 to 4000 ppm
CO <sub>2</sub>	0 to CO <sub>2</sub> max
Ambient CO	0 to 4000 ppm



**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**  
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.



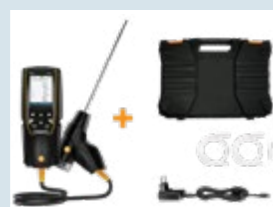
**Printer**  
Documentation via the Bluetooth® interface.

**Certified according to  
DIN EN 50379-1, -3**



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

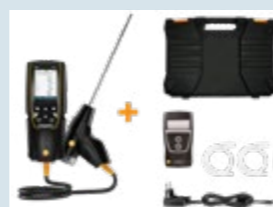
testo 310 (2<sup>nd</sup> Gen) incl. rechargeable battery and calibration protocol for the measurement of O<sub>2</sub>, CO; probe 180mm with cone; case; mains unit incl. cable; silicon hose for pressure measurement, 5 x particle filters; USB-C cable



**Order no. 0563 3106**

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

testo 310 (2<sup>nd</sup> Gen) incl. rechargeable battery and calibration protocol for the measurement of O<sub>2</sub>, CO; Bluetooth®/IRDA Printer (0554 0621); probe 180mm 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 327 flue gas analyser

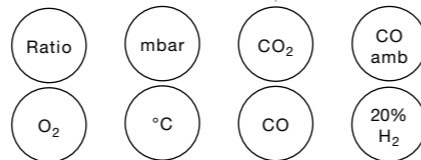
The testo 327 measures combustion efficiency, °C, O<sub>2</sub>, CO<sub>2</sub>, CO and flue draught. Ambient CO measurement is also possible. The powerful LED backlighting in the 4-line display guarantees good legibility even in unfavourable lighting. The instrument stands out thanks to its ergonomic housing design, as well as its durability.

The single integrated flue gas and thermocouple connector of the testo 327 ensures a fast, gas tight connection to the sample hose every time. The testo 327 also has automatic pump protection as standard to help protect the CO measuring cell from damage due to over-range (4,000ppm range capability).

- Fast and robust probe connection
- 7 selectable fuels
- Timed Ambient CO measurement
- Tightness and let-by tests
- Flow and return temperatures (using additional probes)
- Easy IR printout
- 4,000 ppm CO sensor protected by automatic pump shut-off
- Tested to EN50379, conforms to BS7967 & Gas Safe TB143
- Pipe clamp probes for quicker and easier use
- Durable soft case with shoulder strap



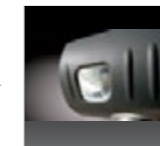
Technical Data	
Temperature	-40 to +600 °C
Draught	±40 mbar
Efficiency measurement (Eta)	0 to 120%
Flue gas loss (qA)	0 to 99.9%
O <sub>2</sub> measurement	0 to 21 Vol. %
CO <sub>2</sub> measurement	0 to CO <sub>2</sub> max
CO measurement	0 to 4000 ppm
Pressure	-200 to +200 mbar



**Configurable display**  
The 4-line LED display can be configured to the users requirements, and its back-lighting function guarantees an easy-to-read display even if lighting conditions are unfavourable



**Robust**  
Enjoy ergonomic, durable housing that has proven to withstand the day to day work of HVAC engineers



**Condensate trap**  
Separates the residual moisture in the flue gas and collects the condensate. Ensuring that the moisture does not enter the analyser and can not cause any damage to the device



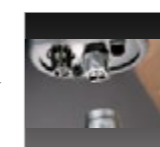
**Rechargeable lithium battery**  
Rechargeable Li-ion battery



**Fantastic value**  
Choose from our selection of kit configurations, starting from just £549 RLP ex VAT



**Soft carry case**  
Smart, lightweight and easy to wear between jobs over the shoulder or carried by the handle



**Secure connection**  
Fast probe connection: All gas paths are connected with one "click"



**Printer**  
Compatible with testo fast Printer (0554 0549) for fast and reliable documentation via the infrared interface.

**testo 327 Standard Kit**  
testo 327 flue gas analyser, rechargeable battery, flue gas probe (180mm x 6mm diameter), soft transport case and calibration protocol



**Order no. 0563 3203 80**

**testo 327 Standard Kit + gas leak detector**  
Everything in the standard kit, plus: gas leak detector.



**Order no. 300563 1327**

**testo 327 Standard Kit + gas leak detector + CPA1 probe set**  
Everything in the standard kit, plus: gas leak detector & CPA1 probe set



**Order no. 300563 3327**

**testo 327 Advanced Kit**  
Everything in the standard kit, plus: pressure hose adapter kit, differential temperature clamp probes and testo IR printer (0554 0549)



**Order no. 0563 3203 81**

**testo 327 Advanced Kit + gas leak detector**  
Everything in the advanced kit, plus: gas leak detector



**Order no. 300563 2327**

**testo 327 Advanced Kit + gas leak detector+ CPA1 probe set**  
Everything in the standard kit, plus: gas leak detector & CPA1 probe set



**Order no. 300563 4327**

# Smart just got smarter: The testo 300+ flue gas analyser.

Providing reliably accurate results is not enough. A contemporary flue gas analyser 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

### Simple reporting

The testo 300+ allows fast reporting via pdf protocol, which can then be sent using Bluetooth transfer\* to external device or direct to client via email.  
\*Bluetooth file transfer not possible with iOS device

**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.

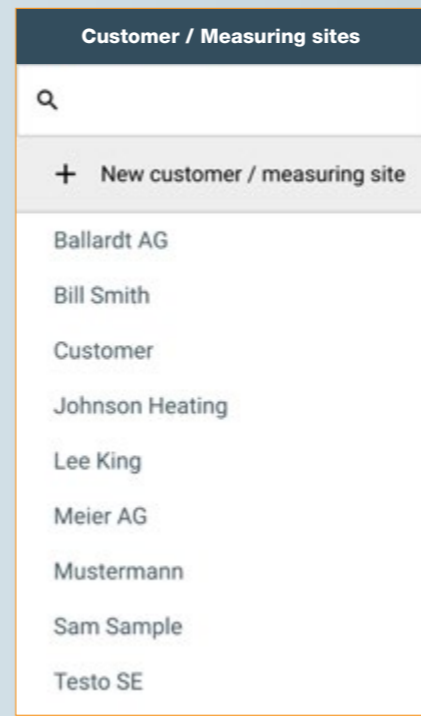
**NEW Enhanced sensors**  
The testo 300+ has enhanced sensors with a 5 years' service life, measures high CO values up to 8,000 ppm and is future-proofed thanks to NOx preparation. This model is also ready for 20% H2 blended gas



**NEW**

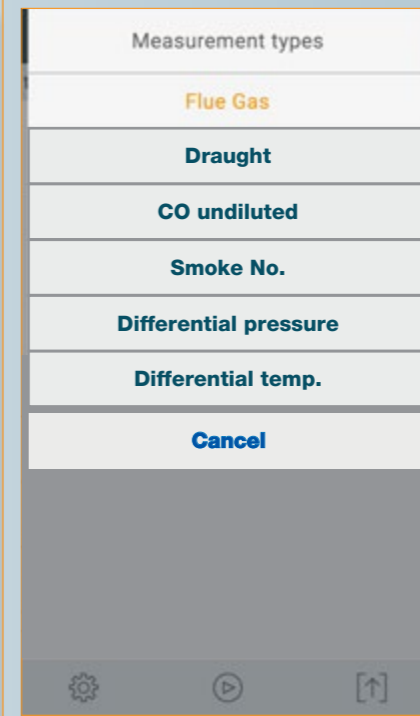
### Customers/measuring points

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



### 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.



### 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.





## testo 300+ smart flue gas analyser

The smart testo 300+ flue gas analyser is fully operated via the 5" HD smart touch display, so you can see all the measuring values straight away without scrolling. The scratch resistant screen is 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 testo 300+ flue gas analyser isn't hampered with slow waiting times or start-up phases, it is immediately ready to go at the touch of a button in standby mode. Documentation is handled just as quickly – reports can be created and sent directly on site.

### Technical Data

Temperature	-40 to 1,200 °C
Draught	-9.99 to +40 mbar
Pressure	-100 to +200 mbar
O <sub>2</sub>	0 to 21 Vol. %
CO	0 to 8,000 ppm
CO <sub>2</sub>	0 to CO <sub>2</sub> max.

**ENHANCED  
O<sub>2</sub> & CO  
SENSORS  
5 YEAR  
LIFESPAN**

Large scratch-resistant 5" HD display with smart-touch operation and replaceable protective film

Stored, intuitive menus for all relevant measurements

Ready to measure at the touch of a button in standby mode

4 strong magnets with rubber coating for material friendly mounting

Emailing of reports directly on site, with integrated customer address book

### Why not add a printer or NOx Upgrade?

#### testo Bluetooth IRDA Printer

Fast documentation for the testo 300 and testo 300LL. Includes 1 roll of thermal paper and batteries

**Order no. 0554 0621**



#### NO Sensor Add-on for Handset

Allows testo 300 FGA unit to measure calculated NOx value.

**Order no. 0393 0151**



\*Additional fitting costs may apply.

