

Be sure. **testo**



**60** Testo  
1957-2017

**Measurement  
solutions for  
Facility Management.**

# Testo – The Strong Partner for Facility Managers.

Operating costs, user convenience, energy consumption: as a facility manager, you need to keep an eye on a number of things. So it is good to have a strong partner who supplies integrated solutions for your building management requirements.

You can find these solutions at Testo. Because the high-tech company from the Black Forest has stood for precision measuring technology with innovative operability for 60 years. Measuring instruments from Testo are in use everywhere where it is important to save time and resources and to protect the environment and human health.

Whether it involves heating, HVAC, air conditioning, ventilation and refrigeration systems or electrical installations: you get measuring solutions for all building systems from a single source at Testo. Testo's measuring instruments enable faster testing, more convenient maintenance and more efficient setting of systems. In addition, you ensure the thermal comfort level in indoor areas and early detection of mould, humidity, damage to buildings and energy losses thanks to thermography.

The range Testo offers is completed by a wide variety of services which make your work easier. From individual advice, along with repair and spare part services, via seminars and training, through to professional test equipment management – Testo is your strong partner for measuring solutions and services in facility management.

## Your advantages with Testo



### **Solutions for all measuring tasks in the field of efficient building management**

You will find the full range of measuring technology you need at Testo, enabling the efficient setting of heating, air conditioning, ventilation and refrigeration systems, as well as electrical installations. And Testo's thermal imagers mean you can detect building defects, damage to buildings and damp spots, along with faults and wear on systems, faster than ever before.



### **Extensive range of training courses available**

From free webinars with valuable practical tips to certified courses provided by the Testo Academy: you not only find measuring technology and services at Testo, but also the know-how you need to do your job really well. The current range of seminars we are offering can be found at [www.testo.com](http://www.testo.com)



### **One-stop service**

Advice, repairs, spare parts hotline, made-to-measure probe construction, calibration and validation or complete test equipment management: Testo offers you the services you need to be able to work efficiently and well. And because you can equip yourself with the complete range of measuring technology for all building systems at Testo, you also have the benefit of quality from a single source when it comes to service.

Our consultants will be delighted to receive your call: [contact]

# PRIMAS – integrated test equipment management for facility managers.

Fully outsourcing test equipment management is a question of trust. Every company has specific products and processes, as well as special measuring technology.

The test equipment management system from Testo Industrial Services means you are on the safe side, because it is the integrated solution for your test equipment and has partnership-based collaboration between customers, Testo Industrial Services, suppliers and logistics partners as its basis.

PRIMAS is a combination of calibration and documentation management, coupled with special software and rounded off by logistics and organization. The modular design enables PRIMAS to be perfectly tailored to your facility management requirements.

## Individual adaptation thanks to modular design

### Calibration

- DAkkS calibration in accredited laboratories
- ISO calibrations
- On-site calibration
- Repairs
- Calibration at manufacturers' and partners' sites

### Logistics

- Collection & delivery service
- Shipping containers
- Transport partners
- Express service
- On-site calibration

# PRIMAS<sup>®</sup>



### Documentation

- Standard-compliant
- Paperless
- Labelling

### Organization

- Planning & advice
- Barcode labelling
- Individual process customization
- Deadline monitoring

### IT

- PRIMAS online – internet-based test equipment management
- PRIMAS exchange – data exchange via VDI/VDE 2623

## Ensure **comfort level** in work rooms.

Too cold, too warm, too draughty: whether people feel good in the workplace is dependent on various comfort level parameters. Furthermore, statutory standard values have to be complied with (e.g. for sound level, illuminance and CO<sub>2</sub>). The objective evaluation of the thermal comfort level according to PMV/PPD, along with determination of the indoor air quality and degree of turbulence, allow you to deal with employees' complaints competently and enable compliance with standards to be proved at any time. You therefore ensure an indoor climate in which the greatest possible number of people feel good and are able to work productively.

**Problem:** Ensuring the thermal comfort level in work rooms and compliance with statutory standard values (e.g. brightness, CO<sub>2</sub> concentration).



**Solution:** Integrated evaluation of the climatic conditions using a multi-function measuring instrument. Standard-compliant evaluation of the comfort level according to PMV/PPD. Determining the indoor air quality.

testo 480: PMV/PPD, turbulence measurement, °C, % RH, Lux, CO<sub>2</sub>  
testo 435: Turbulence measurement, °C, % RH, Lux, CO<sub>2</sub>

	Page
Multi-function measuring instrument <b>testo 480</b>	36
Multi-function measuring instrument <b>testo 435</b>	35
WiFi data logger system <b>testo Saveris 2</b>	27
Thermohygrometer <b>testo 608</b>	24
Temperature/humidity data logger <b>testo 175 H1</b>	26
IAQ logger <b>testo 160</b>	48
Sound level meter <b>testo 816-1</b>	53
CO/CO <sub>2</sub> measuring instrument <b>testo 315-3</b>	47
Lux meter <b>testo 540</b>	53
Thermohygrometer <b>testo 625</b>	24

**Problem:** Ensuring a consistent ambient climate.



**Solution:** (Remote) monitoring of the climate using data loggers.

testo Saveris 2, testo 608,  
testo 175 H1, testo 160 IAQ logger

**Problem:** Complaints about uncomfortable rooms or poor light quality (headaches, tiredness).



**Solution:** Fast checking of individual parameters with compact measuring instrument.

Sound: testo 816-1  
CO<sub>2</sub>: testo 315-3  
Lux: testo 540  
°C and % RH: testo 625



# Set HVAC and air conditioning systems efficiently.

## In ducts

**Problem:** Setting an air conditioning or ventilation system according to the design.



**Solution:** Measurement of flow velocity and volume flow in the ventilation duct.

testo Smart Probes VAC set, testo 405, testo 416, testo 425, testo 435

**Problem:** Carrying out HVAC grid measurement according to EN 12599.



**Solution:** Step-by-step instructions for HVAC grid measurement and probes that can be individually calibrated.

testo 480

A good working climate is important – and technically feasible, because modern workplaces have high-performance HVAC and air conditioning systems. However, these only run smoothly and efficiently when they have optimum settings and regular maintenance. For this reason, the air flows in the ventilation duct and at the outlet have to be checked and matched to the design. If the air flows are too low, there is not sufficient removal of the indoor loads. If they are too high, the system does not run efficiently, leading to higher operating costs. Testo's flow measuring instruments support you in standard-compliant HVAC grid measurement in ducts, just as they do in the precise measurement of turbulent flows at ventilation outlets.

## At outlets

**Problem:** More difficult measurement at large outlets due to turbulent flow.



**Solution:** Accurate flow measurement with flow straightener.

testo 420, testo 417, testo 435, testo 480 with flow straightener set, testovent 417

**Problem:** Insufficient air exchange rate in closed rooms.



**Solution:** Measurement and adjustment of the volume flow in the duct and at the duct outlet.

testo 417, testo 416, testo 410i, testo 410

	Page
Multi-function measuring instrument <b>testo 480</b>	36
Multi-function measuring instrument <b>testo 435</b>	35
<b>testo Smart Probes VAC set</b>	31
Thermal anemometer <b>testo 405</b>	32
Vane anemometer <b>testo 410</b>	32
Vane anemometer with App <b>testo 410i</b>	31
Vane anemometer <b>testo 416</b>	32
Vane anemometer <b>testo 417</b>	33
Flow straightener set <b>testovent 417</b>	33
Thermal anemometer <b>testo 425</b>	33
Volume flow hood <b>testo 420</b>	34

# Set heating systems efficiently.

It is taken for granted that the heating system is running and all rooms are pleasantly warm. In addition, you should ensure the energy-saving and low-pollution operation of the heating system. With Testo's flue gas analyzers, you can be sure that limit values are adhered to and that you set the burner accurately according to the manufacturer's specifications.

The measurement of emissions and flue gas loss also provides information about negative changes in terms of the burner function. This means you can carry out upcoming maintenance work in good time and avoid inconvenient faults and failures.

## Flue gas analysis

**Problem:** The requirement to set the burner so that it complies with the legal regulations and runs in an energy-saving way.



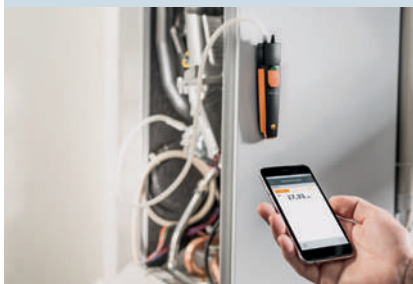
**Solution:** Measure flue gas loss and emission values (CO, CO<sub>2</sub>) and, if applicable, establish the need for maintenance work.

Recommendation: testo 330-2 LX, testo 330i LX  
Alternative: testo 320 basic

	Page
Flue gas analyzer <b>testo 330-2 LX</b>	40
Flue gas analyzer <b>testo 330i LX</b>	41
Flue gas analyzer <b>testo 320 basic</b>	40
Differential pressure measuring instrument <b>testo 510</b>	42
Differential pressure measuring instrument operated by smartphone <b>testo 510i</b>	42
<b>testo Smart Probes</b> heating set	38
Pressure and leakage measuring instrument <b>testo 324</b>	52
Pressure measuring instrument <b>testo 312-4</b>	50
High-pressure measuring instrument operated by smartphone <b>testo 549i</b>	43

## Flow/nozzle pressure

**Problem:** Setting the flow and nozzle pressures according to the manufacturer's specifications.



**Solution:** Measurement and setting of the appropriate pressures.

Recommendation: testo 510/510i, testo Smart Probes heating set  
Alternative: testo 330-2 LX, testo 330i LX (with the pressure connection set as an accessory)

## Tightness test

**Problem:** Checking the gas pipes in accordance with legal regulations.



**Solution:** Tightness test with certified measuring instrument, along with digital documentation of the results as reliable evidence.

Recommendation: testo 324  
Alternative: testo 312-4

## Hydraulic adjustment

**Problem:** The burner is functioning, but the radiators are not really warm.



**Solution:** Measurement of the difference between flow and return temperature as preparation for the hydraulic adjustment.

**Spot measurement:** testo 320, testo 330-2 LX, testo 330-1 LL with differential temperature set, testo Smart Probes heating set, testo 115i, testo 922, testo 925

**Long-term monitoring:** testo 175 T3

**Problem:** Uneven heat distribution due to blockages and silting in radiators.



**Solution:** Non-contact temperature measurement.

testo 865, testo 868, testo 830, testo Smart Probes heating set, testo 805i, testo 810

If a heating system is not set correctly, heat is being wasted. It may also be the case that the radiators that are located furthest away in the circuit do not really warm the room up. A hydraulic adjustment here ensures that the right quantity of water reaches the right place at the right time. The crucial parameters for hydraulic adjustment are the flow and return temperature and determination of the radiator's heat distribution.

## Legionella

**Problem:** Proliferation of legionella in hot water and air conditioning systems.

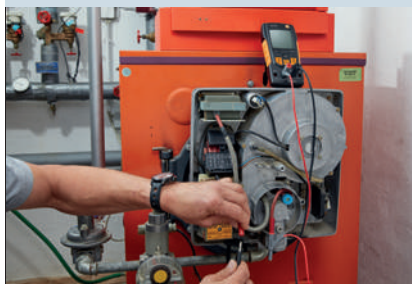


**Solution:** Regular checking of the water temperature and quality.

testo 104-IR, testo 106, testo 206, mini penetration thermometer

## Ionization flow at the burner flame

**Problem:** Incorrect settings of the burner flame in the milliamperere range lead to faults.



**Solution:** Checking the ionization flow with a certified multimeter.

testo 760

	Page
Clamp thermometer operated by smartphone <b>testo 115i</b>	13
Temperature measuring instrument (2-channel) <b>testo 922</b>	15
Temperature data logger <b>testo 175 T3</b>	19
Thermal imager <b>testo 865</b>	20
Thermal imager <b>testo 868</b>	20
Infrared temperature measuring instrument <b>testo 830</b>	17
Infrared thermometer operated by smartphone <b>testo 805i</b>	16
Infrared temperature measuring instrument (2-channel) <b>testo 810</b>	16
Temperature measuring instrument (1-channel) <b>testo 925</b>	15
<b>Mini penetration thermometer</b>	12
Combined infrared/penetration thermometer <b>testo 104-IR</b>	12
Core temperature measuring instrument <b>testo 106</b>	13
pH/temperature measuring instrument <b>testo 206</b>	13
Digital multimeter <b>testo 760</b>	557



# Set refrigeration systems and heat pumps efficiently.

Pressures, temperatures and any possible system superheating or subcooling have to be checked for a refrigeration system to function smoothly. Furthermore, the tightness of the system must be ensured and the source of any leaks must quickly be found if they occur. A reliable statement in terms of the reliability and efficiency of the system can be made on the basis of these parameters.

**Problem:** Refrigeration system is not running efficiently and needs to be adjusted.



**Solution:**

**Full service:** digital manifold with App, testo 550i, testo 557

**Fast check:** hoseless test with the testo Smart Probes refrigeration set

	Page
Digital manifold <b>testo 550</b>	44
Digital manifold <b>testo 557</b>	44
<b>testo Smart Probes</b> refrigeration set	43
Electronic leak detector for refrigerants <b>testo 316-3</b>	46
Leak detector set for refrigerants <b>testo 316-4</b>	46
Temperature measuring instrument (1-channel) <b>testo 110</b>	14

**Problem:** Leaks on the refrigeration system.



**Solution:** Detection of leaks.

testo 316-3, testo 316-4

**Problem:** Inefficient refrigeration system due to loss of performance on the compressor.



**Solution:**

**Measure current consumption:** testo 760-2, testo 770-3.

**Fast fault detection:** testo 750-3, testo 755-2, testo 745



# Monitor electrical installations.

**Problem:** Ensuring the efficient operation of the system.



**Solution:** Current and voltage measurement in the switching cabinet on heat pump systems, compressors and air conditioning systems.

testo 750, testo 755, testo 760, testo 770

**Problem:** Failure of systems and increased fire risk due to superheating.



**Solution:** Electrical maintenance with thermal imager or pyrometer.

testo 835, testo 865, testo 872, testo 875i

Increased temperatures are always an indication of an overload, an imminent malfunction or an existing defect in electrical installations or cables. A thermal imager or pyrometer allows an evaluation of the heat status of low, medium and high voltage systems. Infrared measuring technology enables you to detect defective components or connections early enough for the targeted preventive measures that are required to be introduced. This means the fire risk is minimized and costly system failures are avoided.

# Mechanical maintenance.

**Problem:** Failure of systems due to mechanical wear.



**Solution:** Early detection of wear through non-contact determination of the temperature increase on components.

testo 835, testo 865, testo 875i, testo 872



	Page
Voltage tester <b>testo 750</b>	54
Current/voltage tester <b>testo 755</b>	54
Digital multimeter <b>testo 760</b>	55
Clamp meter <b>testo 770</b>	55
Infrared thermometer <b>testo 835</b>	18
Thermal imager <b>testo 865</b>	20
Thermal imager <b>testo 872</b>	21
Thermal imager <b>testo 875i</b>	22

# Find thermal bridges and building weak spots.

Thermal imagers or pyrometers enable fast and reliable detection of anomalies and damage on building shells or interiors. Because materials and components undergo completely non-destructive testing through an imaging procedure or using temperature values. This means that energy losses, thermal bridges and leaks are located without contact. Whereas cable or pipeline systems must be exposed over a large area with other methods, one quick look is enough to visualize weak spots when you use a thermal imager.

**Problem:** Energy loss in the heating and air conditioning of buildings.



**Solution:** Thermographic visualization of the entire building shell with a thermal imager.

testo 872, testo 875i, testo 885

**Problem:** Suspicion of building defects or age-related damage to the building shell.



**Solution:** Determine the energy loss using thermography.

testo 865, testo 868, testo 872, testo 875i

	Page
Thermal imager <b>testo 872</b>	21
Thermal imager <b>testo 875i</b>	23
Thermal imager <b>testo 865</b>	20
Thermal imager <b>testo 868</b>	20
Thermal imager <b>testo 871</b>	20
Thermal imager <b>testo 885</b>	23
Infrared thermometer <b>testo 835</b>	18
Humidity/temperature <b>testo 635 U-value set</b>	25

**Problem:** Heat insulation capacity of a building is unknown.



**Solution:** Easy measurement of the U-value provides information about insulation behaviour.

testo 635 U-value set

**Problem:** Searching for thermal bridges in interiors.



**Solution:** Non-contact temperature measurement.

testo 835, testo 865, testo 868, testo 872, testo 875i

# Detect humidity and mould.

**Problem:** Establish the cause of mould in residential buildings.



**Solution:** Visualization and location of leaks, damp spots and design-related risk of mould.

testo 835, testo 868, testo 871, testo 872, testo 875i

**Problem:** Formation of mould due to incorrect ventilation behaviour.



**Solution:** Recording of the ventilation behaviour.

testo 176 H1, testo 176 H2

Incorrect ventilation behaviour, building defects, age-related damage to the building shell, trace humidity in building materials or incomplete drying – damp spots and mould can have many causes. Testo’s thermal imagers, data loggers and humidity measuring instruments enable fast, unerring and non-destructive determination of the correct cause of mould and damp spots. The early detection of spots with a potential mould risk means you can introduce counter-measures in good time and save an expensive and time-consuming refurbishment.

## Material moisture and drying

**Problem:** Evaluation of drying processes (e.g. screed).



**Solution:** Fast and non-destructive measurement of the material moisture.

testo 606, testo 616, testo 635

**Problem:** Evaluation of the material moisture (e.g. of wood).



**Solution:** Fast and non-destructive measurement of the material moisture.

testo 606, testo 616, testo 635

	Page
Humidity data logger <b>testo 176 H1/H2</b>	26
Wood/material moisture measuring instrument <b>testo 606</b>	24
Material moisture measuring instrument <b>testo 616</b>	24
Humidity/temperature measuring instrument <b>testo 635</b>	25

## Mini penetration thermo- meter

- Easy-to-read display
- Battery status display
- Fast, easy battery change
- Protective sleeve as a holder

Measuring range	-50 to +250°C
Accuracy ±1 digit	±1°C (-10 to +99.9°C) ±2% of m.v. (+100 to +199.9°C) ±3% of m.v. (+200 to +250°C)
Resolution	0.1°C (-19.9 to +199.9°C) 1°C (remaining meas. range)

## Combined infrared and penetration thermometer **testo 104-IR**

- Two in one: infrared and penetration thermometer
- Fits into any jacket pocket thanks to folding mechanism
- Precise 2-point laser with 10:1 optics
- Watertight (IP65)

Sensor	NTC	Infrared
Measuring range	-50 to +250°C	-30 to +250°C
Accuracy ±1 digit	±1°C (-50.0 to -30.1°C) ±0.5°C (-30.0 to +99.9°C) ±1% of m.v. (remaining meas. range)	±2.5°C (-30.0 to -20.1°C) ±2.0°C (-20.0 to -0.1°C) ±1.5°C or ±1.5% of m.v. (remaining meas. range)
Resolution	0.1°C	0.1°C
Measuring cycle	-	0.5 s

## Temperature measuring instrument **testo 108**

- Easy operation and handling
- Watertight instrument and probe (IP67)
- EN 13485-compliant
- Can be used universally

Measuring range	-50 to +300°C
Instrument ac- curacy (ambient tempera- ture +23°C ±3°C)	±0.5°C (-30 to +70°C) ±0.5°C ±0.5% of m.v. (remaining meas. range)
Probe accuracy	±0.5°C (-40 to -20°C) ±0.2°C (-20 to +70°C) ±0.5°C (+70 to +125°C) ±0.4% of m.v. (+125 to +300°C)
Resolution	0.1°C

## Mini penetration thermometer with extended probe shaft

Mini penetration thermometer up to 250°C, length 213 mm, with protective case for probe shaft, easy-to-read display, incl. batteries and calibration protocol

Order no. 0560 1111



## testo 104-IR

testo 104-IR, infrared penetration thermometer, watertight, foldable, incl. batteries and calibration protocol

Order no. 0560 1040



## testo 108-2

testo 108-2, watertight temperature measuring instrument (type T), incl. lockable thermocouple probe type T, softcase, batteries and calibration protocol

Order no. 0563 1082



### Accessories for testo 108

Standard TC penetration probe type T for testo 108-2

### Order no.

0602 1081



## Core temperature measuring instrument **testo 106**

- TopSafe: dishwasher-safe protective case (IP 67), protects against dirt and impact
- Small, handy and always within reach
- Audible & visual alarm
- Certified according to EN 13485 (only in conjunction with TopSafe)

Measuring range	-50 to +275°C
Accuracy ±1 digit	±1% of m.v. (+100 to +275°C) ±0.5°C (-30 to +99.9°C) ±1°C (-50 to -30.1°C)
Resolution	0.1°C

## Clamp thermometer operated by smartphone **testo 115i**

- Compact professional measuring instrument for use with smartphones/tablets
- Measurement of flow and return temperature of heating systems
- Temperature measurement on refrigeration systems for calculation of superheating and subcooling
- Measurement data analyzed and sent via App

Measuring range	-40 to +150°C
Accuracy ±1 digit	±1.3°C (-20 to +85°C)
Resolution	0.1°C
Compatibility	requires iOS 8.3 or newer / Android 4.3 or newer requires mobile end device with Bluetooth 4.0

## pH/temperature measuring instrument **testo 206**

- Ideally suited for application in liquid and semi-solid media (e.g. in the food sector)
- Built-in temperature probe
- Maintenance-free gel electrolyte
- Robust, watertight and dishwasher-safe protective case (TopSafe, protection class IP68)

Sensor	pH	°C
Measuring range	0 to 14 pH	0 to 60°C (briefly up to +80°C, max. 5 min.)
Accuracy ±1 digit	±0.02 pH	±0.4°C
Resolution	0.01 pH	0.1°C

### testo 106 set

testo 106 set, core food thermometer incl. TopSafe (watertight protective case, IP67), attachment clip, probe protective cap, batteries and calibration protocol

Order no. 0563 1063

#### Accessories for testo 106

	Order no.
TopSafe (indestructible protective case); watertight and dishwasher-safe protective case (IP67)	0516 8265
Attachment clip with probe protective cap	0554 0825

### testo 115i

testo 115i, clamp thermometer operated by smartphone, for measurement on pipelines with diameters of 6 to maximum 35 mm, incl. batteries and calibration protocol

Order no. 0560 1115



#### testo Smart Probes App

The App turns your smartphone/tablet into the display for the testo 115i. The measuring instrument operation and the measuring value display are by Bluetooth via the Smart Probes App on your smartphone or tablet – irrespective of the measuring location. In addition, you can use the App to create measurement protocols, add photos and comments to these and send them by e-mail. For iOS and Android.

### testo 206-pH1

testo 206-pH1 set, one-hand pH/°C measuring instrument, protection class IP68, incl. storage cap with gel, TopSafe and belt holder/wall bracket

Order no. 0563 2061



# Temperature measuring instrument (1-channel)

## testo 110

- Wireless measurement with radio probes possible
- TopSafe, the indestructible protective case, protects against dust and impact (with TopSafe and attached probe: IP65)
- Audible alarm (limit values adjustable)
- Certified according to EN 13485


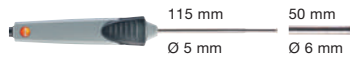

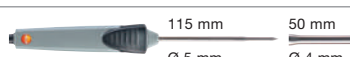
### testo 110

testo 110, 1-channel NTC temperature measuring instrument, optional radio probe can be connected, audible alarm, incl. calibration protocol and batteries

Order no. 0560 1108



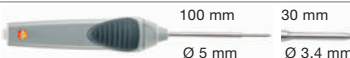
Measuring range	-50 to +150°C
Accuracy ±1 digit	±0.2°C (-20 to +80°C) ±0.3°C (remaining meas. range)
Resolution	0.1°C

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	
<b>Air probe</b>					
◆ Precise, robust NTC air probe, fixed cable 1.2 m	 115 mm 50 mm Ø 5 mm Ø 4 mm	-50 to +125°C <sup>2)</sup>	±0.2°C (-25 to +80°C) ±0.4°C (remaining meas. range)	60 s	0613 1712
<b>Surface probe</b>					
◆ Watertight NTC surface probe for flat surfaces, fixed cable 1.2 m	 115 mm 50 mm Ø 5 mm Ø 6 mm	-50 to +150°C <sup>2)</sup>	±0.5% of m.v. (+100 to +150°C) ±0.2°C (-25 to +74.9°C) ±0.4°C (remaining meas. range)	35 s	0613 1912
Pipe wrap probe with Velcro tape for pipe diameters up to max. 75 mm, Tmax. +75°C, NTC, fixed cable 1.5 m	 300 mm	-50 to +70°C <sup>2)</sup>	±0.2°C (-25 to +70°C) ±0.4°C (-50 to -25.1°C)	60 s	0613 4611
<b>Immersion/penetration probes</b>					
◆ Watertight NTC immersion/penetration probe, fixed cable 1.2 m	 115 mm 50 mm Ø 5 mm Ø 4 mm	-50 to +150°C	±0.5% of m.v. (+100 to +150°C) ±0.2°C (-25 to +74.9°C) ±0.4°C (remaining meas. range)	10 s	0613 1212

◆ The measuring instrument with this probe is watertight in the TopSafe.

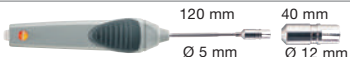
#### Radio handle, incl. probe head for air/immersion/penetration measurement

#### Order no.

Radio handle for plug-in probe heads, incl. TC adapter, authorization for the following countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO; radio frequency 869.85 MHz FSK	0554 0189			
TC probe head for air/immersion/penetration measurement (TC type K)	0602 0293			
Radio handle for plug-in probe heads, incl. TC adapter, authorization for USA, CA, CL; radio frequency 915.00 MHz FSK	0554 0191			
TC probe head for air/immersion/penetration measurement (TC type K)	0602 0293			
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t <sub>99</sub>
 100 mm 30 mm Ø 5 mm Ø 3.4 mm	-50 to +350°C briefly up to +500°C	Radio handle: ±(0.5°C +0.3% of m.v.) (-40 to +500°C) ±(0.7°C +0.5% of m.v.) (remaining meas. range) TC probe head: Class 2	0.1°C (-50 to +199.9°C) 1.0°C (remaining meas. range)	t <sub>99</sub> (in water) 10 s

#### Radio handles incl. probe head for surface measurement

#### Order no.

Radio handle for plug-in probe heads, incl. TC adapter, authorization for the following countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO; radio frequency 869.85 MHz FSK	0554 0189			
TC probe head for surface measurement (TC type K)	0602 0394			
Radio handle for plug-in probe heads, incl. TC adapter, authorization for USA, CA, CL; radio frequency 915.00 MHz FSK	0554 0191			
TC probe head for surface measurement (TC type K)	0602 0394			
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t <sub>99</sub>
 120 mm 40 mm Ø 5 mm Ø 12 mm	-50 to +350°C briefly up to +500°C	Radio handle: ±(0.5°C +0.3% of m.v.) (-40 to +500°C) ±(0.7°C +0.5% of m.v.) (remaining meas. range) TC probe head: Class 2	0.1°C (-50 to +199.9°C) 1.0°C (remaining meas. range)	5 s

# Temperature measuring instruments

## testo 925/testo 922

- Ideal for application in the heating, air conditioning and ventilation areas
- With optional radio probes
- Display of differential temperature (testo 922)

Measuring range	-50 to +1000°C
Accuracy ±1 digit	±(0.5°C +0.3% of m.v.) (-40 to +900°C) ±(0.7°C +0.5% of m.v.) (remaining meas. range)
Resolution	0.1°C (-50 to +199.9°C) 1°C (remaining meas. range)

### testo 925

testo 925, 1-channel temperature measuring instrument TC type K, audible alarm, one optional radio probe can be connected, incl. calibration protocol and batteries

Order no. 0560 9250

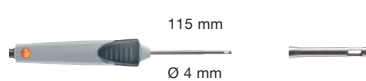

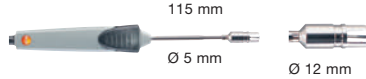




### testo 922

testo 922, 2-channel temperature measuring instrument TC type K, one optional radio probe can be connected, incl. calibration protocol and batteries

Order no. 0560 9221



Probes	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Order no.
Robust air probe, TC type K, fixed cable 1.2 m		-60 to +400°C	Class 2 <sup>1)</sup>	25 s	0602 1793
Watertight immersion/penetration probe, TC type K, fixed cable 1.2 m		-60 to +400°C	Class 2 <sup>1)</sup>	7 s	0602 1293
Super quick-action surface probe with sprung thermocouple strip, also suitable for uneven surfaces, measuring range briefly up to +500°C, TC type K, fixed cable 1.2 m		-60 to +300°C	Class 2 <sup>1)</sup>	3 s	0602 0393
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		-60 to +130°C	Class 2 <sup>1)</sup>	5 s	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		-50 to +100°C	Class 2 <sup>1)</sup>	5 s	0602 4692

The measuring instrument with this probe is watertight in the TopSafe.

1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000°C (type K), Class 2 to -40 to +1200°C (type K), Class 3 to -200 to +40°C (type K). A probe only ever complies with one accuracy class.

## Infrared thermometer operated by smartphone **testo 805i**

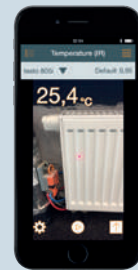
- Compact professional measuring instrument for use with smartphones/tablets
- Non-contact IR measurement of surface temperature
- Easy image documentation incl. measuring values and measurement spot marking
- Measurement data analyzed and sent via App
- Measurement spot marking with easily visible 8-point laser circle

Measuring range	-30 to +250°C
Accuracy ±1 digit	±1.5°C or ±1.5% of m.v. (0 to +250°C) ±2.0°C (-20 to -0.1°C) ±2.5°C (-30 to -20.1°C)
Resolution	0.1°C

### testo 805i

testo 805i infrared thermometer operated by smartphone, incl. batteries and calibration protocol

Order no. 0560 1805



#### testo Smart Probes App

The App turns your smartphone/tablet into the display for the testo 805i. The measuring instrument operation and the measuring value display are by Bluetooth via the Smart Probes App on your smartphone or tablet – irrespective of the measuring location. In addition, you can use the App to create measurement protocols, add photos and comments to these and send them by e-mail. For iOS and Android.

## Infrared temperature measuring instrument (2-channel) **testo 810**

- Combined pocket-sized instrument for non-contact measurement of the surface temperature and measurement of the air temperature
- 1-point laser marking and 6:1 optics
- Hold function, display of max./min. values and the difference between air and surface temperatures

### testo 810

testo 810, 2-channel temperature measuring instrument with infrared thermometer, laser marking, integrated NTC air thermometer, incl. protective cap, calibration protocol, belt pouch and batteries

Order no. 0560 0810



	Infrared	NTC
Measuring range	-30 to +300°C	-10 to +50°C
Accuracy ±1 digit	±2.0°C (-30 to +100°C) ±2% of m.v. (remaining meas. range)	±0.5°C
Measuring rate	0.5 s	0.5 s
Resolution	0.1°C	0.1°C



## Infrared temperature measuring instrument **testo 826**

- Non-contact measurement of the surface temperature, ideally suited for the food sector
- 6:1 optics for fast and accurate measurement
- 1-point laser marking
- Combination instrument with infrared and penetration measurement
- Two adjustable alarm limit values
- Watertight and robust thanks to dishwasher-safe TopSafe protective case, according to protection class IP65
- Hold function and display of min./max. values

### testo 826-T4

testo 826-T4, infrared thermometer with penetration probe, 1-point laser marking, alarm function, incl. TopSafe, wall bracket/belt holder, probe protective cap and frozen produce pre-driller

Order no. 0563 8284



Sensor types	Infrared	NTC (testo 826-T4)
Measuring range	-50 to +300°C	-50 to +230°C
Accuracy ±1 digit	±1.5°C (-20 to +100°C) ±2°C or 2% of m.v. (remaining meas. range)	±0.5°C (-20 to +99.9°C) ±1°C or 1% of m.v. (remaining meas. range)
Resolution	0.1°C	0.1°C
Spectral range	8 to 14 µm	
Measuring rate	0.5 s	1.25 s

## Infrared temperature measuring instruments **testo 830**

- Laser marking and large lenses for accurate measurement, even at greater distances
- Adjustable emission factor
- Two adjustable alarm limit values
- Hold function and display of min./max. values

### testo 830-T1

testo 830-T1, infrared thermometer, 1-point laser marking, 10:1 optics, adjustable limit values, alarm function, incl. batteries and factory calibration certificate

Order no. 0560 8311



	testo 830-T1	testo 830-T4
<b>Measuring range</b>		
Infrared	-30 to +400°C	-30 to +400°C
Type K (NiCr-Ni)	-	-50 to +500°C
<b>Accuracy ±1 digit</b>		
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 in each case	±1.5°C (-20 to 0°C) ±2°C (-30 to -20.1°C) ±1°C or 1% of m.v. (remaining meas. range)
Type K (NiCr-Ni)	-	±0.5°C +0.5% of m.v.
<b>Resolution</b>	0.1°C	0.1°C

### testo 830-T4

testo 830-T4, infrared thermometer, 2-point laser marking, 30:1 optics, adjustable limit values, alarm function, external probe can be connected, incl. batteries and factory calibration certificate

Order no. 0560 8314



Probes for testo 830; see probes for testo 925/testo 922 on page 15.