#### testo 300+ Handset Only

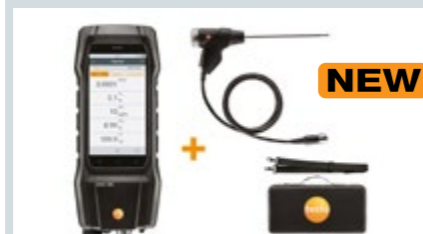
testo 300+ flue gas analyser handset, power supply, Bluetooth connector, O<sub>2</sub>, CO 8,000 ppm and calibration protocol



**Order no. 0633 3004 95**

#### testo 300+ Standard Kit

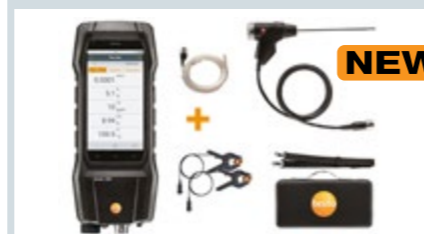
testo 300+ handset, Bluetooth connector, calibration protocol & compact flue gas probe (180mm, Ø 6 mm) and soft transport case



**Order no. 0564 3004 12**

#### testo 300+ Advanced Kit

Everything in the standard kit, plus: pipe clamp probes for differential temperature and pressure hose connection set



**Order no. 0564 3004 13**



- Ratio
- O<sub>2</sub>
- CO
- CO<sub>2</sub>
- mbar
- °C
- CO amb
- Δ P
- 20% H<sub>2</sub>

#### testo 300+ Smart Kit

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



**Order no. 300564 3004 01**

#### testo 300+ Ultra Smart Kit

All items from testo 300+ standard kit, plus: 2x testo 115i bluetooth pipe thermometers, 1x testo 510i bluetooth manometer, 1x pressure connection set and 1x testo gas leak detector



**Order no. 300564 3004 02**

#### testo 300+ Smart Heat Pump Kit

All items from testo 300+ Smart kit, plus: testo 550i smart digital manifold. Be equipped to carry out smart measurements involving domestic boilers and monobloc or split heat pumps



**Order no. 300564 3004 04**

## testo 300LL smart flue gas analyser

Designed for commercial boiler installation and servicing

Fitted with 'longlife' sensors with a 6 year warranty

CO sensor with H<sub>2</sub> compensation. 0 to 30,000 ppm with automatic fresh air dilution

Supplied with modular style flue gas probe 8mm diameter x 180mm long

Emailing of reports directly on site, with integrated customer address book

Optional NO sensor can be fitted to allow calculated NOx measurement

### Technical Data

Temperature	-40 to 1,200 °C
Draught	-9.99 to +40 mbar
Pressure	0 to +300 mbar
O <sub>2</sub>	0 to 21 Vol. %
CO H <sub>2</sub> compensated	0 to 30,000 ppm via automatic dilution
CO <sub>2</sub>	0 to CO <sub>2</sub> max.

#### testo 300LL Standard Kit

testo 300LL flue gas analyser  
O<sub>2</sub>, CO H<sub>2</sub>, 30,000 ppm,  
Bluetooth Connector, NO sensor  
- can be retrofitted, compact  
flue gas probe (180mm,  
Ø 8 mm), testo EasyHeat  
PC software and hard  
instrument case



**Order no. 0564 3004 82**

#### testo 300LL Printer Kit

testo 300LL flue gas analyser  
O<sub>2</sub>, CO H<sub>2</sub>, 30,000 ppm,  
Bluetooth Connector NO sensor  
- can be retrofitted, compact  
flue gas probe (180mm, Ø  
8 mm), testo EasyHeat PC  
software, hard instrument case  
and testo printer



**Order no. 0564 3004 89**

## testo 300LL NOx measurement kit

For engineers who need to measure and record NOx values within the combustion process on domestic or light commercial boilers, Testo have introduced specific measurement kits based around the testo 300 flue gas analyser unit.

This model gives a calculated NOx measurement using the onboard NO sensor, and a preset NO<sub>2</sub> percentage.

#### testo 300LL NOx Kit

testo 300LL with O<sub>2</sub> sensor,  
H<sub>2</sub> compensated CO sensor,  
NO, mains unit, modular flue  
gas probe (180 mm, Ø 8 mm),  
spare dirt filters, Bluetooth  
printer, instrument hard case



**Order no. 0564 3004 84**

## testo 340 industrial emissions analyser

The compact, easy-to-operate testo 340 emissions analyser is the right tool for many different emission measurements. The compact design and the reliable technology make it the ideal measuring instrument for commissioning, service and maintenance work and in test measurements on industrial burners, stationary industrial engines, gas turbines and thermal processes.

The unique measuring range extension allows unrestricted measurements to be carried out even at high gas concentrations. The testo 340 is equipped with an O<sub>2</sub> sensor as standard. Three further gas sensors can be configured individually, in order to be able to adapt the instrument optimally to the respective measurement task. The instrument can also be operated remotely from your Android Smartphone or tablet using the free App.

Measuring range extension for unrestricted measurement at high gas concentrations up to 5 x sensor range
Flue gas analysis with up to 4 gas sensors – freely configurable
Large selection of probes
Bluetooth interface
Convenient measurement data management
TÜV-tested / EN norm



Technical Data	
O <sub>2</sub> measurement	0 to 25 vol. %
CO measurement (H <sub>2</sub> -compensated)	0 to 10,000 ppm
CO <sub>low</sub> measurement (H <sub>2</sub> -compensated)	0 to 500 ppm
NO measurement	0 to 4,000 ppm
NO <sub>low</sub> measurement	0 to 300 ppm
NO <sub>2</sub> measurement	0 to 500 ppm
SO <sub>2</sub> measurement	0 to 5,000 ppm
Temperature measurement	-40 to +1,200 °C
Draught measurement	-40 to +40 hPa
Differential pressure measurement	-200 to 200 hPa
Absolute pressure measurement	600 to +1,150 hPa
Derived parameters:	
Efficiency	0 to 120%
Flue gas loss	0 to 99.9%
Flue gas dewpoint	0 to 99.9 °C
CO <sub>2</sub> determination (calculation from O <sub>2</sub> )	0 to CO <sub>2</sub> max.

**testo 340 Combustion Kit**

testo 340 analyser unit with O<sub>2</sub>, CO, NO cells and Bluetooth module fitted, testo 340 carry case, switching power supply 6, 3VDC 2A, carry strap

**Order no. 0563 9352**

**testo 340 NO<sub>2</sub> / NO<sub>x</sub> Kit**

testo 340 analyser unit with O<sub>2</sub>, CO, NO, NO<sub>2</sub> cells and Bluetooth module fitted, testo 340 carry case, switching power supply 6, 3VDC 2A, carry strap

**Order no. 0563 9350**

**testo 340 SO<sub>2</sub> Kit**

testo 340 analyser unit with O<sub>2</sub>, CO, NO, SO<sub>2</sub> cells and Bluetooth module fitted, testo 340 carry case, switching power supply 6, 3VDC 2A, carry strap

**Order no. 0563 9351**

## Accessories for flue gas analysers

	Description	Order No.
	<b>Testo Bluetooth IRDA Printer for testo 300</b> Fast documentation for the testo 300+ and testo 300LL. Includes 1 roll of thermal paper and batteries	<b>0554 0621</b>
	<b>Testo IRDA Printer</b> This printer offers a faster print out of readings via IRDA interface and includes 1 roll of thermal paper and batteries. (For use with testo 310, 320B, 327, 330, 340 and 350)	<b>0554 0549</b>
	<b>Testo IR Printer</b> Infrared printer, includes 1 roll of thermal paper and batteries. (For use with testo 310 only)	<b>0554 3100</b>
	<b>Thermal Printer Rolls</b> Pack of six thermal printer rolls with 10 year legibility. (For models: 0554 3100, 0554 0549, 0554 0553)	<b>0554 0568</b>
	<b>Differential Pressure Set</b> Hose connection set for gas pressure measurement. For use with testo 327, testo 320B, testo 300 and testo 330	<b>0554 1203</b>
	<b>Differential Temperature Set</b> 2 x clamp probes and thermocouple adaptor for differential temperature testing. For use with testo 327, 320, 320B & 330.	<b>0554 7223</b>
	<b>CPA1 Set</b> BS7967 probe set - includes 3 x probes and modular handle	<b>300554 2000</b>
	<b>Clamp Probe</b> with NTC temperature sensor - for measurements on pipes (Ø 6-35 mm). For use with testo 300 only	<b>0615 5505</b>
	<b>Clamp Probe</b> with NTC temperature sensor - for use with testo 327 and 320B	<b>0600 5505</b>
	<b>Testo Smoke Pump</b> Smoke tester including smoke paper sheet, smoke chart and cone	<b>300554 0307</b>
	<b>Spare Particle Filters</b> for compact style probe, 10 off	<b>0554 0040</b>
	<b>Spare Particle Filters</b> for compact style probe, 10 off	<b>0554 3385</b>
	<b>Testo Soft Transport Bag</b> Soft bag with shoulder strap suitable for all Testo flue gas analysers	<b>0516 3001</b>
	<b>Testo Hard Transport Case</b> Suitable for all Testo flue gas analysers and accessories	<b>0516 3300</b>
	<b>testo 300 Upgrade Kit</b> For testo 300 owners: testo 300 USB bluetooth adapter (allows smart probe connection,) 2x testo 115i clamp thermometers and 1x testo 510i bluetooth manometer	<b>300564 3002 03</b>

Please note, these kits do not include sampling probe/hose, printer or software. These should be chosen to suit your specific application. Find out more at [www.testo.co.uk](http://www.testo.co.uk) or contact our sales office on 01420 544433 if you require assistance.