# Infrared thermometer

## testo 835

- Measure up to the high-temperature range
- 4-point laser shows the exact measuring range
- Safe measurements from a long distance thanks to 50:1 optics
- Integrated emissivity measurement
- Memory and data analysis on the PC with free "EasyClimate" PC software



Probes for testo 835; see probes for testo 925/testo 922 on page 15.

### testo 835-T1

testo 835-T1, infrared temperature measuring instrument, 4-point laser marking, measurement data management, incl. PC software for free download, batteries and calibration protocol



Order no. 0560 8351

### testo 835-T2

testo 835-T2, infrared high-temperature measuring instrument, 4-point laser marking, measurement data management, incl. PC software for free download, batteries and calibration protocol



Order no. 0560 8352

	testo 835-T1	testo 835-T2
<b>Sensor type infrared</b>		
Optics	50:1 (typical for distance of 2.0 m from measurement object) + aperture diameter of sensor (24 mm)	
Measurement spot marking	4-point laser	
Spectral range	8 to 14 μm	
Measuring range	-30 to +600°C	-10 to +1500°C
Accuracy ±1 digit	±2.5°C (-30.0 to -20.1°C) ±1.5°C (-20.0 to -0.1°C) ±1.0°C (+0.0 to +99.9°C) ±1% of m.v. (remaining meas. range)	±2.0°C or ±1% of m.v.
Resolution	0.1°C	0.1°C (-10.0 to +999.9°C) 1°C (+1000.0 to +1500.0°C)
<b>Sensor type, type K (NiCr-Ni)</b>		
Measuring range	-50 to +600°C	-50 to +1000°C
Accuracy ±1 digit	±(0.5°C + 0.5% of m.v.)	
Resolution	0.1°C	

# Temperature data logger testo 175 T3

- Large, easy-to-read display
- Measurement data memory for 1 million readings
- Up to 3-year battery life
- Data transfer via USB cable or SD card
- Two external sensor connections, type T and type K

	Type T (Cu-CuNi)	Type K (NiCr-Ni)
Measuring range	-50 to +400°C	-50 to +1000°C
Accuracy ±1 digit	±0.5°C (-50 to +70°C) ±0.7% of m.v. (+70.1 to +1000°C)	
Resolution	0.1°C	

## testo 175 T3

testo 175 T3, 2-channel temperature data logger with external sensor connections (TC type T and type K) incl. wall bracket, lock, batteries and calibration protocol



Order no. 0572 1753

Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	t <sub>99</sub>	Order no.
Magnetic probe, adhesive power approx. 20 N, with magnets, for measurements on metal surfaces, TC type K, fixed cable	35 mm Ø 20 mm	-50 to +170°C	Class 2 <sup>1)</sup>	150 s	0602 4792
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 1.2 m		-60 to +130°C	Class 2 <sup>1)</sup>	5 s	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		-50 to +100°C	Class 2 <sup>1)</sup>	5 s	0602 4692

1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000°C (type K), Class 2 to -40 to +1200°C (type K), Class 3 to -200 to +40°C (type K).  
2) According to standard EN 60584-2 the accuracy of Class 1 refers to -40 to +350°C (type T).

# USB temperature data logger **testo 184**

- Clear alarm indication
- Extremely easy operation
- Extremely easy configuration without software installation
- Convenient readout thanks to automatic PDF report
- Mobile readout by NFC possible
- IT-safe (no installation, no download)

Measuring range	-35 to +70°C
Accuracy	±0.5°C
Resolution	0.1°C

## testo 184 T3

USB data logger testo 184 T3 for temperature, unlimited operating time thanks to replaceable battery

Available in packages of 1, 10 and 50 items

Order no. 0572 1843



Sliding prices for acceptance of large quantities on request

### testo 184 T3 accessories

### Order no.

Mobile printer for data loggers testo 175/176/184	0572 0576
ComSoft Professional, professional software, incl. data archiving	0554 1704
Wall bracket for testo 184	0554 1841
Lithium battery CR2450, 3 V	0515 5841

## Thermal imager testo 865

- Infrared resolution 160 x 120 pixels (with testo SuperResolution technology 320 x 240 pixels)
- Automatic detection of hot and cold spots
- testo ScaleAssist for comparable thermal images in building thermography
- IFOV warner

### testo 865

Thermal imager testo 865 with USB cable, mains unit, lithium-ion rechargeable battery, professional software, commissioning instructions, short instructions, calibration protocol and case



Order no. 0560 8650

Infrared resolution	160 x 120 pixels
Thermal sensitivity (NETD)	120 mK
Field of view/min. focusing distance	31° x 23° / < 0.5 m
Geometric resolution (IFOV)	3.4 mrad
testo SuperResolution (pixels/IFOV)	320 x 240 pixels / 2.1 mrad
Focus	Fixed focus

## Thermal imager testo 868

- Infrared resolution 160 x 120 pixels (with testo SuperResolution technology 320 x 240 pixels)
- With testo Thermography App
- Integrated digital camera
- Automatic detection of hot and cold spots
- testo ScaleAssist for comparable thermal images in building thermography
- testo ε-Assist for automatic determination of emissivity

### testo 868

Thermal imager testo 868 with BT/ WLAN radio module, USB cable, mains unit, lithium-ion rechargeable battery, professional software, 3 x testo ε-markers, commissioning instructions, short instructions, calibration protocol and case



Order no. 0560 8681

Infrared resolution	160 x 120 pixels
Thermal sensitivity (NETD)	100 mK
Field of view/min. focusing distance	31° x 23° / < 0.5 m
Geometric resolution (IFOV)	3.4 mrad
testo SuperResolution (pixels/IFOV)	320 x 240 pixels / 2.1 mrad
Focus	Fixed focus

## Thermal imager testo 871

- Infrared resolution 240 x 180 pixels (with testo SuperResolution technology 480 x 360 pixels)
- Thermal sensitivity 90 mK
- Integrated digital camera
- With testo Thermography App
- Wireless measurement data transfer from testo 770-3 clamp meter and testo 605i humidity measuring instrument
- With testo ScaleAssist and testo ε-Assist

### testo 871

Thermal imager testo 871 with BT/ WLAN radio module, USB cable, mains unit, lithium-ion rechargeable battery, professional software, 3 x testo ε-markers, commissioning instructions, short instructions, calibration protocol and case



Order no. 0560 8712

Infrared resolution	240 x 180 pixels
Thermal sensitivity (NETD)	90 mK
Field of view/min. focusing distance	35° x 26° / < 0.5 m
Geometric resolution (IFOV)	2.6 mrad
testo SuperResolution (pixels/IFOV)	480 x 360 pixels/1.6 mrad
Focus	Fixed focus



# Thermal imager

## testo 872

- Infrared resolution 320 x 240 pixels (with testo SuperResolution technology 640 x 480 pixels)
- Thermal sensitivity 60 mK
- Integrated digital camera and laser marker
- With testo Thermography App
- Wireless measurement data transfer from testo 770-3 clamp meter and testo 605i humidity measuring instrument
- With testo ScaleAssist and testo ε-Assist

### testo 872

Thermal imager testo 872 with BT/WLAN radio module, USB cable, mains unit, lithium-ion rechargeable battery, professional software, 3 x testo ε-markers, commissioning instructions, short instructions, calibration protocol and case



Order no. 0560 8721

Infrared resolution	320 x 240 pixels
Thermal sensitivity (NETD)	60 mK
Field of view/min. focusing distance	42° x 30° / < 0.5 m
Geometric resolution (IFOV)	2.3 mrad
testo SuperResolution (pixels/IFOV)	640 x 480 pixels / 1.3 mrad
Focus	Fixed focus

#### testo 865 / testo 868 / testo 871 / testo 872 accessories

#### Order no.

Spare rechargeable battery, extra lithium-ion rechargeable battery for extending the operating time.	0515 5107	
Battery-charging station, desktop charging station for optimizing the charge time.	0554 1103	
testo ε-Marker (10 x), marker for the testo ε-Assist function for automatic determination of emissivity and reflected temperature (not for testo 865).	0554 0872	
Holster case	0554 7808	

### testo Thermography App



With the testo Thermography App, your smartphone/tablet becomes a second display and a remote control for your Testo thermal imager. In addition, you can use the App to quickly create and send compact reports on site and to save them online. Download for Android or iOS now free of charge.



# Thermal imager

## testo 875i

- Thermal imager for complete building analysis
- Exchangeable lenses
- Measuring mode for detecting areas with a mould risk
- Radio humidity probe (optional) can be connected
- Laser marker

The thermal imager testo 875i quickly and reliably detects anomalies and weak spots in materials and components. Its 50 mK thermal resolution and exchangeable lenses also make it ideal for analyzing complete house façades.

	testo 875-1i	testo 875-2i
Infrared resolution	160 x 120 pixels	
Thermal sensitivity (NETD)	< 50 mK at +30°C	
Field of view/min. focusing distance	32° x 23° / 0.1 m (standard lens)	32° x 23° / 0.1 m (telephoto: 9° x 7° / 0.5 m)
Geometric resolution (IFOV)	3.3 mrad (standard lens)	3.3 mrad (telephoto: 1.0 mrad)
SuperResolution (pixels/IFOV)	320 x 240 pixels / 2.1 mrad (standard lens)	320 x 240 pixels / 2.1 mrad (telephoto: 0.6 mrad)
Focus	Manual	
Measuring range	-30 to +100°C / 0 to +350°C (switchable)	
Accuracy	±2°C, ±2% of m.v. (±3°C of m.v. at -30 to -22°C)	

### testo 875-1i

Thermal imager testo 875-1i with integrated testo SuperResolution and digital camera, in a robust case, incl. professional software, softcase, carrying strap, SD card, USB cable, lens-cleaning cloth, mains unit, rechargeable Li-ion battery and tripod adapter



Order no. 0563 0875 V1

### testo 875-2i

Thermal imager testo 875-2i with integrated testo SuperResolution and digital camera, in a robust case, incl. professional software, softcase, carrying strap, SD card, USB cable, lens-cleaning cloth, mains unit, rechargeable Li-ion battery, tripod adapter and headset



Order no. 0563 0875 V2

### testo 875-2i set

Thermal imager set testo 875-2i with integrated testo SuperResolution and digital camera, in a robust case, incl. professional software, softcase, carrying strap, SD card, USB cable, lens-cleaning cloth, mains unit, rechargeable Li-ion battery, tripod adapter, headset, 9° x 7° telephoto lens, lens protective glass, spare rechargeable battery and fast charging station



Order no. 0563 0875 V3

#### Accessories for testo 875i

	Code <sup>1)</sup> (Initial equipment testo 875i)	Order no. (Retro-fit)
Fast charging station. Desktop fast charging station for two rechargeable batteries for optimization of the charging time	E1	0554 8801
Spare rechargeable battery. Spare lithium-ion rechargeable battery for extending the operating time	D1	0554 8802
Humidity measurement with radio humidity probe* (testo 875-2i only)	B1	2) 3)

<sup>1)</sup> When ordering as initial equipment, the accessories will already be in the case. Example: testo 875-1i incl. lens protective glass and spare rechargeable battery: Order no. 0563 0875 V1 C1 D1

<sup>2)</sup> Please contact our customer service

<sup>3)</sup> Plus installation

# Thermal imager

## testo 885

- Thermal imager for highest requirements
- Exchangeable lenses
- Parallax-free laser
- Panorama image assistant for large images
- Swivel and hinged display for top ergonomics

The thermal imager testo 885 is the professional measuring instrument for accurate and non-contact detection of anomalies and weak spots in materials and components. The high quality infrared measurement system allows even the smallest of energy losses and thermal bridges to be visualized. The camera is operated intuitively and features a rotating handle, swivel display and many helpful functions, such as the panorama image assistant, or auto-focus. This enables you to carry out both fast inspections on site and also in-depth inspections with professional reports.

### testo 885

Thermal imager testo 885 in a robust case, incl. professional software, SD card, USB cable, carrying strap, lens-cleaning cloth, mains unit, rechargeable Li-ion battery and headset



Order no. 0563 0885 V2

### testo 885 set

Thermal imager set testo 885 in a robust case, incl. professional software, SD card, USB cable, carrying strap, lens-cleaning cloth, mains unit, rechargeable Li-ion battery, headset, telephoto lens, lens case, lens protective glass, spare rechargeable battery and fast charging station



Order no. 0563 0885 V3

Infrared resolution	320 x 240 pixels
Lens	Standard: 30° x 23°, 1.7 mrad Telephoto (optional): 9° x 7°, 1.0 mrad
Thermal sensitivity (NETD)	< 30 mK at + 30°C
Temperature range	-20 to +100°C 0 to +350°C (switchable)
Digital camera resolution	3.1 MP
Focus	Auto-focus and manual focus
Display	4.3" capacitive LCD touchscreen Swivel and hinged display

Accessories for testo 885	Code <sup>1)</sup> (Initial equipment)	Order no. (Retro-fit)
testo SuperResolution. Four times as many readings, for even more detailed thermal images.	S1	0554 7806
Spare rechargeable battery. Spare lithium-ion rechargeable battery for extending the operating time.	G1	0554 8852
Fast charging station. Desktop fast charging station for two rechargeable batteries for optimizing the charging time.	H1	0554 8851
Humidity measurement with radio humidity probe*	E1	<sup>2) 3)</sup>
Process analysis package: image sequence capturing in the instrument and fully radiometric video measurement	V1	0554 8902

<sup>1)</sup> When ordering as initial equipment, the accessories will already be in the case. Example: testo 885-1 incl. lens protective glass and SuperResolution: Order no. 0563 0885 V1 F1 S1

<sup>2)</sup> Please contact our customer service

<sup>3)</sup> Plus installation

## Thermohygrometer testo 608-H2

- Continuous display of temperature and humidity or dew point
- Min./max. values
- Battery monitoring

Measuring range	-10 to +70°C / -40 to +70°Ctd / +2 to +98% RH
Accuracy ±1 digit	±0.5 °C (at +25°C) / ±2% RH (+2 to +98% RH)
Resolution	0.1°C / 0.1% RH

### testo 608-H2

testo 608-H2, alarm hygrometer, humidity/dew point/temperature measuring instrument with LED alarm, incl. calibration protocol and battery



Order no. 0560 6082

## Humidity/temperature measuring instrument testo 625

- Display of temperature and relative humidity, wet bulb temperature and dew point
- Min./max. values
- Display illumination

Measuring range	0 to +100% RH / -10 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, incl. plug-in humidity probe head, calibration protocol and batteries



Order no. 0563 6251

## Wood/material moisture measuring instrument testo 606

- Other characteristics for detecting wet areas in construction materials
- Display illumination
- Measurement of temperature and humidity of the ambient air Includes dew point calculation and wet bulb