## Ambient CO and CO<sub>2</sub> monitoring

### Ambient CO monitor testo 317-3

The compact testo 317-3 CO meter is designed to provide you with a quick and reliable means of testing the surrounding air for carbon monoxide.

- Detects the presence of dangerous levels of ambient CO
- 3 year warranty on CO sensor
- Visual and audible alarm. Adjustable alarm threshold

**testo 317-3**

testo 317-3 CO monitor, carrying case with belt clip, headphones, wrist strap, sampler and calibration protocol

**Order no. 0632 3173**



### Ambient CO/CO<sub>2</sub> measuring instrument testo 315-3


The testo 315-3 offers a highly accurate electrochemical sensor for CO measurement and a shock-resistant infrared CO<sub>2</sub> sensor.

- Parallel measurement of CO and CO<sub>2</sub> in ambient air according to EN 50543 for testing in commercial kitchens
- Convenient, easy handling
- Data printout on site using optional IR printer unit
- Optional temperature/humidity module

**testo 315-3**

testo 315-3 ambient CO/CO<sub>2</sub> measuring instrument, including USB mains unit and cable

**Order no. 0632 3153**



### Ambient CO<sub>2</sub> measuring instrument with App connection testo 535


For indoor air quality and comfort, the measurement of the carbon dioxide content in the indoor air is crucial. To obtain precise results quickly, you need a suitable measuring instrument. The compact CO<sub>2</sub> measuring instrument testo 535 with practical App connection allows you to carry out this important measurement easily and efficiently - and thus ensure comfort and a healthy indoor climate.

- Simple, fast and precise measurement of CO<sub>2</sub> concentration
- Audible alarm sounds if a limit value is exceeded
- Fast in-app configuration, graph history, second screen and measurement data memory in the testo Smart App
- High reproducibility of measurement results due to long-term stable infrared sensor technology

**testo 535**

testo 535 CO<sub>2</sub> measuring instrument with App connection, transport bag, calibration protocol and 3x AA batteries

**Order no. 0563 0535**




## Gas pressure

### Differential pressure meter testo 510

The compact testo 510 is suitable for pressure testing on gas pipework (tightness & let-by). Also flow measurements in ventilation ducts using a Pitot tube. The testo 510 comes with a silicone connection hose and other useful accessories.

- Differential pressure measurement from 0 to 100 mbar
- Flow measurement possible with optional Pitot tube
- 10 units to choose from; Pa, hPa, mbar, mmH<sub>2</sub>O, mmHg, inH<sub>2</sub>O, inHg, psi, m/s, fpm

**testo 510**

testo 510 differential pressure meter, protection cap, belt holder, 2 x connection hoses, wrist strap, calibration protocol

**Order no. 0563 0510**



### Bluetooth differential pressure Smart Probe testo 510i

the testo 510i differential pressure measuring instrument with smartphone operation for pressure testing on gas pipework (tightness & let-by). Readings can be viewed conveniently on your smartphone/tablet via the testo Smart Probes App and emailed directly.

- Measurement of gas flow and static pressure
- -150 to +150 mbar
- Measurement menu for pressure drop test
- Simple configuration and determination of volume flow

**testo 510i**

testo 510i differential pressure measuring instrument with smartphone operation, including hose set (Ø 4 mm and 5 mm) with adapter, batteries and calibration protocol

**Order no. 0560 1510**



\*compatible with testo Smart App, for details refer to p.18 & 19

### Differential pressure measuring instrument with App connection testo 512-1 & testo 512-2

Differential pressure measurement fast, easy and precise: This is what the compact measuring instrument testo 512-1 & 512-2 is all about. In practical use, it convinces with its flexibility and variety of applications. Checking the gas pressure on burners by measuring gas flow pressure and static gas pressure is just as quick and precise as checking filters and Pitot tube measurement in the ventilation duct.


- Simple, fast and precise differential pressure measurement for checking filters and for Pitot tube measurement in the ventilation duct
- Measuring range: testo 512-1 (0 to 200 mbar) or testo 512-2 (0 to 2000 mbar)
- Reliable measurement results due to position-independent differential pressure sensor with high accuracy
- Fast (duct) configuration, graph history, second screen and measurement data memory in the testo Smart App
- Volume flow calculation in measuring instrument and App

**testo 512-1 & 512-2**

testo 512 measuring instrument with App connection, transport bag, connection hose made of silicone, calibration protocol and 3x AA batteries

testo 512-1  
**Order no. 0563 1512**

testo 512-2  
**Order no. 0563 2512**




## testo Smart Probes: compact Bluetooth probes for heating systems

Measure temperature, pressure or humidity more easily and more productively than ever before with the testo Smart Probes - handy measuring tools that can be operated by your smartphone/tablet via the testo Smart App.

The Testo Smart Probes transmit readings via Bluetooth to the testo Smart App on your smartphone/tablet. You can then use this to analyse and document the data, and to send them as an email report directly on site.



**testo Smart App:**  
Download now for iOS or Android free of charge:






**testo App to App interface:**  
For seamless data transfer to numerous industry Apps.



**Your benefits:**

- More mobility: readings always to hand right where they are needed.
- More reliability: direct digital processing of measurement results.
- More professionalism: clear PDF report with photos, logo and comments.

### Updated: extended range and better handling




The new Smart Probes testo 115i, testo 605i and testo 549i have an extended Bluetooth range of up to 100 metres.

Measurement at a vent is comfortable with the bendable probe of the new testo 605i. Its thinner measurement tip is ideal for smaller measurement apertures, and the stable magnetic holder ensures even more secure attachment.

The connection of the new testo 549i is angled by 45° for easier mounting.

Range up to 100 m

### testo Smart Probes heating kits

Measure and check all heating system temperatures and pressures in conjunction with your smartphone.

- Measurement menu for pressure drop test, including alerts via testo Smart Probes App
- Measurement of gas flow and static pressure
- Flow/return/differential temperature on boilers and radiator balancing

**Heating kit (0563 0004 10) also offers:**

- Rapid image documentation with IR temperature readings and measuring spot marking
- Non-contact temperature measurement on underfloor heating systems and radiators

**Smart Probes heating kit**

Contains testo 115i surface thermometer, testo 510i differential pressure meter & testo 805i infrared thermometer in testo smart case

**Order no. 0563 0004 10**



**Smart Probes differential temperature/pressure kit**

Kit contains 2 x testo 115i surface thermometers and testo 510i differential pressure meter in testo smart case

**Order no. 300563 0015**



#### testo 115i clamp thermometer

- Temperature measurement, suitable for pipe temperature measurement on heating systems
- -40 to +150 °C
- Suitable for pipes 6 to 35mm diameter

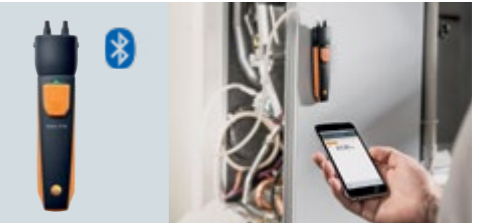
**Order no. 0560 2115 02**



#### testo 510i differential pressure measuring instrument

- Measurement menu for pressure drop test
- -150 to +150 mbar

**Order no. 0560 1510**



#### testo 605i humidity measuring instrument

- Air humidity/temperature measurement
- -20 to +60 °C; 0 to 100 %RH

**Order no. 0560 2605 02**



#### testo 405i thermal anemometer

- Air flow velocity/temperature, volume flow measurement, also for calculating cooling/heating performance
- -20 to +60 °C; 0 to 30 m/s

**Order no. 0560 1405**



#### testo 410i vane anemometer

- Air flow velocity/temperature, volume flow measurement, also for calculating cooling/heating performance
- -20 to +60 °C; 0.4 to 30 m/s

**Order no. 0560 1410**



#### testo 805i infrared thermometer

- Non-contact surface temperature
- Measuring spot marking
- -50 to +150 °C

**Order no. 0560 1805**



### testo Smart App

- Wireless control of the Testo Smart Probes
- Automatic calculation of evaporation and condensation temperature, as well as superheating and sub-cooling
- Analyse measurement data, create reports, add photos and send them by email

Perfect with the testo Smart App  
**FREE download**








# The new testo 915i Smart Probe

## For smart temperature measurement

### testo 915i Thermometer with plug-in probes, operated by smartphone

- Wireless temperature measurement in the most diverse applications thanks to large selection of probes and compatibility with common Type K thermocouple probes
- Robust and fast-reaction probes for quick measurements
- Fast identification of temperature change by graph curve
- Individually available with air probe, immersion/penetration probe, surface probe or flexible probe (all TC Type K, Class 1)
- Available as a kit with air, immersion/penetration and surface probes TC Type K, Class 1
- Large measuring range up to -50 to +400 °C
- High measurement accuracy up to ±1.0 °C thanks to system calibration ex-works



### Flexible temperature measurement

- Measure ambient temperature and temperature in ducts or at air vents with the testo 915i with air temperature probe
- Measure temperatures in liquid, semi-solid or paste media with the testo 915i with immersion/penetration probe
- Measure surface temperature on uneven surfaces with the testo 915i with surface probe

The testo Smart App offers extra support and functionality in this application:

- Intuitive operation with fast and reliable temperature display
- Versatile use in the most varied temperature measurement applications
- Easy analysis and documentation



### testo 915i with flexible probe

Wireless Smart Probe testo 915i with flexible probe (TC Type K), incl. batteries and calibration protocol.