	Material moisture	NTC	Humidity sensor
Measuring range	0 to 50%	-10 to +50°C	0 to 100% RH
Accuracy ±1 digit	±1%	±0.5°C	±2.5% RH (5 to 95% RH)
Resolution	0.1	0.1°C	0.1% RH

### testo 606-2

testo 606-2, handy wood and material moisture measuring instrument with integrated moisture measurement and NTC air thermometer, incl. protective cap, calibration protocol, belt pouch and batteries



Order no. 0560 6062

## Material moisture measuring instrument testo 616

- Accurate measurement of materials moisture in construction materials and woods
- Equipped with 10 characteristics
- Handy shape for optimal contact pressure

Wood measuring range:	< 50%
Building materials measuring range:	< 20%
Resolution	0.1

### testo 616

testo 616, material moisture measuring instrument for non-destructive moisture measurement of wood and construction materials, incl. calibration protocol and battery



Order no. 0560 6160

# Humidity/temperature measuring instrument

## testo 635

- Connection of 2 plug-in probes and 3 radio probes for temperature and humidity
- Measurement of temperature, humidity, material equilibrium moisture content, pressure dew point, absolute pressure and U-value
- Print-out of data using the testo fast printer (optional)
- Protection class IP 54






### testo 635-2

testo 635-2, humidity/temperature measuring instrument with reading memory, PC software, USB data cable, incl. calibration protocol and batteries



Order no. 0563 6352

	Type K (NiCr-Ni)	NTC (humidity probe)	testo humidity sensor	Absolute pressure probe
Measuring range	-200 to +1370°C	-40 to +150°C	0 to 100% RH	0 to 2000 hPa
Accuracy ±1 digit	±0.5°C (-60 to +60°C) ±(0.2°C + 0.3% of m.v.) (remaining meas. range)	±0.2°C (-25 to +74.9°C) ±0.4°C (-40 to -25.1°C) ±0.4°C (+75 to +99.9°C) ±0.5% of m.v. (remaining meas. range)	See probe data	See probe data
Resolution	0.1°C	0.1°C	0.1% RH	0.1 hPa

Probe	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Order no.
Humidity/temperature probes	 Ø 12 mm	0 to 100% RH -20 to +70°C	±2% RH (+2 to +98% RH) ±0.3°C		0636 9735
Slim humidity probe with offset electronics, incl. 4 plug-on PTFE protective caps for material equilibrium moisture measurement	 60 mm Ø 4 mm	0 to 100% RH 0 to +40°C	±2% RH (+2 to +98% RH) ±0.2°C		0636 2135
Scatter field probe for fast and non-destructive material moisture measurement, with 1.2 m probe cable		Woods: < 50% Building materials: < 20%			0636 6160
Robust air probe, TC type K, fixed cable	 115 mm	-60 to +400°C	Class 2 <sup>1)</sup>	25 s	0602 1793
Temperature probe for determining U-value, threefold sensor for recording wall temperature, incl. modelling clay		-20 to +70°C	Class 1 <sup>1)</sup> U-value: ±0.1 °C ±2% of m.v. *		0614 1635

1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000°C (type K), Class 2 to -40 to +1200°C (type K), Class 3 to -200 to +40°C (type K).

# U-value measuring instrument

## testo 635 U-value set

- Easy attachment of the probes – even on difficult-to-access components
- Integrated memory and easy analysis with PC software
- Proof of service thanks to report creation

### testo 635 U-value set

**Set comprising:**

- testo 635-2 (order no. 0563 6352)
- Radio module (order no. 0554 0188)
- Radio handle for plug-in probe heads (order no. 0554 0189)
- Humidity probe head, plug-in (order no. 0636 9736)
- Temperature probe for determining U-value, triple sensor technology for determining wall temperature (order no. 0614 1635)
- Service case (order no. 0516 1035)



Order no. 0563 6353



## Mini temperature and humidity data logger

### testo 175 H1

- Large, easy-to-read display
- Measurement data memory for 1 million readings
- Up to 3-year battery life
- Permanently connected external capacitive humidity sensor

Accessories for testo 175 H1	Order no.
ComSoft Basic, basic software for the programming and readout of Testo data loggers; display of measured values in graph and table format, along with export function. (If free download requiring registration is not wanted)	0572 0580
ComSoft Professional, professional software, incl. data archiving	0554 1704

### testo 175 H1

testo 175 H1, 2-channel temperature and humidity data logger with external humidity sensor (NTC/capacitive humidity sensor) incl. wall bracket, lock, batteries and calibration protocol



Order no. 0572 1754

Measuring range	-20 to +55°C -40 to +50°C <sub>d</sub> 0 to 100% RH*
Accuracy ±1 digit	±0.4°C (-20 to +55°C) +0.03% RH/K ±2% RH (2 to 98% RH) at 25°C
Resolution	0.1°C 0.1% RH

\* Not for condensing atmospheres. For continuous application in high humidity (>80% RH at ≤30°C for >12 h, >60% RH at >30°C for >12 h), please contact us via our website.

## Data logger temperature and humidity

### testo 176 H1 / testo 176 H2

- High data security
- For two external temperature/humidity probes
- Parallel measurement at two locations
- Measurement data memory for 2 million readings
- Up to 8-year battery life
- Data transfer via USB cable and SD card

Measuring range	-20 to +70°C 0 to 100% RH*
Accuracy ±1 digit	±0.2°C (-20 to +70°C) ±0.4°C (remaining meas. range) % RH: dependent on the probe selected
Resolution	0.1°C 0.1% RH

\* Not for condensing atmospheres. For continuous application in high humidity (>80% RH at ≤30°C for >12 h, >60% RH at >30°C for >12 h), please contact us via our website.

### testo 176 H1

testo 176 H1, 4-channel temperature and humidity data logger with external sensor connections (NTC/capacitive humidity sensor) incl. wall bracket, lock, battery and calibration protocol



Order no. 0572 1765

### testo 176 H2

testo 176 H2, 4-channel temperature and humidity data logger in metal housing with external sensor connections (NTC/capacitive humidity sensor) incl. wall bracket, lock, battery and calibration protocol



Order no. 0572 1766

Probes	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Order no.
Wall surface temperature probe, e. g. for proof of structural damage in the building, fixed cable, 3 m		-50 to +80°C	±0.2°C (0 to +70°C)	0628 7507
Humidity/temperature probe 12 mm		-20 to +70°C 0 to 100% RH	±0.3°C ±2% RH at +25°C (2 to 98% RH) ±0.03% RH/K ±1 digit	0572 6172
External humidity/temperature probe 12 mm, plug-in, without cable		-30 to +50°C 0 to 100% RH	±0.5°C ±2% RH	0572 2151
Humidity/temperature probe 4 mm		0 to +40°C 0 to 100% RH	±0.3°C ±2% RH at +25°C (2 to 98% RH) ±0.08% RH/K ±1 digit	0572 6174

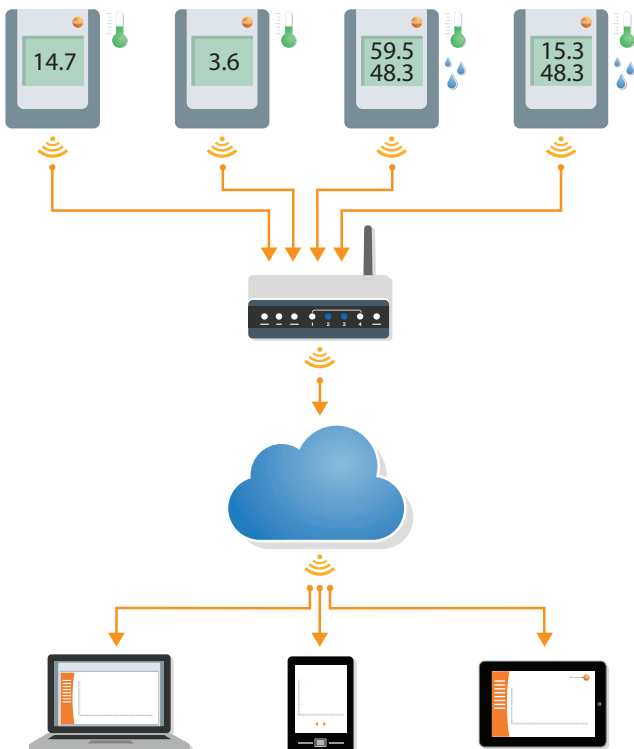
# WiFi data logger system testo Saveris 2

- Data transfer via WLAN
- All measurement data available at any time, anywhere and on any device
- Alarm notification when limit values are violated
- With testo Saveris 2 App for easier configuration, push alarms and WiFi range analysis
- Free online data store (Testo Cloud)

The testo Saveris 2 WiFi data logger system is the modern solution for monitoring temperature and humidity values in storerooms and work rooms.

Installing the system is child's play and this can be done either via a browser or with the testo Saveris 2 App. The WiFi data loggers reliably record temperature and humidity at adjustable intervals and transmit the readings via WLAN to the Testo Cloud.

The stored readings can be analyzed at any time and anywhere, using an internet-enabled smartphone, tablet or PC. Limit value violations are immediately reported by e-mail, optionally by SMS or via the testo Saveris 2 App as a push notification. This allows critical processes to be kept under control at all times, even if you are not on site yourself.



## testo Saveris 2-T1

testo Saveris 2-T1; WiFi data logger (WLAN) with display and internal NTC temperature sensor, incl. USB cable, wall bracket, batteries and calibration protocol



Order no. 0572 2031

## testo Saveris 2-T2

testo Saveris 2-T2; WiFi data logger (WLAN) with display for measuring temperature, two connections for external NTC temperature probes or door contacts, incl. USB cable, wall bracket, batteries and calibration protocol



Order no. 0572 2032

## testo Saveris 2-H1

testo Saveris 2-H1; WiFi data logger (WLAN) with display for measuring temperature and relative humidity, internal capacitive humidity sensor, incl. USB cable, wall bracket, batteries and calibration protocol



Order no. 0572 2034

## testo Saveris 2-H2

testo Saveris 2-H2; WiFi data logger (WLAN) with display for measuring temperature and relative humidity, connection for one external humidity probe, incl. USB cable, wall bracket, batteries and calibration protocol



Order no. 0572 2035

Please note that in order to use the testo Saveris 2 WiFi data logger system, both registration with the Testo Cloud ([www.saveris.net](http://www.saveris.net)) and a WLAN-capable network are required.



**testo Saveris 2 App**

With the App for iOS and Android, you can now operate the testo Saveris 2 WiFi data logger system even more easily and flexibly.

*More efficient commissioning\*:*

- Easy detection and selection of the WiFi network
- Fast parallel commissioning of several loggers

*Easy network analysis\*:*

- Test the strength and range of your WiFi network
- Create and send status reports

*Reliable alarm functions:*

- Push notification of violations of limit values
- Combinable with e-mail or SMS alarms

\*These functions are only available in the Android version of the testo Saveris 2 App.


WiFi data loggers	testo Saveris 2-T1	testo Saveris 2-T2	testo Saveris 2-H1	testo Saveris 2-H2
<b>Temperature measurement</b>				
Sensor type	Internal NTC	NTC	Internal NTC	NTC
Measuring range	-30 to +50°C	-50 to +150°C	-30 to +50°C	dependent on probe
<b>Humidity measurement</b>				
Measuring range	-		0 to 100% RH	dependent on probe
<b>Communication</b>				
WiFi (WLAN)	Signal transmission: wireless; frequency band: 2.4 GHz; supported WLAN standards: IEEE 802.11 b/g/n and IEEE 802.1X Possible encryption methods: without encryption, WEP, WPA, WPA2, WPA2 Enterprise The data loggers communicate via the standard protocol MQTT and are SNTP time synchronization-capable.			

Calibration certificates	Order no.
ISO temperature calibration certificate; temperature probe; calibration points -18°C, 0°C, +40°C; per channel/instrument	0520 0153
DAkkS temperature calibration certificate; temperature probe; calibration points -18°C, 0°C, +40°C; per channel/instrument	0520 0262
ISO humidity calibration certificate; calibration points 11.3% RH and 75.3% RH at +25°C/+77°F; per channel/instrument	0520 0076
DAkkS humidity calibration certificate; humidity probe; calibration points 11.3% RH and 75.3% RH at +25°C; per channel/instrument	0520 0246

**testo Saveris 2 Cloud**


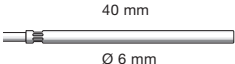
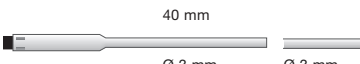
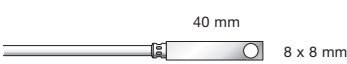
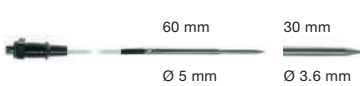

The Testo Cloud is the core operating element for setting up your testo Saveris 2 system. Here you can configure your WiFi data loggers, set limit value alarms and analyze your measurement data. You must first register at [www.saveris.net](http://www.saveris.net) to have access to the Testo Cloud.

Depending on the desired range of functions, you have a choice between the free Basic and more extensive Advanced functionality for use of the Testo Cloud. In both packages, you have access to an API interface in order to export measurement data to your systems.



	<b>Basic</b> 	<b>Advanced</b>		
<b>Measuring cycle</b>	15 minutes (fixed)	1 minute to 24 hrs (flexible)		
<b>Communication cycle</b>	15 minutes (fixed)	1 minute to 24 hrs (flexible)		
<b>Data storage</b>	Max. 3 months	Max. 2 years		
<b>Reports</b>	Manual (.pdf/.csv)	Manual (.pdf/.csv) Automatic (.pdf/.csv)		
<b>Data analysis</b>	For one measurement channel in each case	For up to 10 measurement channels simultaneously		
<b>Number of users per account</b>	1	10		
<b>Number of WiFi data loggers per account</b>	Unlimited	Unlimited		
<b>Alarm options</b>	Upper/lower alarm limits	<ul style="list-style-type: none"> <li>• Upper/lower alarm limits</li> <li>• Alarm delay</li> <li>• Time control of alarms</li> </ul>		
<b>System notifications</b>	<ul style="list-style-type: none"> <li>• Notification of low battery</li> <li>• Radio link interrupted</li> <li>• Power supply interrupted</li> </ul>	<ul style="list-style-type: none"> <li>• Notification of low battery</li> <li>• Radio link interrupted</li> <li>• Power supply interrupted</li> </ul>		
<b>E-mail alarm notification</b>	Yes	Yes		
<b>SMS alarm notification</b>	No	<ul style="list-style-type: none"> <li>• Incl. 25 SMS per logger and year</li> <li>• Option of purchasing additional SMS packages</li> </ul>		
		12-month licence Order no. 0526 0735	24-month licence Order no. 0526 0732	36-month licence Order no. 0526 0733

You will find the current prices at the following web address: [www.testo.com/saveris2-lizenzen](http://www.testo.com/saveris2-lizenzen)

### Temperature probes for testo Saveris 2-T2

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Order no.
Stub probe, IP 54		-20 to +70°C	±0.2°C (-20 to +40°C) ±0.4°C (+40.1 to +70°C)	15 s	0628 7510
Stationary probe with aluminium sleeve, IP 65, fixed cable 2.4 m		-30 to +90°C	±0.2°C (0 to +70°C) ±0.5°C (remaining meas. range)	190 s	0628 7503
Accurate immersion/penetration probe, cable length 6 m, IP 67, fixed cable		-35 to +80°C	±0.2°C (-25 to +74.9°C) ±0.4°C (remaining meas. range)	5 s	0610 1725
Probe for surface measurement, fixed cable, 2 m		-50 to +80°C	±0.2°C (0 to +70°C)	150 s	0628 7516
NTC penetration probe with ribbon cable, cable length 2 m, IP 54, fixed cable,		-40 to +125°C	±0.5% of m.v. (+100 to +125°C) ±0.2°C (-25 to +80°C) ±0.4°C (remaining meas. range)	8 s	0572 1001
External temperature probe 12 mm, plug-in, without cable		-30 to +50°C	±0.2°C (-30 to +50°C)		0572 2153