Order no. 0563 4915



### testo 915i with air probe

Wireless Smart Probe testo 915i with air probe (TC Type K), incl. batteries and calibration protocol.

Order no. 0563 3915



### testo 915i with immersion/penetration probe

Wireless Smart Probe testo 915i with immersion/penetration probe (TC Type K), incl. batteries and calibration protocol.

Order no. 0563 1915



### testo 915i with surface probe

Wireless Smart Probe testo 915i with surface probe (TC Type K), incl. batteries and calibration protocol.

Order no. 0563 2915



### testo 915i kit

Universal temperature kit consisting of Smart Probe testo 915i with plug-in immersion/penetration probe, air probe and surface probe in Smart Case, incl. batteries and calibration protocol.

Order no. 0563 5915



Perfect with the testo Smart App  
FREE download






# First choice for heating engineers

## Smart thermal imagers from Testo

### testo 865s thermal imaging camera



- Infrared resolution 160 x 120 pixels (with testo SuperResolution Technology 320 x 240 pixels)
- Thermal sensitivity 100mk/0.1 °C
- Automatic detection of hot and cold spots
- Measuring range: -20 to +280°C

Order no. 0560 8651

### testo 868s thermal imaging camera



- Infrared resolution 160 x 120 pixels (with testo SuperResolution Technology 320 x 240 pixels)
- Thermal sensitivity 100mk/0.1 °C
- Integrated digital camera
- testo Thermography App
- Measuring range: -30 to +100°C; 0 to +650°C

Order no. 0560 8684

### testo 871s thermal imaging camera



- Infrared resolution 240 x 180 pixels (with testo SuperResolution technology 480 x 360 pixels)
- Thermal sensitivity 80mk/0.08 °C
- Integrated digital camera
- Wireless measurement data transfer from testo 770-3 clamp meter for electrical thermography and testo 605i for humidity measuring instrument
- testo Thermography App
- Measuring range: -30 to +100°C; 0 to +650°C

Order no. 0560 8716

### testo 872s thermal imaging camera



- Infrared resolution 320 x 240 pixels (with testo SuperResolution Technology 640 x 480 pixels)
- Thermal sensitivity 50mk/0.05 °C
- Integrated digital camera and laser marker
- Wireless measurement data from testo 770-3 clamp meter and testo 605i humidity measuring instrument (sold separately)
- testo Thermography App
- Measuring range: -30 to +100°C; 0 to +650°C

Order no. 0560 8725



### testo Thermography App

- Create compact reports quickly, save them online and send them by email
- Contains helpful functions for fast, on-site analysis
- Transmit thermal images live to smartphone/tablet

Download now for iOS or Android free of charge:





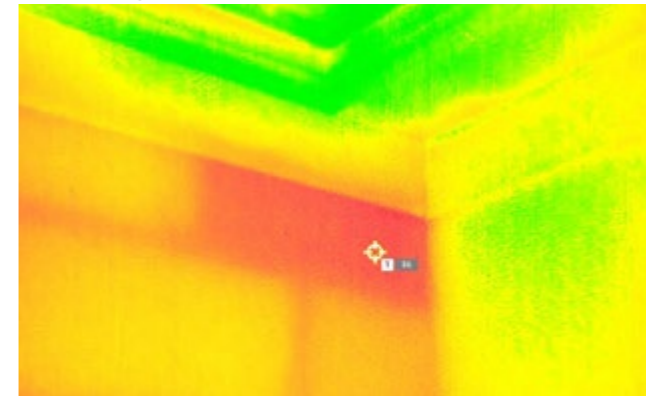
# Testo thermal imaging cameras for many applications.

Thermal imaging cameras are highly versatile instruments that can be deployed wherever there is a need to visualise temperature, making them an extremely useful tool for many varieties of applications; checking heating systems & radiators for build-ups of silt, finding ruptured pipe work, electrical testing, detecting structural defects, detecting mould and much more.

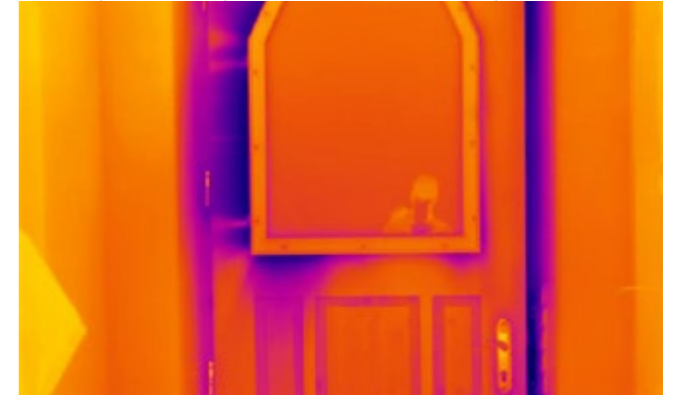
**Hot on the trail of a ruptured pipe**



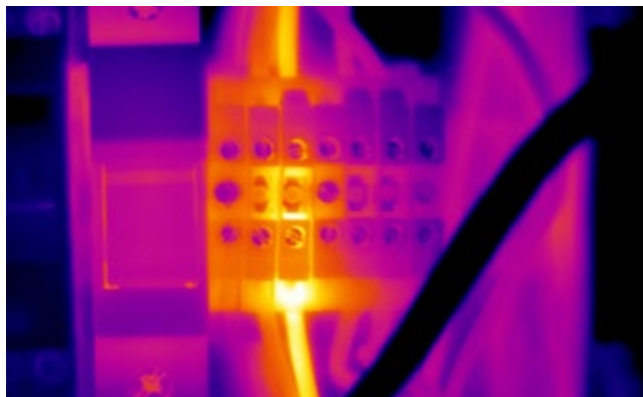
**Preventing mould formation**



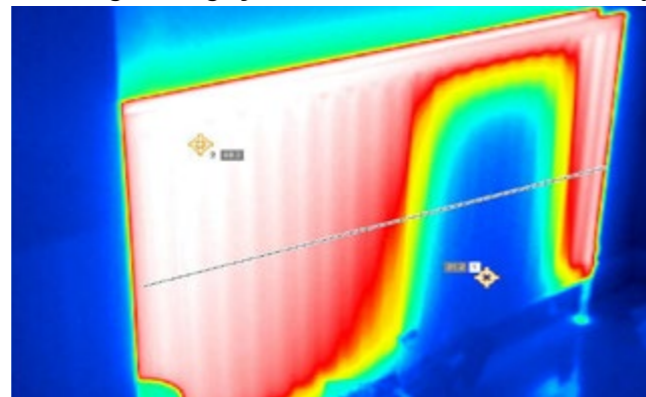
**Testing the air tightness of new buildings**



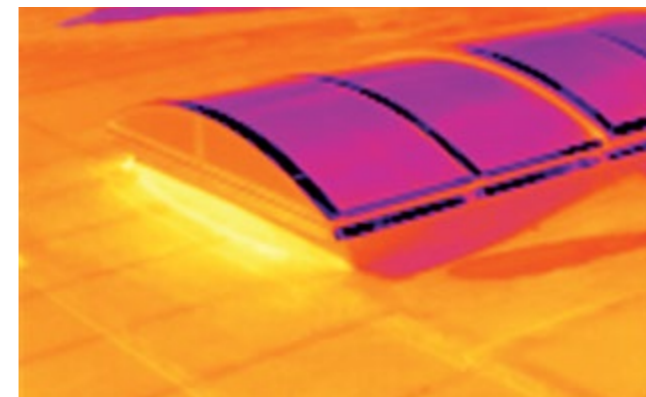
**Electrical testing**



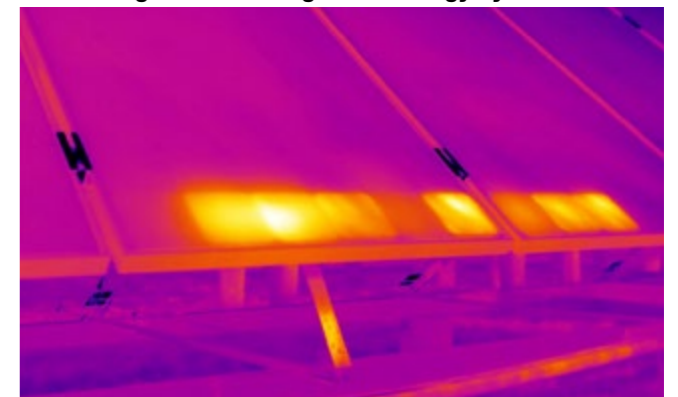
**Checking heating systems & radiators for silt build up**



**Locate & pinpoint roof leaks**



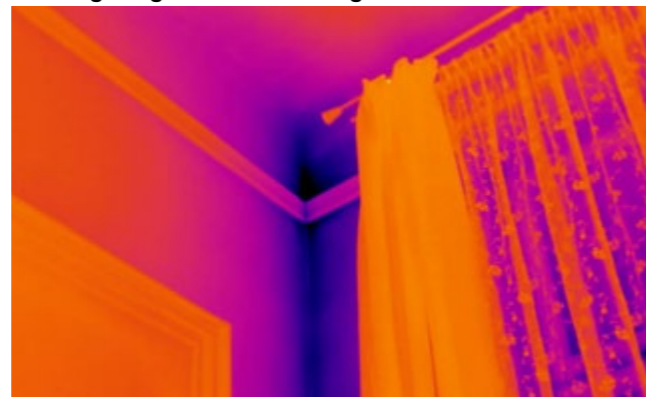
**Monitoring and checking solar energy systems**



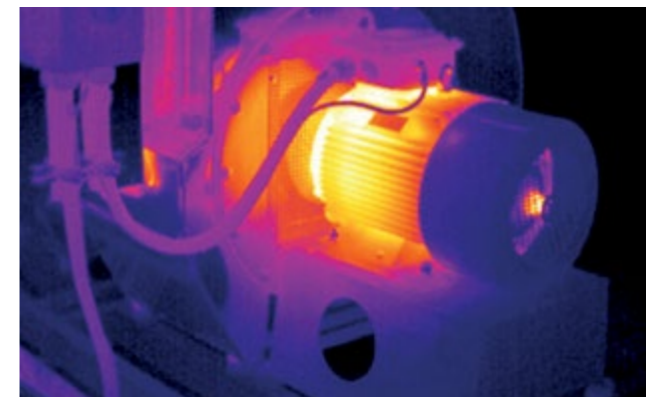
**Carrying out detailed energy consultancy**



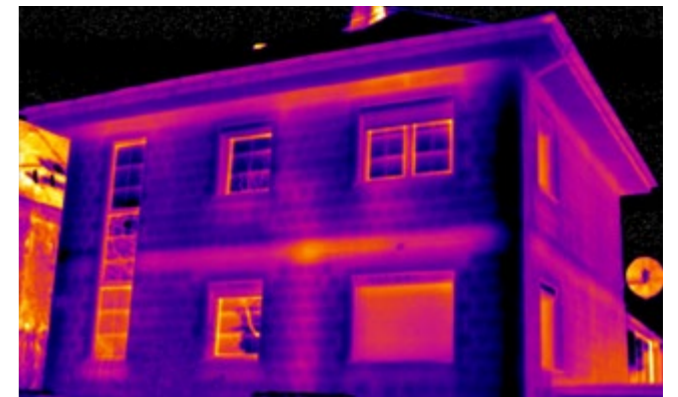
**Investigating moisture damage**



**Mechanical testing**



**Detecting structural defects**





# The Testo Compact Class.

## 11 measuring instruments, 9 parameters, 1 App.

Air conditioning and ventilation systems					
Product	testo 416	testo 417	testo 417 kit 1	testo 417 kit 2	testo 425
Description	16 mm vane anemometer with App connection, fixed telescope (max. 850 mm), incl. transport bag and calibration protocol	100 mm vane anemometer with App connection, incl. transport bag and calibration protocol	100 mm vane anemometer with App connection, incl. measuring funnel for plate outlets, measuring funnel for ventilation grilles, transport bag and calibration protocol	100 mm vane anemometer with App connection incl. measuring funnel for plate outlets, measuring funnel for ventilation grilles, flow straightener, transport bag and calibration protocol	Thermal hot wire anemometer with App connection, fixed telescope (max. 820 mm), incl. transport bag and calibration protocol
Measurement parameter	m/s, fpm, m <sup>3</sup> /h, cfm, l/s	m/s, fpm, °C, °F, m <sup>3</sup> /h, cfm, l/s			m/s, fpm, °C, °F, m <sup>3</sup> /h, cfm, l/s
Measuring range	0.6 to 40 m/s	0.3 to 20 m/s 0 to +50 °C			0 to 30 m/s -20 to +70 °C
Accuracy	±(0.2 m/s + 1% of reading)	±(0.1 m/s + 1.5% of m.v.) ±0.5 °C			±(0.03 m/s + 4% of m.v.) (0 to 20 m/s) ±(0.5 m/s + 5% of m.v.) (20.01 to 30 m/s) ±0.5 °C
Display resolution	0.1 m/s	0.01 m/s 0.1 m <sup>3</sup> /h (0 to +99.9 m <sup>3</sup> /h) 1 °C/h (rem. measuring range) 0.1 °C			0.01 m/s 0.1 °C
IP rating	IP40 (probe: IP20)	IP40 (probe: IP20)			IP40 (probe: IP20)
Battery (incl.)	3 x AA	3 x AA			3 x AA
Battery life (h)	60	50			35
Connection testo Smart App	✓	✓			✓
Order no.	0563 0416	0563 0417	0563 1417	0563 2417	0563 0425

Pressure measurement		
Product	testo 512-1	testo 512-2
Description	Differential pressure measuring instrument with App connection, measuring range 0 to 200 mbar, audible alarm, incl. transport bag and calibration protocol	Differential pressure measuring instrument with App connection, measuring range 0 to 2,000 mbar, audible alarm, incl. transport bag and calibration protocol
Measurement parameter	Pa, hPa/mbar, kPa, psi, in <sup>2</sup> Hg, in <sup>2</sup> H <sub>2</sub> O, mm <sup>2</sup> H <sub>2</sub> O, mm <sup>2</sup> Hg, m/s, fpm, m <sup>3</sup> /h, cfm, l/s	Pa, hPa/mbar, kPa, psi, in <sup>2</sup> Hg, in <sup>2</sup> H <sub>2</sub> O, mm <sup>2</sup> H <sub>2</sub> O, mm <sup>2</sup> Hg
Measuring range	0 to +200 mbar	0 to +2,000 mbar
Accuracy	±(0.3 Pa + 1% of m.v.) ±1 digit (0 to 25 hPa) ±(0.1 hPa + 1.5% of m.v.) ±1 digit (25.001 to 200 hPa)	0.5 %fs
Display resolution	0.001 hPa	1 hPa
IP rating	IP 40	IP40
Battery (incl.)	3 x AA	3 x AA
Battery life (h)	120	120
Connection testo Smart App	✓	✓
Order no.	0563 1512	0563 2512

Comfort level			
Product	testo 535	testo 545	testo 625
Description	CO <sub>2</sub> measuring instrument with App connection, audible alarm, incl. transport bag and calibration protocol	Lux meter with App connection, audible alarm, incl. transport bag and calibration protocol	Humidity and temperature measuring instrument with App connection, audible alarm, incl. transport bag and calibration protocol
Measurement parameter	ppm, %	lux	%RH, °C, °F, °C td, °C dp
Measuring range	0 to 10,000 ppm	0 to 100,000 lux	0 to 100 %RH -20 to +60 °C
Accuracy	±100 ppm +5 % of mv	Class C, corresponding to DIN 5032-7 / EN 13032-1, Appendix B f1 = 6% = V(Lambda) adjustment f2 = 5% = cos-true evaluation Total ≤15% ±3% of m.v. ±1 digit	2.5 %RH (5 to 95 %RH) ±0.5 °C
Display resolution	1 ppm	0.1 lux (<10,000 lux) 1 lux (≥10,000 lux)	0.1 %RH 0.1 °C
IP rating	IP40 (probe: IP20)	IP40 (probe: IP20)	IP40 (probe: IP20)
Battery	3 x AA	3 x AA	3 x AA
Battery life (h)	30	70	100
Connection testo Smart App	✓	✓	✓
Order no.	0563 0535	0563 1545	0563 1625

Temperature			
Product	testo 922	testo 925	testo 110
Description	2-channel temperature measuring instrument TC Type K with App connection, audible alarm, incl. transport bag, 2 x TC Type K probes and calibration protocol	1-channel temperature measuring instrument TC Type K with App connection, audible alarm, incl. transport bag, 1 x TC Type K probes and calibration protocol	1-channel temperature measuring instrument NTC / Pt100 with App connection, TUC probe socket, audible alarm, incl. transport bag and calibration protocol
Measurement parameter	°C, °F	°C, °F	°C, °F
Measuring range	-50 to +1000°C	-50 to +1000°C	NTC: -50 to +150°C Pt100: -200 to +800 °C
Accuracy	±(0.5 °C + 0.3% of m.v.) (-50 to +1000 °C)	±(0.5 °C + 0.3% of m.v.) (-50 to +1000 °C)	NTC: ±0.2 °C (-20 to +80 °C) ±0.3 °C (remaining meas. range) Pt100: according to the probe accuracy
Display resolution	0.1 °C (-50 to +499.9 °C) 1 °C (remaining measuring range)	0.1 °C (-50 to +499.9 °C) 1 °C (remaining measuring range)	NTC: 0.1 °C Pt100: according to the probe accuracy
IP rating	IP40 (optional TopSafe IP65)	IP40 (optional TopSafe IP65)	IP40 (optional TopSafe IP65)
Battery	3 x AA	3 x AA	3 x AA
Battery life (h)	120	150	100
Connection testo Smart App	✓	✓	✓
Order no.	0563 0922	0563 0925	0563 0110