### Humidity/temperature probes for testo Saveris 2-H2

Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	Order no.
Humidity/temperature probe 12 mm, fixed cable, cable length 1.3 m		-30 to +70°C 0 to 100% RH	±0.3°C ±2% RH at +25°C (2 to 98% RH) ±0.03% RH/K ±1 digit	0572 2155
External humidity/temperature probe 12 mm, plug-in, without cable		-30 to +50°C 0 to 100% RH	±0.3°C ±2% RH	0572 2154



## testo Smart Probes VAC set

- Compact professional measuring instruments for use with smartphones/tablets
- Measurement of air and surface temperature, humidity, air velocity and volume flow
- Application-specific menus
- Measurement data display as a table or graph

 Measurement data analyzed and sent via **testo Smart Probes App**

### testo Smart Probes VAC set

testo Smart Probes VAC set for servicing ventilation and air conditioning systems. Comprising: testo 405i, testo 410i, testo 605i, testo 805i, testo Smart Case (VAC), batteries, calibration protocol

Order no. 0563 0003



	testo 405i	testo 410i	testo 605i	testo 805i
<b>Sensor type</b>	<b>Hot wire</b>	<b>Vane</b>	<b>Humidity – capacitive</b>	<b>Infrared</b>
Measuring range	0 to 30 m/s	0.4 to 30 m/s	0 to 100% RH	-30 to +250°C
Accuracy ±1 digit	±(0.1 m/s + 5% of m.v.) (0 to 2 m/s) ±(0.3 m/s + 5% of m.v.) (2 to 15 m/s)	±(0.2 m/s + 2% of m.v.) (0.4 to 20 m/s)	±(1.8% RH + 3% of m.v.) at +25°C (5 to 80% RH)	±1.5°C or ±1.5% of m.v. (0 to +250°C) ±2.0°C (-20 to -0.1°C) ±2.5°C (-30 to -20.1°C)
Resolution	0.01 m/s	0.1 m/s	0.1% RH	0.1°C
<b>Sensor type</b>	<b>NTC</b>	<b>NTC</b>	<b>NTC</b>	
Measuring range	-20 to +60°C	-20 to +60°C	-20 to +60°C	
Accuracy ±1 digit	±0.5°C	±0.5°C	±0.8°C (-20 to 0°C) ±0.5°C (0 to +60°C)	
Resolution	0.1°C	0.1°C	0.1°C	
Compatibility	requires iOS 8.3 or newer / Android 4.3 or newer requires mobile end device with Bluetooth 4.0			

## Vane anemometer operated by smartphone testo 410i


- Compact professional measuring instrument for use with smartphones/tablets
- Measurement of air velocity, volume flow and temperature
- Easy parameterization of the outlet for volume flow measurement (dimensions and geometry)
- Display of the volume flow of several outlets for regulating systems
- Measurement data analyzed and sent via App

Sensor type	Vane	NTC
Measuring range	0.4 to 30 m/s	-20 to +60°C
Accuracy ±1 digit	±(0.2 m/s + 2% of m.v.) (0.4 to 20 m/s)	±0.5°C
Resolution	0.1 m/s	0.1°C

### testo 410i

testo 410i vane anemometer operated by smartphone, incl. batteries and calibration protocol

Order no. 0560 1410



 **testo Smart Probes App**

The App turns your smartphone/tablet into the display for the testo 410i. The measuring instrument operation and the measuring value display are by Bluetooth via the Smart Probes App on your smartphone or tablet – irrespective of the measuring location. In addition, you can use the App to create measurement protocols, add photos and comments to these and send them by e-mail. For iOS and Android.



## Thermal anemometer testo 405

- Flow measuring instrument with temperature measurement
- Volume flow calculation to 99,990 m<sup>3</sup>/h
- Extendible telescope to 300 mm

	Thermal	NTC
Measuring range	0 to 5 m/s (-20 to 0°C) 0 to 10 m/s (0 to 50°C) 0 to +99,990 m <sup>3</sup> /h	-20 to +50°C
Accuracy ±1 digit	±(0.1 m/s + 5% of m.v.) (0 to +2 m/s) ±(0.3 m/s + 5% of m.v.) (remaining meas. range)	±0.5°C
Resolution	0.01 m/s	0.1°C

### testo 405

testo 405, thermal anemometer with duct bracket, incl. attachment clip and batteries



Order no. 0560 4053

## Vane anemometer testo 410

- Flow measuring instrument with temperature measurement
- Integrating measurement by 40 mm vane
- Air humidity measurement using testo humidity sensor with long-term stability

	Vane	NTC	Humidity sensor
Measuring range	0.4 to 20 m/s	-10 to +50°C	0 to 100% RH
Accuracy ±1 digit	±(0.2 m/s + 2% of m.v.)	±0.5°C	±2.5% RH (5 to 95% RH)
Resolution	0.1 m/s	0.1°C	0.1% RH

### testo 410-2

testo 410-2, vane anemometer with integrated humidity measurement and NTC air thermometer, incl. protective cap, calibration protocol and batteries



Order no. 0560 4102

## Vane anemometer testo 416

- Direct display of the volume flow
- Multi-point and timed mean calculation
- Hold button to retain the reading

Measuring range	0.6 m/s to 40 m/s
Accuracy ±1 digit	±(0.2 m/s + 1.5% of m.v.)
Resolution	0.1 m/s

### testo 416

testo 416, vane anemometer with permanently connected 16 mm telescopic vane (max. 890 mm), incl. calibration protocol and battery



Order no. 0560 4160

## Thermal anemometer testo 425

- Measurement of flow, volume flow and temperature
- Multi-point and timed mean calculation
- Max./min. values

	Thermal	NTC
Measuring range	0 to +20 m/s	-20 to +50°C
Accuracy ±1 digit	±(0.03 m/s +5% of m.v.)	±0.5°C (0 to +60°C) ±0.7°C (remaining meas. range)
Resolution	0.01 m/s	0.1°C

### testo 425

testo 425, compact thermal anemometer with permanently connected flow probe, incl. temperature measurement and telescope (max. 820 mm), calibration protocol and battery

Order no. 0560 4251



## Vane anemometer testo 417

- Measurement of flow, volume flow and temperature
- Flow direction detection
- Multi-point and timed mean calculation

### testo 417

testo 417, vane anemometer with integrated 100 mm vane, incl. temperature measurement, calibration protocol and battery

Order no. 0560 4170



	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)

### testo 417-1 funnel set

Set comprising:

- Vane anemometer testo 417 with integrated 100-mm vane, incl. temperature measurement, battery and calibration protocol.
- Funnel set (Ø 200 mm for plate outlets and 330 x 330 mm for fans).

Order no. 0563 4171



**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	
Volume flow straightener testovent 417 comprising the testovent 417 funnel set and volume flow straightener	0554 4173	

## Volume flow hood

### testo 420

- Weight less than 2.9 kg
- Flow straightener for more precise measurement at swirl outlets
- Removable and tiltable measuring instrument with large display
- App connection via Bluetooth for fast and easy monitoring and reporting on site

### testo 420 set

testo 420 volume flow hood, with measuring instrument, body, 610 x 610 mm flow hood, 5 x tension rods, USB cable, batteries and trolley, incl. calibration protocol



Order no. 0563 4200

### testo 420

testo 420 differential pressure measuring instrument incl. batteries and calibration protocol



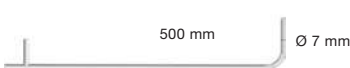
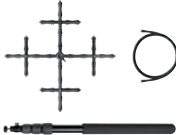

Order no. 0560 0420

	Volume flow	NTC	Capacitive humidity sensor	Differential pressure sensor	Absolute pressure probe
Measuring range	40 to 4000 m <sup>3</sup> /h	-20 to +70°C	0 to 100% RH	-120 to +120 Pa	+700 to +1100 hPa
Accuracy ±1 digit	±3% of m.v. +12 m <sup>3</sup> /h at +22°C, 1013 hPa (85 to 3500 m <sup>3</sup> /h)	±0.5°C (0 to +70°C) ±0.8°C (-20 to 0°C)	±1.8% RH +3% of m.v. at +25°C (5 to 80% RH)	±2% of m.v. +0.5 Pa at +22°C, 1013 hPa	±3 hPa
Resolution	1 m <sup>3</sup> /h	0.1°C	0.1% RH	0.001 Pa	0.1 hPa

#### Accessories for testo 420

#### Order no.

Flow hood 360 x 360 mm, with bag	0554 4200
Flow hood 305 x 1220 mm, with bag	0554 4201
Flow hood 610 x 1220 mm, with bag	0554 4202
Flow hood 915 x 915 mm, with bag	0554 4203
Tripod, extendable up to 4 m, with wheels	0554 4209
Connection hose, silicone, length 5 m, maximum load capacity up to 700 hPa (mbar)	0554 0440
Connection hose, silicone-free, for differential pressure measurement, length 5 m, maximum load capacity up to 700 hPa (mbar)	0554 0453

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Order no.
Pitot tube, length 500 mm, Ø 7 mm, stainless steel, for flow velocity measurement*		Measuring range 1 to 100 m/s Operating temperature 0 to +600°C Pitot tube factor 1.0	0635 2045
Air flow velocity matrix, telescope with spherical head, length 1.8 m, with 2 x 2 m connection hose, silicon-free, with Velcro attachment on the telescope, for connection to differential pressure measuring instrument		ID no. 0699 7077/1	0635 8888
Air flow velocity matrix, telescope with spherical head, length 1.8 m, with 2 x 2 m connection hose, silicon-free, with Velcro attachment on the telescope and testo 420 measuring instrument		ID no. 0699 7077/2	0635 8888

\*Connection hose required (order no. 0554 0440) or (order no. 0554 0453)

# Multi-function measuring instrument **testo 435**

- Large range of probes (optional):
  - IAQ probe for evaluating indoor air quality
  - Thermal probes with integrated measurement of temperature and air humidity
  - Vane and hot wire probes
  - Integrated differential pressure probe for Pitot tube measurement (see versions)
  - Radio probe for temperature and humidity (see versions)
- Easy operation
- PC software for analyzing, archiving and documenting the measurement data

The multi-function measuring instrument testo 435 is your reliable partner for indoor air analysis and regulating air conditioning (HVAC) systems to optimize energy use. CO<sub>2</sub>, relative humidity and ambient temperature parameters are available to evaluate indoor air quality.

In addition, the absolute pressure, draught, lux, U-value and surface temperature can be defined. All the options for flow measurement are available to you for determining the volume flow.

## testo 435-1

testo 435-1, multi-function measuring instrument for air conditioning, ventilation and indoor air quality, incl. calibration protocol and batteries

Order no. 0560 4351















## testo 435-4

testo 435-4, multi-function measuring instrument with integrated differential pressure measurement for air conditioning, ventilation and indoor air quality, reading memory, PC software, USB cable, incl. calibration protocol and batteries

Order no. 0563 4354

### Probes for testo 435 Order no.

Flow			
	Hot wire probe (Ø 12 mm) - for flow, temperature, humidity	0635 1535	
	Vane probe (Ø 60 mm) - for flow measurement at air outlets	0635 9335	
	Vane/temperature probe (Ø 100 mm) - for air outlets	0635 9435	
	Vane probe (Ø 16 mm) - for flow measurement in ducts	0635 9535	
Comfort level			
	Comfort probe for turbulence measurement	0628 0109	
	Indoor air quality probe for CO <sub>2</sub> , temperature, humidity, absolute pressure	0632 1535	
	Lux probe; probe for measuring illuminance	0635 0545	
	Globe thermometer Ø 150 mm, TC type K, for measuring radiant heat	0602 0743	
Humidity			
	Humidity/temperature probes	0636 9735	
U-value			
	Temperature probe for determining U-value	0614 1635	
Temperature			
	Fast-action surface probe (TC type K)	0602 0393	
	Robust air temperature probe (TC type K) - fixed cable 1.2 m	0602 1793	

### Overview of testo 435 versions

	testo 435-1	testo 435-4
Connectable probe (optional)		
IAQ probe for measuring CO <sub>2</sub> , air temperature, indoor air humidity and absolute pressure	X	X
Thermal flow probe with integrated temperature and humidity measurement	X	X
Vane and hot wire probes	X	X
Radio probe for temperature measurements	X	X
Ambient CO probe	X	X
Absolute pressure probe	X	X
Integrated differential pressure measurement for flow measurement with Pitot tubes and filter monitoring	-	X
Comfort probe for turbulence measurement	-	X
Humidity probe for air temperature and humidity measurements	-	X
Radio probe for air temperature and humidity measurements	-	X
Lux probe for measuring illuminance	-	X
Temperature probe for determining U-value	-	X
Instrument fittings		
Easy operation with user profiles	X	X
Illuminated display	X	X
testo fast printer for documenting measurement data (optional)	X	X
Instrument memory for 10,000 readings (cannot be retrofitted)	-	X
PC software for analyzing, archiving and documenting the measurement data	-	X



## Multi-function climate measuring instrument

### testo 480

- Measurement of all climate-related parameters with just one instrument: flow, temperature, humidity, pressure, illuminance, radiant heat, degree of turbulence, CO<sub>2</sub>, PMV/PPD and WBGT index
- High-quality digital probes and an intelligent calibration concept
- High-precision, integrated differential pressure sensor
- Quick, professional reporting using "EasyClimate" PC software
- Integrated, guided measurement programs:
  - HVAC grid measurement as per EN 12599
  - PMV/PPD measurement as per ISO 7730
  - Turbulence measurement as per EN 13779
  - WBGT measurement according to ISO 7243 or DIN 33403

With the testo 480 you can record, analyze and document all the parameters relevant to air conditioning with just one instrument. It is above all accuracy and practically-oriented handling that are characteristic of the multi-function climate measuring instrument in these processes.

The testo 480 supports assessors, experts, technical service providers or service engineers in the air conditioning and ventilation sector in the fast and efficient performance of measuring tasks, such as standard-compliant setting of VAC systems in office, residential and industrial buildings.

Furthermore, you can use the testo 480 for the reliable and precise checking of relevant quality parameters for your production and processing chains – thanks also to the measuring instrument's comprehensive range of probes which are specially tailored to industrial requirements.

The multi-function climate measuring instrument is equipped with intelligent, digital probes which can be calibrated independently from the handheld instrument. This enables uninterrupted use of the instrument.