Perfect with the testo Smart App FREE download



# Electrical measurement technology

## Indispensable for heating engineers

**testo 760 digital multimeter:**

- Automatic recognition of measurement parameter/range
- Without manual rotary knob - prevents incorrect settings and saves on fuses
- Large, illuminated LCD for optimum legibility

**testo 760-1    testo 760-2    testo 760-3**

**Order no. 0590 7601    Order no. 0590 7602    Order no. 0590 7603**

Digital multimeter model comparison	testo 760-1	testo 760-2	testo 760-3
Illuminated display	✓	✓	✓
True root mean square measurement - TRMS	-	✓	✓
µA current measuring range	-	✓	✓
Low-pass filter	-	✓	✓
AC/DC voltage measuring range	0.1 mV to 600 V		0.1 mV to 1,000 V
AC/DC current measuring range	1 mA to 10 A	0.1 µA to 10 A	
Temperature measuring range	-	-20 to +500°C	
Resistance measurement	0.01 to 40.00Mohm	0.01 to 60Mohm	
Capacitance measurement	0,001nf to 100µF	0,001nf to 30,000µF	0,001nf to 60,000µF

**testo 770 clamp meter**

- Unique grab mechanism makes it easier to work at tight measuring points
- Can be used via Bluetooth with testo Smart Probes App and smartphone/tablet (testo 770-3 only)

**testo 770-1    testo 770-2    testo 770-3**

**Order no. 0590 7701    Order no. 0590 7702    Order no. 0590 7703**

Clamp meter model comparison	testo 770-1	testo 770-2	testo 770-3
True root mean square measurement - TRMS	✓	✓	✓
Starting current measurement	✓	✓	✓
µA current measuring range	-	✓	✓
Bluetooth and testo Smart Probes App	-	-	✓
AC/DC voltage measuring range	1 mV to 600 V		
AC/DC current measuring range	0.1 to 400 A	0.1 to 600 A	
Power (watts) measurement	-	-	✓
Resistance measurement	0.01 to 40.00Mohm	0.01 to 60Mohm	
Capacitance measurement	10nf to 100µF	2nf to 60,00mF	

**testo Smart App:**  
Download now for iOS or Android free of charge (testo 770-3 only)

**testo 750 voltage tester**

- Clear, patented 360° all-round display is legible from all sides
- Ergonomic handle shape
- Checks residual current circuit breakers (testo 750-2/-3 only)

**testo 750-1    testo 750-2    testo 750-3**

**Order no. 0590 7501    Order no. 0590 7502    Order no. 0590 7503**

Voltage tester model comparison	testo 750-1	testo 750-2	testo 750-3
Patented all-round LED display	✓	✓	✓
Certified according to voltage tester standard DIN EN 61243-3:2010	✓	✓	✓
Measuring point illumination	-	✓	✓
Single pole phase testing	-	✓	✓
Additional LC display	-	-	✓
AC/DC voltage measuring range	12 to 690 V		
Continuity testing measuring range	< 500 kΩ		

**testo 755 current/voltage tester**

- Measurement result without switching on or selection
- Automatic measurement parameter detection
- Voltage range up to 1,000 V
- Current and voltage testing all in one

**testo 755-1    testo 755-2**

**Order no. 0590 7551    Order no. 0590 7552**

Current/voltage tester model comparison	testo 755-1	testo 755-2
Certified according to voltage tester standard DIN EN 61243-3:2010	✓	✓
Measuring point illumination	✓	✓
Exchangeable measuring tips	✓	✓
Single pole phase testing	-	✓
Rotating magnetic field measurement	-	✓
AC/DC voltage measuring range	6 to 600 V	6 to 1,000 V
Current measuring range	0.1 to 200 A AC	

**testo 745 non-contact voltage tester**

- Optical and acoustic signal
- 2 sensitivities (12 to 50 V / 50 to 1,000 V)
- Measuring point illumination
- Filter (LPF) for high-frequency interference signals
- Waterproof and dustproof according to IP 67

**testo 745**

**Order no. 0590 7450**

Non-contact voltage testing on a distributor box for a heating system with the testo 745.

## Practical accessories for electrical measuring instruments

<p><b>Magnetic hook</b> For testo 760 multimeter</p> <p><b>Order no. 0590 0001</b></p>	<p><b>Transport bag</b> For testo 760    For testo 755/770    For testo 750</p> <p><b>Order no. 0590 0016    Order no. 0590 0017    Order no. 0590 0018</b></p>
<p><b>Thermocouple adapter</b> For testo 760 multimeter</p> <p><b>Order no. 0590 0002</b></p>	<p><b>Standard measuring cables (Angled plug)</b> Tip Ø: 2 mm</p> <p><b>Order no. 0590 0010</b></p>
<p><b>Thermocouple adapter type K</b> For testo 770 clamp meter</p> <p><b>Order no. 0590 0021</b></p>	<p><b>Standard measuring cables (Angled plug)</b> Tip Ø: 4 mm</p> <p><b>Order no. 0590 0011</b></p>
<p><b>Clamp meter adapter</b> For testo 760-2/-3 multimeter</p> <p><b>Order no. 0590 0003</b></p>	<p><b>Set of crocodile clips</b> For use with the measuring cable 0590 0011</p> <p><b>Order no. 0590 0009</b></p>



## Contact temperature measurement

### Digital temperature measuring instrument **testo 925**

- Easy, fast and precise temperature measurement with thermocouple Type K probe (1 TC Type K probe included)
- Fast in-app configuration, graph history, second screen and measurement data memory in the testo Smart App
- Wide range of applications due to large measuring range from -50 °C to 1000 °C
- Large sensor selection optional and compatible with commercially available TC Type K sensors
- Audible alarm sounds if a limit value is exceeded

#### testo 925

testo 925- 1-channel temperature measuring instrument TC Type K with App connection and audible alarm, transport bag, 2x TC Type K probe, calibration protocol and 3x AA batteries



**Order no. 0563 9250**

Robust air probe, TC type K, fixed cable 1.2 m  
**Order No. 0602 1793**



Watertight immersion/penetration probe, TC type K, fixed cable 1.2 m  
**Order No. 0602 1293**



Quick-action surface probe with sprung thermocouple strip, measuring range briefly up to +500°C, TC type K, fixed cable 1.2 m  
**Order No. 0602 0393**



### Digital differential temperature measuring instrument **testo 922**

- Easy, fast and precise differential temperature measurement with dual thermocouple Type K probe (2 TC Type K probes included)
- Fast in-app configuration, graph history, second screen and measurement data memory in the testo Smart App
- Wide range of applications due to large measuring range from -50 °C to 1000 °C
- Large sensor selection optional and compatible with commercially available TC Type K sensors
- Audible alarm sounds if a limit value is exceeded

#### testo 922

testo 922- 2-channel temperature measuring instrument TC Type K with App connection and audible alarm, transport bag, 2x TC Type K probe, calibration protocol and 3x AA batteries



**Order no. 0563 0922**

Pipe wrap probe for pipe diameters of 5 to 65 mm, with replaceable measuring head, measuring range briefly up to +280°C, TC type K, fixed cable  
**Order No. 0602 4592**



Clamp probe for measurements on pipes, pipe diameters of 15 to 25 mm (max. 1"), measuring range briefly up to +130°C, TC type K, fixed cable  
**Order No. 0602 4692**



## Non-contact temperature measurement

### Compact infrared thermometer **testo 810**

- Simultaneous measurement of surface temperature and air temperature
- Display of the temperature difference
- Adjustable emission level

#### Technical Data

Measuring range	-10 to +50 °C
Accuracy	±0.5 °C
Resolution	0.1 °C

#### testo 810

testo 810 infrared thermometer with integrated NTC temperature sensor, including protective cap, calibration protocol, belt pouch, and batteries



**Order no. 0560 0810**

### Infrared thermometer Smart Probe **testo 805i**

- Non-contact infrared measurement of surface temperature
- Easy selection of emission level via stored materials list
- Highly visible marking of the measuring spot thanks to 8-point laser

#### Technical Data

Measuring range	-30 to +250 °C
Accuracy	±1.5 °C or ±1.5 % of mv (0 to +250 °C), ±2 °C (-20 to -0.1 °C) ±2.5 °C (-30 to -20.1 °C)
Resolution	0.1 °C

#### testo 805i

testo 805i infrared thermometer with smartphone operation, including batteries and calibration protocol



**Order no. 0560 1805**

\*compatible with testo Smart App, for details refer to p.18 & 19

## Non-contact temperature measurement

### Infrared thermometers for surface temperature measurement **testo 830**

- testo 830-T1 with 1-point laser measurement spot marking and 10:1 optics.
- testo 830-T2 with 2-point laser measurement spot marking and 12:1 optics. External type-K t/c can be connected.
- testo 830-T4 with 2-point laser measurement spot marking and 30:1 optics. This instrument measures the surface temperature even of smaller objects at a safe distance. External type-K t/c can be connected.

	testo 830-T1	testo 830-T2	testo 830-T4
Measuring range			
Infrared	-30 to +400 °C	-30 to +400 °C	-30 to +400 °C
Type K (NiCr-Ni)	-	-50 to +500 °C	-50 to +500 °C
Accuracy ±1 digit			
Infrared	±1.5 °C or 1.5 % of m.v. (+0.1 to +400 °C) ±2 °C or ±2 % of m.v. (-30 to 0 °C) the higher value applies	±1.5 °C or ±1.5% of m.v. (+0.1 to +400 °C) ±2 °C or ±2% of m.v. (-30 to 0 °C) the higher value applies	±1,5 °C (-20 to 0 °C) ±2 °C (-30 to -20,1 °C) ±1 °C or 1% of m.v. (remaining range)
Type K (NiCr-Ni)	-	±0.5 °C +0.5% of m.v.	±0.5 °C +0.5% of m.v.
Resolution	0.1 °C	0.1 °C	0.1 °C
Measurement rate			
Infrared	0.5 s	0.5 s	0.5 s
Type K (NiCr-Ni)	-	1.75 s	1.75 s
Meas. spot marking	1-point laser	2-point laser	2-point laser
Distance to measurement spot	10:1	12:1	30:1 (typical at a distance of 0.7 m to the measurement object 24 mm @ 700 mm (90%))

#### testo 830-T2 Set

testo 830-T2 infrared thermometer with protective leather case, includes cross-band surface probe (0602 0393), batteries and factory calibration certificate



**Order no. 0563 8312**

#### testo 830-T4 Set

testo 830-T4 infrared thermometer with protective leather case, includes cross-band surface probe (0602 0393), batteries and factory calibration certificate



**Order no. 0563 8314**

#### testo 830-T1

testo 830-T1 infrared thermometer includes batteries and factory calibration certificate



**Order no. 0560 8311**

#### testo 830-T2

testo 830-T2 infrared thermometer includes batteries and factory calibration certificate



**Order no. 0560 8312**

#### testo 830-T4

testo 830-T4 infrared thermometer includes batteries and factory calibration certificate



**Order no. 0560 8314**

## Temperature and humidity measurement


### Compact humidity/temperature meter testo 610

- Easy temperature and humidity measurement
- Calculation of dew point and wet bulb temperature
- Illuminated display
- Capacitive humidity sensor with long-term stability

Technical data		
	Temperature - NTC	Humidity - Capacitive
Measuring range	-10 to +50 °C	0 to 100 %RH
Accuracy	±0.5 °C	±2.5 %RH (5 to 95 %RH)
Resolution	0.1 °C	0.1 %RH

**testo 610**

testo 610 thermohygrometer, protective cap, calibration protocol, belt pouch and batteries



**Order no. 0560 0610**


### Thermohygrometer with App connection testo 625

- Simple, fast and precise measurement of air temperature and relative humidity
- Calculation of dewpoint and wet bulb temperature
- Fast in-app configuration, graph history, second screen and measurement data memory in the testo Smart App
- Audible alarm sounds if a limit value is exceeded

Technical Data	
Measuring range	0 to +100% RH / -20 to +60°C
Accuracy ±1 digit	2.5% RH (5 to +95% RH) / ±0.5°C
Resolution	0.1% RH/0.1°C

**testo 625**

testo 625 humidity/temperature measuring instrument with App connection and audible alarm, transport bag, calibration protocol and 3x AA batteries




**Order no. 0563 1625**

## Temperature/humidity data logging

For simple testing and recording of room temperatures and humidity levels. testo 174 loggers record up to 16,000 measurements. Download results to free PC software to review and analyse.


**testo 174T**

testo 174T mini temperature data logger, 1-channel, includes wall bracket, batteries and calibration protocol



**Order no. 0572 1560**

testo 174T mini data logger set, 1-channel, includes USB interface for programming and reading out the logger, wall bracket, batteries and calibration protocol




**Order no. 0572 0561**

Technical Data	
Sensor type	NTC
Measuring range	-30 to +70 °C
Accuracy ±1 digit	±0.5 °C (-30 to +70 °C)
Resolution	0.1 °C


**testo 174H**

testo 174H mini temperature and humidity data logger, 2-channel, includes wall bracket, batteries and calibration protocol



**Order no. 0572 6560**

testo 174H mini data logger set, 2-channel, includes USB interface for programming and reading out the logger, wall bracket, batteries and calibration protocol



**Order no. 0572 0566**

Technical Data	
Sensor type	NTC
Measuring range	-20 to +70 °C
Accuracy ±1 digit	±0.5 °C (-20 to +70 °C)
Resolution	0.1 °C
Sensor type	Testo humid. sensor, cap.
Measuring range	0 to 100 %RH*
Accuracy ±1 digit	±3 %RH (2 to 98 %RH) ±0.03 %RH/K
Resolution	0.1 %RH

## Airflow measurement


### Compact vane anemometer testo 410-1

- Measurement of air velocity and air temperature
- Ideal for spot measurements at ventilation grilles
- Displays m/s, km/h, fpm, mph and kts
- Calculates wind chill and the Beaufort wind force
- Practical: with single-point averaging, max/min and Hold function

Technical Data		
	Temperature - NTC	Velocity - Vane
Measuring range	-10 to +50 °C	0.4 to 20 m/s
Accuracy	±0.5 °C	±(0.2 m/s + 2 % of mv)
Resolution	0.1 °C	0.1 m/s

**testo 410-1**

testo 410-1 vane anemometer including protective cap, wrist strap, calibration protocol and batteries



**Order no. 0560 4101**

### 100mm vane anemometer testo 417

- Easy, fast and precise measurement of flow, volume flow and temperature at air inlets and outlets
- Efficient regulation of balanced residential ventilation and fast documentation with the testo Smart App
- Fast in-app configuration, graph history, second screen and measurement data memory in the testo Smart App
- Timed and multi-point mean calculation

Technical Data			
	NTC	Vane	Volume flow
Measuring range	0 to +50°C	+0.3 to +20 m/s	0 to +99,999 m³/h
Accuracy ±1 digit	±0.5°C	±(0.1 m/s + 1.5% of m.v.)	
Resolution	0.1°C	0.01 m/s	0.1 m³/h (0 to 99.9 m³/h) 1 m³/h (+100 to +99,999 m³/h)

Accessories for testo 417	Order no.
testovent 417, funnel set comprising funnel for plate outlets (Ø 200 mm) and funnel for fans (330 x 330 mm)	0563 4170
Volume flow straightener testovent 417	0554 4172
Flow straightener and funnel set	0554 4173


### Vane anemometer Smart Probe testo 410i

- Measurement of air velocity, volume flow and temperature
- Display of the volume flow
- Parametrisation of the outlet (dimension/ geometry)
- Convenient viewing of readings on a smartphone/tablet with the testo Smart Probes App

Technical Data		
	Temperature - NTC	Velocity - Vane
Measuring range	-20 to +60 °C	0.4 to 30 m/s
Accuracy	±0.5 °C	±(0.2 m/s + 2 % of mv)
Resolution	0.1 °C	0.1 m/s

**testo 410i**

testo 410i vane anemometer with smartphone operation, including protective cap, batteries and calibration protocol




**Order no. 0560 1410**

\*compatible with testo Smart App, for details refer to p.18 & 19

**testo 417**

testo 417 100 mm vane anemometer with App connection, transport bag, calibration protocol and 3x AA batteries




**Order no. 0563 0417**

**testo 417 kit 1**

In the kit:

- Vane anemometer testo 417 100 mm vane anemometer with App connection, transport bag, calibration protocol and 3x AA batteries
- Funnel set (Ø 200 mm for plate outlets and 330 x 330 mm for fans).




**Order no. 0563 1417**

**testo 417 kit 2**

In the kit:

- Contents of kit 1 + flow straightener for swirl vents.



**Order no. 0563 2417**



## Heat pump servicing with Testo. The testo 55x range

The new way of installing and servicing refrigeration systems and heat pumps. Our new generation of digital manifolds are faster, more reliable and more flexible than ever before. With all the necessary filling hoses and a robust transport case they are immediately ready for work. The first fully digital manifold on the market, which allows you to display and evaluate all results in real time using the testo Smart App. The results are clear to see, at a glance, in your hand:

- ✓ High-precision measurements of pressure and temperature
- ✓ Controlled refrigerant service
- ✓ Easy tightness testing and evacuation
- ✓ Compact and reliable with IP 54 protection
- ✓ Larger display with clearer layout
- ✓ Improved durability and handling
- ✓ Wireless connectivity with Bluetooth® 5.0

Want to find out more about our manifolds? Check out our website!