### testo 480

High-end climate measuring instrument testo 480, incl. "EasyClimate" PC software, mains unit, USB cable and calibration protocol

Order no. 0563 4800



#### Comfort level measurement

- High-end climate measuring instrument testo 480, incl. PMV/PPD measurement (order no. 0563 4800)
- Comfort probe for turbulence measurement according to EN 13779 (order no. 0628 0143)\*
- Globe thermometer Ø 150 mm, TC type K, for measuring radiant heat (order no. 0602 0743)
- IAQ probe for the evaluation of indoor air quality, CO<sub>2</sub>, humidity, temperature and absolute pressure measurement, incl. desktop tripod (order no. 0632 1543)\*
- Lux probe for measuring the illuminance (order no. 0635 0543)
- 2 x plug-in head cable for digital probes (order no. 0430 0100)
- Tripod for workplace evaluation (order no. 0554 0743)
- System case for comfort level measurement (order no. 0516 4801)

\*plug-in head cable required (order no. 0430 0100)




#### HVAC measurement





- High-end climate measuring instrument testo 480, incl. PMV/PPD measurement (order no. 0563 4800)
- Vane probe Ø 16 mm, with telescope (scaling max. 960 mm) and integrated measurement button (order no. 0635 9542)\*
- Thermal flow probe (hot wire) Ø 10 mm, bendable through 90° (200 mm), with telescope (scaling max. 1100 mm) and integrated measurement button (order no. 0635 1543)\*
- Humidity and temperature probe Ø 12 mm, high-precision humidity measurement with 1% accuracy (order no. 0636 9743)\*
- Vane probe Ø 100 mm, for measurement at ventilation outlets (order no. 0635 9343)\*
- Plug-in head cable for digital probes (order no. 0430 0100)
- System case for HVAC measurements (order no. 0516 4800)

\*plug-in head cable required (order no. 0430 0100)




Sensor type	Differential pressure, integrated	Absolute pressure, integrated and external	Type K (NiCr-Ni)
Measuring range	-100 to +100 hPa	700 to 1100 hPa	-200 to +1370°C
Accuracy ±1 digit	±(0.3 Pa +1% of m.v.) (0 to +25 hPa) ±(0.1 hPa +1.5% of m.v.) (+25,001 to +100 hPa)	±3 hPa	±(0.3°C +0.1% of m.v.)
Resolution	0,001 hPa	0.1 hPa	0.1°C
Sensor type	Radiant temperature, globe	Pt100	Vane, 16 mm
Measuring range	0 to +120°C	-100 to +400°C	+0.6 to +50 m/s
Resolution	0.1°C	0.01°C	0.1 m/s
Sensor type	Vane, 100 mm	Hot wire, hot ball	Comfort probe
Measuring range	+0.1 to +15 m/s	0 to +20 m/s	0 to +5 m/s
Resolution	0.01 m/s	0.01 m/s	0.01 m/s
Sensor type	Testo capacitive humidity sensor	CO <sub>2</sub>	Lux
Measuring range	0 to 100% RH	0 to 10,000 ppm CO <sub>2</sub>	0 to 100,000 lux
Resolution	0.1% RH	1 ppm CO <sub>2</sub>	1 lux

Accessories for testo 480	Order no.
Telescope for digital probes, with spherical head and probe holder, length 1.8 m. Use 5 m plug-in head cable (order no. 0430 0101) .	0430 0946
Tripod for workplace evaluation with brackets for handheld instrument and probe, including telescopic extension	0554 0743
Plug-in head cable for digital probes	0430 0100
testovent 417, funnel set comprising funnel for plate outlets (Ø 200 mm) and funnel for fans (330 x 330 mm) for incoming / outgoing air	0563 4170
Volume flow straightener testovent 417	0554 4172
Control and calibration set for testo humidity probes, salt solution with 11.3% RH and 75.3% RH, incl. adapter for testo humidity probes	0554 0660
Connection hose, silicone, length 5 m, maximum load capacity up to 700 hPa (mbar)	0554 0440
Connection hose, silicone-free, for differential pressure measurement, length 5 m, maximum load capacity up to 700 hPa (mbar)	0554 0453

Probes for testo 480	Order no.
<b>Flow</b>	
 Vane probe Ø 100 mm, for measurement at air outlets*	0635 9343
 Vane probe Ø 16 mm with telescope (scaling max. 960 mm) and integrated measurement button*	0635 9542
 Thermal flow probe (hot wire) Ø 10 mm, bendable through 90° (200 mm), with telescope (scaling max. 1100 mm) and integrated measurement button*	0635 1543

Comfort level	Order no.
 Comfort probe for turbulence measurement in accordance with EN 13779*	0628 0143
 IAQ probe for the evaluation of indoor air quality and measurement of CO <sub>2</sub> , humidity, temperature and absolute pressure, incl. desktop tripod*	0632 1543
 Lux probe for measuring illuminance	0635 0543
 Globe thermometer Ø 150 mm, TC type K, for measuring radiant heat	0602 0743

\*plug-in head cable required (order no. 0430 0100)

Probes for testo 480	Order no.
<b>Humidity</b>	
 High-precision humidity/temperature probe (Ø 12 mm)*	0636 9743
<b>Temperature</b>	
 Fast-action surface probe (TC type K)	0602 0393
 Robust air temperature probe (TC type K) - fixed cable 1.2 m	0602 1793

## testo Smart Probes heating set


- Compact professional measuring instruments for use with smartphones/tablets
- All necessary measuring instruments for non-contact temperature measurement and the measurement of flow and return temperature, as well as gas flow pressure
- Measurement data analyzed and sent via App
- Measurement data display as a table or graph

### testo Smart Probes heating set

testo Smart Probes heating set for pressure and temperature measurement on heating systems. Comprising: testo 115i, testo 510i incl. hose set (Ø 4 mm and 5 mm) with adapter, testo 805i, testo Smart Case (heating), batteries, calibration protocol







Order no. 0563 0004



**testo Smart Probes App**  
 The App turns your smartphone/tablet into the display for up to 6 Testo Smart Probes at the same time. The measuring instrument operation and the measuring value display are by Bluetooth via the Smart Probes App on your smartphone or tablet – irrespective of the measuring location. In addition, you can use the App to create measurement protocols, add photos and comments to these and send them by e-mail. For iOS and Android.

	testo 115i	testo 510i	testo 805i
<b>Sensor type</b>	<b>NTC</b>	<b>Pressure</b>	<b>Infrared</b>
Measuring range	-40 to +150°C	-150 to 150 hPa	-30 to +250°C
Accuracy ±1 digit	±1.3°C (-20 to +85°C)	±0.05 hPa (0 to 1 hPa) ±(0.2 hPa + 1.5% of m.v.) (1 to 150 hPa)	±1.5°C or ±1.5% of m.v. (0 to +250°C) ±2.0°C (-20 to -0.1°C) ±2.5°C (-30 to -20.1°C)
Resolution	0.1°C	0.01 hPa	0.1°C
Compatibility	requires iOS 8.3 or newer / Android 4.3 or newer		
	requires mobile end device with Bluetooth 4.0		

# Overview of flue gas analyzers

	testo 320 basic	testo 320	testo 330-2 LL / testo 330-2 LX	testo 330i testo 330i LX	
					
Fuels	Oil, gas	Oil, gas	Oil, gas, solid fuels	Oil, gas, solid fuels	
The most important measurement parameters	O <sub>2</sub> , CO	O <sub>2</sub> , CO	O <sub>2</sub> , CO or CO H <sub>2</sub> -compensated, NO	O <sub>2</sub> , CO or CO H <sub>2</sub> -compensated, NO	
Measuring ranges	CO: 0 to 4,000 ppm CO <sub>2</sub> : 0 to CO <sub>2</sub> max Draught: -9.99 to 40 hPa Pressure: 0 to 300 hPa <sup>1)</sup>	CO H <sub>2</sub> -compensated: 0 to 8,000 ppm CO: 0 to 4,000 ppm or CO <sub>2</sub> : 0 to CO <sub>2</sub> max Draught: -9.99 to 40 hPa Pressure: 0 to 300 hPa <sup>1)</sup>	CO H <sub>2</sub> -compensated: 0 to 30,000 ppm (through fresh air dilution) CO: 0 to 4,000 ppm or CO <sub>2</sub> : 0 to CO <sub>2</sub> max Optional NO: 0 to 3,000 ppm Draught: -9.99 to 40 hPa Differential pressure: 0 to 300 hPa <sup>1)</sup>	CO H <sub>2</sub> -compensated: 0 to 30,000 ppm (through fresh air dilution) CO: 0 to 4,000 ppm or CO <sub>2</sub> : 0 to CO <sub>2</sub> max Optional NO: 0 to 3,000 ppm Draught: -9.99 to 40 hPa Differential pressure: 0 to 300 hPa <sup>1)</sup>	
TÜV-tested	According to EN 50379, parts 1 and 3	According to 1st German Federal Immission Control Ordinance (BlmSchV) (VDI 4206) and EN 50379, parts 1-3	According to 1st German Federal Immission Control Ordinance (BlmSchV) (VDI 4206) and EN 50379, parts 1-3	According to 1st German Federal Immission Control Ordinance (BlmSchV) (VDI 4206) and EN 50379, parts 1-3	
CO measurement (H <sub>2</sub> -compensated)	[-]	[✓]	[✓]	[✓]	
LongLife CO sensor with 4-year warranty	[-]	[✓]	[✓]	[✓]	
Sensors exchangeable by user	[✓]	[✓]	[✓]	[✓]	
Flue gas loss measurement	[✓]	[✓]	[✓]	[✓]	
Draught measurement	[✓]	[✓]	[✓]	[✓]	
Differential/gas flow pressure measurement	[✓]	[✓]	[✓]	[✓]	
Error and sensor diagnosis	[✓]	[✓]	[✓]	[✓]	
Functions	Differential temperature for flow and return <sup>2)</sup>	[✓]	[✓]	[✓]	
	Zeroing of measuring cells and pressure sensor without probe removal from the flue gas system <sup>3)</sup>	[-]	[-]	[✓]	
	Parallel measurement of flue gas values and flue draught	[-]	[-]	[✓]	
	TÜV-tested O <sub>2</sub> and CO measurement with 15-minute mean calculation on solid fuel systems <sup>4)</sup>	[-]	[-]	[✓]	
	Create digital measurement protocol directly in the App and send by e-mail	[-]	[-]	[-]	
	Ambient CO measurement <sup>5)</sup>	with flue gas probe	with ambient CO probe available separately	with ambient CO probe available separately	with ambient CO probe available separately
	Data recording for up to 2 hours possible	[-]	[-]	[✓]	[✓]
	Gas leak detection for CH <sub>4</sub> (methane) and C <sub>3</sub> H <sub>8</sub> (propane) <sup>6)</sup>	[-]	[✓]	[✓]	[-]
	Pressure and tightness test <sup>9)</sup>	[-]	[-]	[✓]	[-]
	Automatic burner error diagnosis through readout adapter for digital automatic furnaces (visual) <sup>10)</sup>	[-]	[-]	[✓]	[-]
Equipment	Warranty (Instrument, O <sub>2</sub> -/CO sensors, probe)	2 years	2 years	4 years only LX: 5-year sensor warranty	4 years only LX: 5-year sensor warranty
	Long service life due to Li-ion rechargeable battery	[✓]	[✓]	[✓]	[✓]
	Display	High-resolution graphic colour display	High-resolution graphic colour display	High-resolution graphic colour display	Smartphone/tablet
	Memory	20 measurement protocols	500 readings	500,000 measurement protocols	500,000 measurement protocols
	USB interface	[✓]	[✓]	[✓]	[✓]
	Bluetooth interface (optional)	[-]	[✓]	[✓]	[✓]
	Software/App	testo EasyHeat	testo EasyHeat <sup>11)</sup>	testo EasyHeat / testo flue gas App <sup>11)</sup>	testo 330i App <sup>11)</sup>

<sup>1)</sup> Optional: connection to gas pipe via pressure connection set (0554 1203)

<sup>2)</sup> Optional: differential temperature set with 2 Velcro probes (0554 1208)

<sup>3)</sup> Using the fresh air valve, i.e. start new measurement without having to remove probe

<sup>4)</sup> Optional: solid fuel set (0600 9765)

<sup>5)</sup> Optional: ambient CO probe (0632 3331)

<sup>6)</sup> Optional: gas leak probe (0632 3330)

<sup>9)</sup> Optional: connection to gas pipe via adapter from the pressure connection set (0554 1203) and with pressure test set for gas pipe test (0554 1213)

<sup>10)</sup> Optional: readout adapter for automatic furnaces (0554 1206)

<sup>11)</sup> Android & iOS App available, please take the system requirements of the mobile terminal devices from the technical data sheets

## Flue gas analyzer testo 320 basic

- High-resolution graphic colour display
- Fast and easy menu guidance
- Storage space for 20 measurement protocols
- Measurements of flue gas, draught, pressure, ambient CO, differential temperature
- O<sub>2</sub> and CO sensor and flue gas probe with temperature probe
- TÜV-tested according to EN 50379, parts 1 and 3

### testo 320 basic set

testo 320 basic, the entry level flue gas analyzer for flue gas measurement on oil and gas systems.

0632 3223	testo 320 basic Flue gas analyzer with O <sub>2</sub> and CO sensor
0554 1105	USB mains unit
0600 9740	Compact flue gas probe (length 180 mm, Ø 6 mm)
0516 0021	Instrument case (height 112 mm)



Order no. 0563 3223 70

## High-efficiency flue gas analyzer testo 320

- High-resolution graphic colour display
- Fast and easy menu guidance
- Storage space for 500 readings
- Measurements of flue gas, draught, pressure, ambient CO, differential temperature and gas leak detection
- O<sub>2</sub> and CO sensor and flue gas probe with temperature probe
- TÜV-tested according to EN 50379, parts 1-3

### testo 320

testo 320 flue gas analyzer, incl. O<sub>2</sub> sensor, calibration protocol, graphic colour display



Order no. 0632 3220

## Professional flue gas analyzer testo 330-2 LX

- 5-Year warranty without maintenance contract on O<sub>2</sub> and CO sensors (4-year warranty on instrument and probes)
- Many measurement menus for analyses involving heating systems, incl. solid fuel measurement and gas pipe test menus
- Integrated sensor monitoring
- Dilution up to 30,000 ppm CO
- Zeroing in flue possible
- High-resolution graphic colour display
- Logger function (up to 2 hrs continuous measuring value recording)
- TÜV-tested according to EN 50379, parts 1-3

### Anniversary set testo 330-2 LX with printer



Set comprising

- Flue gas analyzer testo 330-2 LX with O<sub>2</sub> sensor, H<sub>2</sub>-compensated CO sensor and Bluetooth®
- International mains unit
- Modular flue gas probe, length 180 mm, Ø 8 mm
- Spare dirt filters (x 10)
- testo fast printer IRDA
- Spare thermal paper
- System case for instrument, probes and accessories

Order no. 0563 6034 71



#### testo flue gas App

The App turns your smartphone/tablet into the display for the testo 330-2 LX.



# Flue gas analyzer testo 330i LX

- 5-Year warranty without maintenance contract on O<sub>2</sub> and CO sensors (4-year warranty on instrument and probes)
- Integrated sensor monitoring
- Dilution up to 30,000 ppm CO
- Zeroing in flue possible
- TÜV-tested according to EN 50379, parts 1-3
- Measuring location-independent operation and Bluetooth measuring value display via smartphone/tablet and testo 330i App
- Paperless documentation and reporting directly on site with the testo 330i App

## Anniversary set testo 330i LX with CO H<sub>2</sub> compensation



- Set comprising
- Flue gas analyzer testo 330i LX with O<sub>2</sub> sensor, H<sub>2</sub>-compensated CO sensor and Bluetooth®
  - International mains unit
  - testoFix probe mount
  - Modular flue gas probe, length 180 mm, Ø 8 mm
  - Spare dirt filters (x 10)
  - Instrument case testo 330i

Order no. 0563 6035 71

### testoFix probe mount

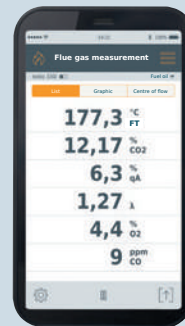
New development: Securely fixes the probe and the measuring instrument to the system.



For measurement apertures from hole diameter of 10 mm and probe diameter of 8 mm  
Max. surface temperature at the measurement aperture: +140°C  
Weight: 114 g

### testo 330i App

The App turns your smartphone/tablet into the display for the testo 330i.



The measuring instrument operation and the measuring value display are by Bluetooth via the testo 330i App on your smartphone or tablet – irrespective of the measuring location. In addition, you can use the App to create measurement protocols, add photos and comments to these and send them by e-mail. For iOS and Android.

### Useful accessories for flue gas analyzers

		Order no.
	External combustion air temperature probe 190 mm with cable, cone and magnetic holder	0600 9787
	For flow and connection pressure measurement: pressure connection set	0554 1203
	For oil-fired systems: smoke tester (please order cone separately 0554 9010)	0554 0307
	For systems not dependent on ambient air: dual wall clearance probe	0632 1260
	For difficult-to-access measurement apertures: flexible probe shaft (important: suitable for modular flue gas probes, not for basic flue gas probes, like those included in the testo 320 basic set!)	0554 9770
	For large flue gas pipe diameters: probe shaft 300 mm, diameter 8 mm	0554 9761

## Differential pressure measuring instrument **testo 510**

- Differential pressure measurement 0 to 100 hPa
- Flow measurement with Pitot tube possible
- Temperature and air tightness compensation
- Display illumination
- 10 selectable units
- Gas flow and connection pressure measurement in parallel to flue gas measurement

Measuring range	0 to 100 hPa
Accuracy ±1 digit	±0.03 hPa (0 to 0.30 hPa) ±0.05 hPa (0.31 to 1.00 hPa) ±(0.1 hPa + 1.5% of m.v.) (1.01 to 100 hPa)
Resolution	0.01 hPa

### Measuring instrument accessories

Connection hose, silicone, length 2 m, maximum load capacity up to 700 hPa (mbar)	0554 0448	
ISO pressure calibration certificate; differential pressure, 3 points distributed across the measuring range	0520 0095	
ISO pressure calibration certificate; differential pressure, 5 points distributed across the measuring range	0520 0005	

## Pressure set **testo 510**

testo 510, handy differential pressure measuring instrument, hose set (Ø 4 mm and 5 mm) with adapter, incl. protective cap, calibration protocol, belt pouch and batteries



Order no. 0563 0510

## Differential pressure measuring instrument operated by smartphone **testo 510i**

- Compact professional measuring instrument for use with smartphones/tablets
- Measurement of gas flow/static pressure and volume flow
- Measurement menu for pressure drop test incl. alarm notifications
- Easy configuration and determination of the volume flow
- Measurement data analyzed and sent via App
- Magnetic holder for easy attachment

Sensor type	Pressure
Measuring range	-150 to 150 hPa
Accuracy ±1 digit	±0.05 hPa (0 to 1 hPa) ±(0.2 hPa + 1.5% of m.v.) (1 to 150 hPa)
Resolution	0.01 hPa

### Accessories

testo Smart Case (VAC) for the storage and transport of testo 405i, testo 410i, testo 510i, testo 605i, testo 805i and testo 905i, dimensions 270 x 190 x 60 mm	0516 0260	
ISO pressure calibration certificate, accuracy > 0.6% of final value	0520 0005	

## testo 510i

testo 510i, differential pressure measuring instrument operated by smartphone, incl. hose set (Ø 4 mm and 5 mm) with adapter, batteries and calibration protocol

Order no. 0560 1510



### testo Smart Probes App

The App turns your smartphone/tablet into the display for the testo 510i. The measuring instrument operation and the measuring value display are by Bluetooth via the Smart Probes App on your smartphone or tablet – irrespective of the measuring location. In addition, you can use the App to create measurement protocols, add photos and comments to these and send them by e-mail. For iOS and Android.

## High-pressure measuring instrument operated by smartphone **testo 549i**

- Compact professional measuring instrument for use with smartphones/tablets
- Measurement of high and low pressure
- Quick and easy installation at the pressure connection
- Low refrigerant loss thanks to hoseless application
- Measurement data analyzed and sent via App

Measuring range	-1 to 60 bar
Accuracy ±1 digit	0.5% of final value
Resolution	0.01 bar
Connection	7/16" – UNF
Overload rel.	65 bar

### Accessories

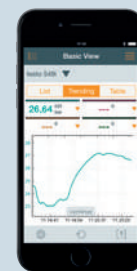
### Order no.

testo Smart Case (refrigeration) for the storage and transport of 2 x testo 115i and 2 x testo 549i, dimensions 250 x 180 x 70 mm	0516 0240	
ISO relative pressure calibration certificate, 3 measuring points distributed across the measuring range	0520 0085	

## testo 549i

testo 549i high-pressure measuring instrument operated by smartphone, incl. batteries and calibration protocol

Order no. 0560 1549



### testo Smart Probes App

The App turns your smartphone/tablet into the display for the testo 549i. The measuring instrument operation and the measuring value display are by Bluetooth via the Smart Probes App on your smartphone or tablet – irrespective of the measuring location. In addition, you can use the App to create measurement protocols, add photos and comments to these and send them by e-mail. For iOS and Android.

## testo Smart Probes refrigeration set

- Set comprising 2 x high-pressure measuring instruments testo 549i and 2 x clamp probes testo 115i for use with smartphones/tablets
- Application-specific menus: target superheating, superheating and subcooling
- All the measuring instruments needed for refrigeration applications in one set
- Fast and easy installation at a pressure connection or the temperature measuring point
- Low refrigerant loss thanks to hoseless application
- Measurement data analyzed and sent via App

### Accessories

### Order no.

ISO relative pressure calibration certificate, 3 measuring points distributed across the measuring range	0520 0085	
ISO temperature calibration certificate, one-point calibration for clamp thermometer, calibration point +60°C	0520 0072	<b>xxx.xx</b>

## testo Smart Probes refrigeration set

testo Smart probes refrigeration set for servicing, commissioning and error detection on air conditioning and refrigeration systems. Comprising: 2x testo 115i, 2x testo 549i, testo Smart Case (refrigeration), batteries, calibration protocol  
Order no. 0563 0002



	testo 115i	testo 549i
<b>Sensor type</b>	<b>NTC</b>	<b>Pressure</b>
Measuring range	-40 to +150°C	-1 to 60 bar
Accuracy ±1 digit	±1.3°C (-20 to +85°C)	0.5% of final value
Resolution	0.1°C	0.01 bar
Connection		7/16" – UNF
Overload rel.		65 bar
Compatibility	requires iOS 8.3 or newer / Android 4.3 or newer requires mobile end device with Bluetooth 4.0	

## Digital manifold **testo 550**

- App connection via Bluetooth for fast and convenient monitoring and reporting on site
- Update of refrigeration data on the instrument via App
- Calculation of superheating/subcooling in real time through up to two external temperature probes
- 2-way valve block with three connections, three hose holders and sight glass
- 250-hour battery life

### testo 550 set

testo 550 set, digital manifold with Bluetooth, for refrigeration systems and heat pumps; incl. 2 x clamp probes, batteries, case and calibration protocol



Order no. 0563 1550



#### testo refrigeration App

The smartphone App for manifolds: more mobile, flexible and efficient.

## Digital manifold **testo 557**

- App connection via Bluetooth for fast and convenient monitoring and reporting on site
- Update of refrigeration data on the instrument via App
- 4-way valve block for fast and efficient work
- External vacuum probe supports the evacuation of the system with high-precision measurement
- 250-hour battery life

### testo 557 set

testo 557 set, digital manifold with Bluetooth, for commissioning, service and maintenance; incl. 2 x clamp probes, external vacuum probe, batteries, case and calibration protocol



Order no. 0563 1557



#### testo refrigeration App

The smartphone App for manifolds: more mobile, flexible and efficient.

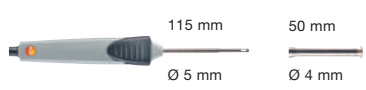
**Technical data testo 550/testo 557**

		testo 550	testo 557
<b>Measuring range</b>	Pressure	-1 to 60 bar	
	Temperature	-50 to +150°C	
	Vacuum	-1 bar to 0 bar	0 to 20,000 microns
<b>Accuracy (at 22°C)</b>	Pressure	±0.5% fs	
	Temperature	±0.5°C	
	Vacuum	-	±(10 microns + 10% of m.v.) (100 to 1,000 microns)
<b>Resolution</b>	Pressure	0.01 bar	
	Temperature	0.1°C	
	Vacuum	-	1 micron (0 to 1,000 microns) 10 microns (1,000 to 2,000 microns) 100 microns (2,000 to 5,000 microns) 500 microns (5,000 to 10,000 microns) 5,000 microns (10,000 to 20,000 microns)
<b>Probe connections</b>	Pressure	3 x 7/16" – UNF	
	Temperature	2 x plug-in (NTC)	
	Vacuum	-	1 x plug-in (external vacuum probe)
<b>Overload</b>	65 bar		
<b>Refrigerant in the instrument</b>	60 profiles: R11, R12, R123, R1234yf, R1234ze, R125, R13B1, R134a, R14, R142B, R152a, R161, R22, R227, R23, R290, R32, R401A, R401B, R401C, R402A, R402B, R404A, R406A, R407A, R407B, R407C, R407D, R407F, R408A, R409A, R410A, R411A, R412A, R413A, R414B, R416A, R417A, R420A, R421A, R421B, R422A, R422B, R422C, R422D, R424A, R426A, R427A, R434A, R437A, R438A, R502, R503, R507, R508A, R508B, R600, R600a, R744 (CO2), R718 (H2O), can be updated via APP		

**Accessories for testo 550/557**

Transport case for comprehensive accessories	0516 0012
--	-----------

**Probes for testo 550/testo 557**

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Order no.
Precise, robust NTC air probe		-50 to +125°C	±0.2°C (-25 to +80°C) ±0.4°C (remaining meas. range)	0613 1712
Clamp probe for temperature measurements on pipes from 6 to 35 mm diameter, NTC, fixed cable 1.5 m		-40 to +125°C	±1°C (-20 to +85°C)	0613 5505
Pipe wrap probe with Velcro tape for pipe diameters up to max. 75 mm, Tmax. +75°C, NTC, fixed cable 1.5 m		-50 to +70°C	±0.2°C (-25 to +70°C) ±0.4°C (-50 to -25.1°C)	0613 4611
Pipe wrap probe (NTC) for pipe diameters of 5 to 65 mm, fixed cable 2.8 m		-50 to +120°C	±0.2°C (-25 to +80°C)	0613 5605
Watertight NTC surface probe for flat surfaces, fixed cable 1.2 m		-50 to +150°C Long-term measuring range +125°C, briefly +150°C (2 minutes)	±0.5% of m.v. (+100 to +150°C) ±0.2°C (-25 to +74.9°C) ±0.4°C (remaining meas. range)	0613 1912



## Leak detector set for refrigerants **testo 316-4**

- Extremely high sensitivity of < 3g/a enables detection of even the smallest leaks
- Very long sensor service life
- Visual and audible alarm
- Permanent sensor check
- Earphone connection for reliable leakage detection in loud environments
- Trend display indicates maximum leakages

Measurement parameter	g/a
Detectable	R134a, R22, R404a, H <sub>2</sub> and all common refrigerants such as CFC, HFC (partially and completely halogenated) NH <sub>3</sub> (separate sensor head)
Lower response threshold	3 g/a

Accessories for testo 316-4	Order no.
testo 316-4, leak detector spare head for CFC, HFC (partially and completely halogenated) , H <sub>2</sub>	0554 3180
testo 316-4 set, spare head for leak detector for ammonia, NH <sub>3</sub>	0554 3181

### Detectable refrigerants

Refrigerant Refrigerant group	Refrigerant ref. (Lower response threshold specified)	Refrigerant de- tectable	Refrigerant selection on instrument
CFC		x	R22
HCFC		x	R22
HFC (partially halogenated)		x	R404a
R12		x	R22
R22	x	x	R22
R123		x	R22
R134a	x	x	R134a
R404	x	x	R404a
R407a, b, c, d, e		x	R134a
R408		x	R22
R409		x	R22
R410a		x	R134a
R505		x	R22
R507		x	R134a

## Electronic leak de-tector for refrigerants **testo 316-3**

- High sensitivity of < 4g/a enables detection of even the smallest leaks
- Detects every common refrigerant
- Immediately ready for use without any kind of pre-settings
- LED indication when there is a leak with simultaneous audible alarm

Sensitivity	4 g/a (0.15 oz/a)
-------------	-------------------

Accessories for testo 316-3	Order no.
Sensor head for testo 316-3	0554 2610

### testo 316-4 set 1

testo 316-4 set, leak detector for CFC, HFC (partially and completely halogenated), H<sub>2</sub>, incl. refrigerant sensor head, case, mains unit and earphones

Order no. 0563 3164



### testo 316-4 set 2

testo 316-4 set, leak detector for ammonia (NH<sub>3</sub>), incl. refrigerant sensor head, case, mains unit and earphone

Order no. 0563 3165



### Detectable refrigerants

Refrigerant Refrigerant group	Refrigerant ref. (Lower response threshold specified)	Refrigerant detectable	Refrigerant selection on instrument
R600/R600a		x	R22
Hydrogen	x	x	H <sub>2</sub>
Ammonia	x	x	NH <sub>3</sub>
R410a		x	R134a
R124		x	R22
R227		x	R134a
R422d		x	R134a
R11		x	R22
R290		x	H <sub>2</sub>
R508		x	R134a
R427a		x	R404a
R1270		x	R22
R1150		x	R22
R170		x	R134a

### testo 316-3

testo 316-3, leak detector for CFC, HFC (partially and completely halogenated), incl. sensor head, transport case, calibration protocol, batteries and filter

Order no. 0563 3163



# Ambient CO-/CO<sub>2</sub> measuring instrument

## testo 315-3

- Parallel and direct CO/CO<sub>2</sub> measurement
- TÜV-tested according to EN 50543
- Measuring values transferable to testo 330 (V2010)
- On-site data printout

	Measuring range	Accuracy ±1 digit	Resolution
CO sensor	0 to 100 ppm	±3 ppm (0 to 20 ppm) ±5 ppm (>20 ppm)	0.5 ppm
CO <sub>2</sub> sensor	0 to 10,000 ppm	±300 ppm (0 to 4,000 ppm) ±8% of m.v. (4,000 to 6,000 ppm) ±500 ppm (6,000 to 10,000 ppm)	10 ppm
Temperature/humidity module	+5 to +95% RH -10 to +60°C	±2.5% RH (5 to 95% RH) ±0.5°C (±1 digit)	0.1% RH 0.1°C

### testo 315-3 without Bluetooth

testo 315-3 ambient CO/CO<sub>2</sub> measuring instrument without Bluetooth, incl. USB mains unit & cable.

Order no. 0632 3153



### testo 315-3 Bluetooth

testo 315-3 ambient CO/CO<sub>2</sub> measuring instrument with Bluetooth, incl. USB mains unit & cable.

Order no. 0632 3154

Accessories for testo 315-3	Order no.
Temperature/humidity module Ø 25 mm, plug-in	0636 9725
testo fast printer IRDA with wireless infrared interface, 1 roll of thermal paper and 4 mignon batteries	0554 0549
Control and calibration set for humidity sensors (11.3% RH and 75.3% RH)	0554 0660

## Monitoring system testo 160

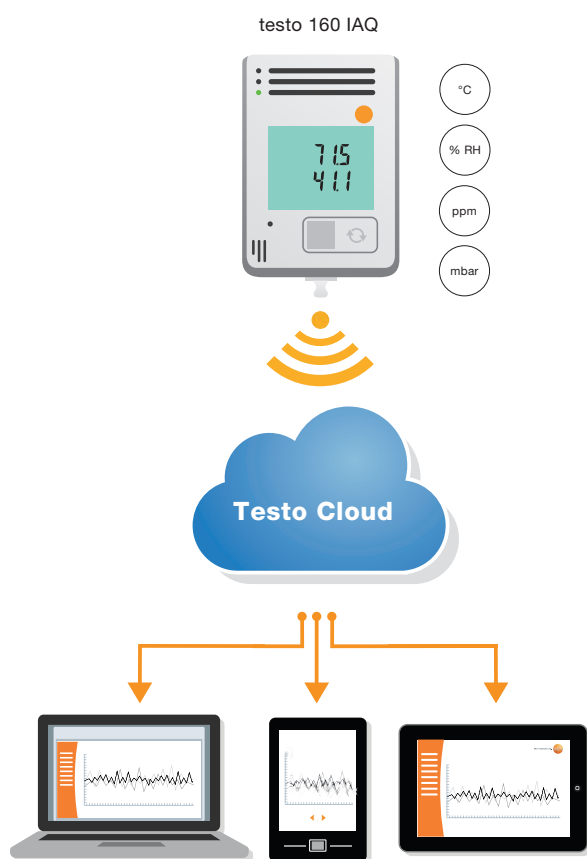
- Measuring value transfer by WLAN to the Cloud store
- Measuring values can be accessed on all terminal devices
- Alarm notifications by SMS or e-mail
- Inconspicuous design and small dimensions
- Deco-cover for optimum individual adaptation of the loggers to the surroundings

### testo 160 IAQ

testo 160 IAQ WiFi air quality logger with display and integrated sensors for temperature, humidity, CO<sub>2</sub> and atmospheric pressure



Order no. 0572 2014



Temperature measurement	
Measuring range	-10 to +50°C
Accuracy	±0.5°C
Resolution	0.1°C
Humidity measurement	
Measuring range	0 to 100% RH
Accuracy	±2% RH at 25°C and 20 to 80% RH ±3% RH at 25°C and < 20% RH and > 80% RH ±1% RH hysteresis ±1% RH / year drift
Resolution	0.1% RH
CO <sub>2</sub> measurement	
Measuring range	0 to 5,000 ppm
Accuracy	±(50 ppm + 3% of m.v.) at +25°C Without external power supply: ±(100 ppm + 3% of m.v.) at +25°C
Resolution	1 ppm
Pressure measurement	
Measuring range	600 to 1100 mbar
Accuracy	±3 mbar at 22°C
Resolution	1 mbar
WLAN	
Standard	802.11 b/g/n
Security	WPA2 Enterprise: EAP-TLS, EAP-TTLS-TLS, EAP-TTLS-MSCHAPv2, EAP-TTLS-PSK, EAP-PEAP0-TLS, EAP-PEAP0-MSCHAPv2, EAP-PEAP0-PSK, EAP-PEAP1-TLS, EAP-PEAP1-MSCHAPv2, EAP-PEAP1-PSK, WPA Personal, WPA2 (AES), WPA (TKIP), WEP

#### testo 160 IAQ accessories

#### Order no.

Deco-cover for testo 160 IAQ	0554 2012
Wall bracket for testo 160 IAQ	0554 2015
External USB voltage supply	0572 2020

## The testo 160 Cloud, see page 29.

Free access to the testo 160 Cloud is included in the scope of delivery. In the Cloud, you can view and manage the measuring values stored online and use the alarm function via e-mail. The system can also be set up and configured here.