- ✓ See the full range of kits
- ✓ Discover products that work in conjunction with the manifolds
- ✓ Access to datasheets for more info



### testo 550i (manifold only)

App-controlled digital manifold with Bluetooth® incl. calibration certificate

Order no. 0564 2550 02



### testo 550i Smart Kit

App-controlled digital manifold with Bluetooth® with wireless temperature probes in practical case, incl. calibration certificate

Order no. 0564 3550 02



### testo 550s Basic Kit

Smart digital manifold with cable temperature probes in practical case, incl. calibration certificate

Order no. 0564 5501 02



### testo 550s Smart Kit

Smart digital manifold with wireless temperature probes in practical case, incl. calibration certificate

Order no. 0564 5502 02



### testo 550s Smart Kit with hoses

Smart digital manifold with wireless temperature probes and hoses in practical case, incl. calibration certificate

Order no. 0564 5503 02



### testo 557s Smart vacuum Kit

Smart digital manifold with wireless vacuum and temperature probes in practical case, incl. calibration certificate

Order no. 0564 5571 02



### testo 557s Smart vacuum Kit with hoses

Smart digital manifold with wireless vacuum and temperature probes in practical case and hoses, incl. calibration certificate

Order no. 0564 5572 02



### testo 570s (manifold only)

testo 570s, incl. certificate of conformity. Suitable for existing owners of testo 550i, 550s, and 557s looking to upgrade their kit

Order no. 0564 5701 02



### testo 570s Smart Vacuum Kit

testo 570s, wireless clamp thermometers, wireless vacuum gauge, transport case & certificate of conformity

Order no. 0564 5702 02



### testo 570s Smart Vacuum Kit with hoses

testo 570s, wireless clamp thermometers, wireless vacuum gauge, transport case & certificate of conformity

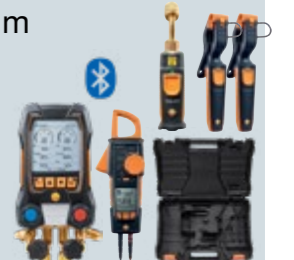
Order no. 0564 5703 02



### testo 570s Smart Vacuum Kit with testo 770-3

testo 570s, wireless clamp thermometers, wireless vacuum gauge, testo 770-3 clamp meter, transport case & certificate of conformity

Order no. 0564 5704 02



## Meet the NEW kits specifically configured to take on the heat pump revolution

With these kits you'll be ready to start your measurements for the commissioning, servicing and maintenance of heat pumps, refrigeration, and air-conditioning systems.

Choose from our range of smart heat pump kits, all of which include two testo 115i Bluetooth temperature pipe clamp probes, that allow simple measurement of superheat and subcool values, and a testo 552i vacuum smart probe which provides Bluetooth measurement during system evacuation procedure. also included is the testo 770-3 clampmeter which can be used for compressor current measurement.

And if you opt for the testo 550s or testo 557s heat pump kit, you will also receive the testo 560i digital refrigerant scales, for accurate and effective charging of refrigerants when used in conjunction with intelligent valve (included in the testo 557s heat pump kit.)

### testo 550i Smart Heat Pump Kit

A cost-effective kit for commissioning & servicing heat pumps



- ✓ testo 550i app-operated manifold, 2x testo 115i & testo 770-3
- ✓ Compact design designed for control via smartphone/tablet
- ✓ Suitable for use on monobloc or split heat pump systems

Order no. 300564 3350 02

### testo 550s Smart Heat Pump Kit

The complete kit for heat pumps, refrigeration & air-conditioning systems



- ✓ testo 550s, 2x testo 115i, testo 770-3 & testo 560i
- ✓ Large graphic display allows all measurement values at a glance
- ✓ Test menu sequences for pressure leak test, vacuum\*, discharge line temperature, and target superheat

Order no. 300564 5502 02

### testo 557s Smart Heat Pump Kit

The ultimate kit for HVAC/R engineers. Have every job covered



- ✓ testo 557s, 2x testo 115i, testo 770-3, testo 552i, testo 560i & intelligent valve
- ✓ All tests covered: superheat & subcool values, pressure leak test, system evacuation, compressor current and refrigerant charging

Order no. 300564 5571 02



## Extra functionality for our digital manifolds with testo Smart App

- ✓ Monitor the evaporation and condenser temp/ pressures and superheat/subcool
- ✓ Easy refrigerant update
- ✓ Create reports, adds photos of the measurement

Perfect with the **testo Smart App**  
**FREE download**






## The testo 560i digital refrigerant scale

### testo 560i

testo 560i scale, shoulder bag, batteries and instruction manual.

- Wireless measurement of refrigerant weight and operation with Testo manifolds and testo Smart App via Bluetooth



Order No. 0564 1560

### Intelligent refrigerant valve

Bluetooth valve for use with testo 560i (sold separately) incl. batteries

- Automatic and precise refrigerant charging according to target superheat, subcooling and weight in combination with the digital refrigerant scale testo 560i (available separately or as a kit)



Order No. 0560 5600

### testo 560i kit + intelligent valve

testo 560i scale, intelligent valve, shoulder bag, batteries and instruction manual.

- Automatic and precise refrigerant charging according to target superheat, subcooling and weight thanks to intelligent valve



Order No. 0564 2560



- **All measured values** for the charging process **at a glance** with storage of the measured data in the testo Smart App.
- **High measuring accuracy** with a maximum load of 100 kg for all common refrigerant containers.
- **Super handy:** Compact housing, low weight, convenient carrying handle and sturdy shoulder bag.
- **3D corners for accurate positioning** and textured rubber surface for stable hold of the container.
- **Power in every respect:**  
**Long battery life** of up to 70 hrs. (4 x AA, included/exchangeable).  
**Bluetooth range up to 30 m.**

## Just press play. Automate your evacuations with the testo 565i smart vacuum pump.



Fully automated evacuation process with integrated holding test

Safe use even with flammable class A3 and A2L refrigerants

One app for everything: Configure measurements, monitor and manage data with the testo Smart App

Easy oil change and inspection glass for quick assessment of the oil level

Non-return valve to prevent vacuum loss in the event of a power interruption



### testo 565i Smart Vacuum Pump (7 CFM)

testo 565i (7 CFM), oil bottle, calibration protocol & instruction manual



Order no. 0564 5652 02

### testo 565i Smart Vacuum Pump (10 CFM)

testo 565i (10 CFM), oil bottle, calibration protocol & instruction manual



Order no. 0564 5653 02

### Everything under control with the testo Smart App



The testo Smart App guides you quickly and easily through measurements on refrigeration, air conditioning and heating systems.

- Automatic Bluetooth connection with the testo 565i, the manifolds and Smart Probes
- Simple configuration of the evacuation
- Monitoring of all measured values and data storage
- Graphic progression display
- Creation and dispatch of the measurement report

Version	7 CFM	10 CFM
Flow rate	7 CFM / 198 l/min	10 CFM / 283 l/min
Weight	12 kg	13 kg
Ultimate vacuum	15 micron	
Refrigerant	A2L / A2 / A3 certified	
Connection sizes	1/4 SAE, 3/8 SAE, 1/2 SAE	
Bluetooth	BLE 5.0: 30 m distance	
Operating temperature	+5 to +40 °C	
Pump type	Rotary vane pump	
Number of stages	Two-stage pump	
Oil compatibility	ISO VG 46	
Order no.	0564 5652 02	0564 5653 02



# Testo flue gas analyser service

## Fast, simple, reliable

Testo understands that you need simple and reliable flue gas analyser service, completed as quickly as possible. Our flue gas analyser service plan offers our lowest cost of ownership over a 5 year period. Instruments serviced by Testo are typically turned around in just 3 working days, or you can choose our optional 24 Hour Express service.

### Testo flue gas analyser service includes:

- ✓ Functional check of analyser and probe
- ✓ Calibration of gas sensors
- ✓ Calibration of NO sensor, if fitted
- ✓ Calibration of flue temperature
- ✓ Calibration of pressure sensors
- ✓ Printer, PSU and case checking
- ✓ Calibration certificate to ensure compliance with BS7967 & EN50379
- ✓ Device warranty



### Domestic flue gas analysers

Model	Year	Order number
testo 310, 320, 320B, 327	1, 2, 4 & 5	300000 7001
testo 310, 320, 320B, 327	3	300000 7002
testo 300	1, 2 & 4	300000 7001
testo 300	3 & 5	300000 7002

### Commercial flue gas analysers

Model	Year	Order number
testo 300LL, 330LL	1, 2, 3 & 4	300000 8001
testo 300LL, 330LL	5	300000 8005
testo 300LL, 330LL	6	300000 8006
testo 300LL NO, 330LL NO	1, 2, 3 & 4	300000 8101
testo 300LL NO, 330LL NO	5	300000 8105
testo 300LL NO, 330LL NO	6	300000 8006

### Additional services

	Order number
Accidental Damage For added peace of mind, option to pay £45 up front for 12 months cover on repairs, including accidental damage. Includes parts found to be required during next service.	300000 0060
24 Hour Express Turnaround Guaranteed 24 hour turnaround from receipt of analyser by Testo to despatch.	300000 0030

**Is your Flue Gas Analyser due for a service? See our service plans.**

- ✓ Functional analyser check
- ✓ Calibration of measuring sensors
- ✓ Calibration of flue temperature
- ✓ Calibration of pressure sensor
- ✓ Calibration certificate
- ✓ 24h express service and accidental cover available on request

**Scan the QR code to see your service options!**



Testo can offer calibration on all new instrument sales. We also offer ISO re-calibration to all testo Flue gas & Refrigeration instruments. For further information or a quotation please get in touch with us on 01420 544433 (option 2)