### The advantages of the testo 160 Cloud at a glance:

- Central operating element for the monitoring, documentation and administration of all measuring points
- Secure protection of measurement data from unauthorized access by third parties
- Automatic storage of your measuring values and constant availability of all measurement data
- Alarm function for critical values
- Two licence packages (Basic, Advanced) with different range of functions

### Maximum flexibility with the Advanced licence:

- Measuring cycle freely adjustable
- Reports automatically sent by e-mail fulfil the documentation obligation
- Several user profiles – important, for example where there are several sites
- Alarm also by SMS



## The testo Saveris 2 App

With the App for iOS and Android, you can now operate the testo 160 WiFi data logger system even more easily and flexibly using the testo Saveris 2 App.

### More efficient commissioning\*:

- Easy detection and selection of the WiFi network
- Fast parallel commissioning of several loggers

### Easy network analysis\*:

- Test the strength and range of your WiFi network
- Create and send status reports

### Reliable alarm functions\*:

- Push notification of violations of limit values
- Combinable with e-mail or SMS alarms

\*These functions are only available in the Android version of the testo Saveris 2 App.



**testo Saveris 2 App**

for free download



## Pressure measuring instrument **testo 312-4**

- Tightness and serviceability test by pressure drop on gas pipes in accordance with DVGW-TRGI 2008
- Load test on gas pipes in accordance with DVGW-TRGI 2008 using the high pressure probe
- Regulator testing by recording readings over a defined period of time
- Checking the gas connection and gas flow pressure, as well as setting the nozzle pressure on gas burners and boilers
- Pressure test on drinking water pipes using water and with the support of the high pressure probe in accordance with DIN 1988 (TRWI) and using air in accordance with the ZVSHK information sheet
- Pressure test on waste water pipes using the high pressure probe

### testo 312-4

Differential pressure measuring instrument up to 200 hPa, DVGW-tested, incl. battery and calibration protocol

Order no. 0632 0327



### Basic set testo 312-4

Differential pressure measuring instrument testo 312-4  
 Hose set for testo 312-4  
 Balloon pump with bleed screw  
 Conical test stop 1/2"  
 Conical test stop 3/4"  
 testo fast printer  
 Pressure set for gas pressure measurement on heating units  
 System case



Illustration may differ from original

Order no. 0563 1327

	Pressure (internal sensor in the testo 312-4)	Pressure (via high pressure probe)	Temperature (via external temperature probe type K)
Measuring range	0 to 200 hPa	0 to 25 bar	dependent on the temperature probe used
Accuracy ±1 digit	±0.03 hPa (0 to +3 hPa) ±1.5% of m.v. (+3.1 to +40 hPa) ±2 hPa or ±1% of f.v. (+41 to +200 hPa)	±0.6% of f.v. (0 to 10 bar) ±0.6% of f.v. (>10 to 25 bar)	±0.4°C (-100 to +200°C) ±1°C (remaining meas. range)
Resolution	0.01 hPa	10 hPa	0.01°C

#### Accessories for testo 312-4

#### Order no.

Pressure set for gas pressure measurement on heating units	0554 0449
Hose set for testo 312-4	0554 3172
Desktop mains unit with international connection option	0554 1143
RS232 cable with USB adapter 2.0	0409 0178
testo fast printer IRDA with wireless infrared interface, 1 roll of thermal paper and 4 mignon batteries	0554 0549
Instrument case (height: 130 mm) for instrument, probes and accessories	0516 3300
testo 316-1 electronic gas leak detector with flexible measuring probe, incl. battery (see page 51)	0632 0316
testo 316-2 electronic gas leak detector with flexible measuring probe, incl. mains charger and earphones (see page 51)	0632 3162
Manual test pump for generating the test pressure	0554 3157
High pressure probe up to 25 bar	0638 1748



## Detector for leaks on natural gas pipes **testo 316-1**

- Flexible measuring probe for difficult-to-access areas
- TopSafe protective case protects against dirt and impact (option)
- Audible alarm if limit values are exceeded
- Visual alarm

### testo 316-1

testo 316-1 electronic gas leak detector with flexible measuring probe, incl. battery

Order no. 0632 0316



	Methane
Measuring range	0 to 10,000 ppm CH <sub>4</sub>
Lower response thresholds	100 ppm
1st alarm threshold	from 200 ppm CH <sub>4</sub> (LED yellow)
2nd alarm threshold	from 10,000 ppm CH <sub>4</sub> (LED red)

## Gas leak detector for fast control measurements **testo 316-2**

- Visual and audible alarm thanks to bar display for increasing and dangerous gas concentrations
- Trend display indicates maximum leakages
- Integrated pump
- Flexible measuring probe for difficult-to-access areas
- Earphone connection for reliable leakage detection in loud environments
- Long service life through rechargeable battery operation

### testo 316-2

Electronic gas leak detector with flexible measuring probe, incl. mains charger and earphones

Order no. 0632 3162



	Methane	Propane	Hydrogen
Measuring range	10 ppm to 4.0 vol. % CH <sub>4</sub>	10 ppm to 1.9 vol. % C <sub>3</sub> H <sub>8</sub>	10 ppm to 4.0 vol. % H <sub>2</sub>
Lower response thresholds	10 ppm	10 ppm	10 ppm
1st alarm threshold	200 ppm CH <sub>4</sub>	100 ppm C <sub>3</sub> H <sub>8</sub>	200 ppm H <sub>2</sub>
2nd alarm threshold	10,000 ppm CH <sub>4</sub>	5,000 ppm C <sub>3</sub> H <sub>8</sub>	10,000 ppm H <sub>2</sub>

## Pressure and leakage measuring instrument **testo 324**

- All measurements on gas and water pipes in one instrument, e.g. gas pipes according to TRGI 2008 G-600 and drinking water pipes according to ZVSHK EN 806-4
- High-resolution graphic colour display
- Simple menu guidance
- Extremely easy operation thanks to the single-hose connection
- Case with gas bladder
- Integrated pressure build-up to 300 mbar
- High-precision sensor technology
- DVGW-compliant measurement results

Leakage measurement	Measuring range: 0 to 10 l/h Accuracy: ±0.2 l/h or ±5% of m.v.
Pressure measurement	Measuring range: 0 to 1000 hPa Accuracy: ±0.5 hPa or ±3% of m.v.
Pressure measurement with high pressure probe (optional)	Measuring range: 0 to 25 bar Accuracy: ±0.6% of f.v. (0 to 10 bar) / ±0.6% of f.v. (>10 to 25 bar)
Absolute pressure measurement	Measuring range: 600 to 1150 hPa Accuracy: ±3 hPa
Overload	up to 1200 hPa
Temperature measurement TC type K (instrument only)	Measuring range: -40 to +600°C Accuracy: ±0.5°C or ±0.5%
Temperature measurement NTC type 5k (instrument only)	Measuring range: -20 to +100°C
DVGW authorization according to G 5952	Instrument class L up to volume = 200 litres

### Basic set testo 324: ready to measure for all legally required tests

testo 324 leakage measuring instrument, mains unit, system case, incl. feed unit, terminal block\* with connection hose, manual test pump to set the test pressure, adapter for the gas boiler test port, 3/4" and 1 1/4" high-pressure stage stops, testo EasyHeat software

Order no. 0563 3240 70

\* Instrument, pump and hose connections, incl. overpressure valve and stopcock




### Gas and water set testo 324: Professional measurement, documentation and checking



testo 324 leakage measuring instrument, mains unit for testo 324 (can also be used for basic printer), system case incl. feed unit, terminal block & connection hose, manual test pump to set the test pressure, adapter for the gas boiler test port, Y-distributor, high pressure probe up to 25 bar, high-pressure connection, conical test stops, 1/2, 3/4 inch, high-pressure stage stops: 3/8 + 3/4, 1/2 + 1, 3/4 + 1 1/4 inch, testo EasyHeat PC software

Order no. 0563 3240 77

#### Accessories for testo 324

		Order no.
	Single-pipe counter cap, connects test fittings to pipe	0554 3156
	Basic infrared printer (incl. batteries)	0554 0549
	testo 316-2 Electronic gas leak detector with flexible measuring probe, incl. mains charger and earphones (see page 51)	0632 3162

## Sound level meter testo 816-1

- Sound level metering according to IEC 61672-1 class 2 and ANSI S1.4 type 2
- Frequency weighting A and C
- Switchable time weighting fast/slow

Measuring range	30 to 130 dB
Frequency range	20 Hz to 8 kHz
Accuracy ±1 digit	±1.4 dB (under reference conditions: 94 dB, 1 kHz)
Resolution	0.1 dB

### testo 816-1

testo 816-1, sound level meter, incl. microphone, wind protection, PC software, connection cable, instruction manual on CD-ROM and batteries in the system case



Order no. 0563 8170

#### Accessories

#### Order no.

Calibrator for regular calibration of  
testo 815, testo 816-1

0554 0452

## Lux meter testo 540

- Sensor adapted to spectral sensitivity of the eye
- Hold function and max./min. values
- Display illumination

Measuring range	0 to 99,999 lux
Accuracy ±1 digit	±3 lux or ±3% of m.v. (compared to reference class B, DIN 5032 part 7)
Resolution	1 lux (0 to 19,999 lux) 10 lux (remaining meas. range)

### testo 540

testo 540, handy lux meter, incl. protective cap, calibration protocol and batteries



Order no. 0560 0540

## Voltage tester

### testo 750

- Clear, patented all-round LED display
- Fibre-optic technology for optimum voltage indication
- Anti-slip ring for secure grip
- Ergonomic handle shape
- Measuring point illumination

Technical data	testo 750-2	testo 750-3
Voltage testing	12 to 690 V AC/DC	
Continuity testing	< 500 k $\Omega$	
Rotating magnetic field testing	100 to 690 V AC at 50/60 Hz	
Single pole phase testing	100 to 690 V AC at 50/60 Hz	
RCD/RC trigger function	✓	✓
LC display	-	✓
Measuring point illumination	✓	✓
Measurement category	CAT IV 600 V CAT III 1000 V	
Authorizations	TÜV, CSA, CE	
Standard	EN 61243-3:2010	

### testo 750-2

testo 750-2, voltage tester incl. batteries, measuring tip protector and measuring tip caps

Order no. 0590 7502



### testo 750-3

testo 750-3, voltage tester incl. batteries, measuring tip protector and measuring tip caps

Order no. 0590 7503



#### Accessories for testo 750

	Order no.
ISO voltage tester calibration certificate	0520 0750
DAkkS voltage tester calibration certificate	0520 0751

## Current/voltage tester

### testo 755

- Automatic measurement parameter detection
- Certified according to the DIN-EN 61243-3:2010 voltage tester standard
- Measurement result without switching on or selection
- Measuring point illumination
- Exchangeable measuring tips

Technical data	testo 755-1	testo 755-2
Voltage measuring range	6 to 600 V AC/DC	6 to 1000 V AC/DC
Current measuring range	0.1 to 200 A AC	
Resistance measuring range	1 $\Omega$ to 100 k $\Omega$	
Continuity testing	< 50 $\Omega$	
Rotating magnetic field testing	-	100 to 690 V AC at 50/60 Hz
Single pole phase testing	-	100 to 690 V AC at 50/60 Hz
Measuring point illumination	✓	
Measurement category	CAT IV 600 V CAT III 1000 V	
Authorizations	TÜV, CSA, CE	
Standards	EN 61243-3:2010, EN 61010-1	

### testo 755-1

testo 755-1, current/voltage tester, incl. batteries and measuring tips

Order no. 0590 7551



### testo 755-2

testo 755-2, current/voltage tester, incl. batteries and measuring tips

Order no. 0590 7552



#### Accessories for testo 755

	Order no.
Set of replacement measuring tips	0590 0015
ISO current/voltage tester calibration certificate	0520 0755
DAkkS current/voltage tester calibration certificate	0520 0756

## Digital multimeter testo 760

- Simple, modern operation with function keys instead of dial
- Measurement parameter detection and selection via the socket assignment
- Prevents incorrect settings
- True root mean square measurement - TRMS

Technical data	testo 760-2	testo 760-3
True RMS		✓
Voltage measuring range	0.1 mV to 600 V AC/DC	0.1 mV to 1000 V AC/DC
Current measuring range	0.1 µA to 10 A AC/DC	
Resistance measuring range	0.1 to 60 MΩ	
Frequency measuring range	0.001 Hz to 30 MHz	0.001 Hz to 60 MHz
Capacitance measuring range	0.001 nF to 30,000 µF	0.001 nF to 60,000 µF
Temperature measuring range	-20 to +500°C	
Continuity testing		✓
Measurement category	CAT IV 600 V / CAT III 1000 V	
Authorizations	TÜV, CSA, CE	
Standards	EN 61326-1	

### testo 760-2

testo 760-2, TRMS multimeter, incl. batteries, 1 set of measuring cables and 1 x adapter for type K thermocouples

Order no. 0590 7602



### testo 760-3

testo 760-3, TRMS multimeter, incl. batteries and 1 set of measuring cables

Order no. 0590 7603



Accessories for testo 760	Order no.
Thermocouple adapter type K	0590 0002
Clamp meter adapter	0590 0003
Magnetic suspension system	0590 0001
Set of safety crocodile clips, suitable for 0590 0011 and 0590 0012	0590 0008
Set of 4 mm standard measuring cables (angled plug), suitable for 0590 0008	0590 0011
Set of 4 mm standard measuring cables (straight plug), suitable for 0590 0008	0590 0012
testo 760 transport bag	0590 0016
ISO multimeter calibration certificate	0520 0760
DAkkS multimeter calibration certificate	0520 0761

## Clamp meter testo 770

- Unique grab mechanism makes it easier to work at tight measuring points
- Auto AC/DC for current and voltage
- True root mean square measurement - TRMS
- With additional functions, such as starting current, power and µA measurement
- Bluetooth



Technical data	testo 770-2	testo 770-3
True RMS		✓
Voltage measuring range	1 mV to 600 V AC/DC	
Current measuring range	0.1 to 400 A AC/DC	0.1 to 600 A AC/DC
Performance measurement	-	✓
µA measuring range	0.1 to 400 µA AC/DC	
Resistance measuring range	0.1 Ω to 40 MΩ	0.1 Ω to 60 MΩ
Temperature measuring range	-20 to +500°C	
Bluetooth and testo Smart Probes App	-	✓
Measurement category	CAT IV 600 V / CAT III 1000 V	
Authorizations	TÜV, CSA, CE	
Standards	EN 61326-1, EN 61140	

### testo 770-2

testo 770-2, TRMS clamp meter, incl. batteries, 1 set of measuring cables and 1 x adapter for type K thermocouples

Order no. 0590 7702



### testo 770-3

testo 770-3, TRMS clamp meter, incl. batteries and 1 set of measuring cables

Order no. 0590 7703



Accessories for testo 770	Order no.
Thermocouple adapter type K (for testo 770-2/-3 only)	0590 0021
Set of safety crocodile clips, suitable for 0590 0011 and 0590 0012	0590 0008
Set of 4 mm standard measuring cables (angled plug), suitable for 0590 0008	0590 0011
Set of 4 mm standard measuring cables (straight plug), suitable for 0590 0008	0590 0012
testo 755 / testo 770 transport bag	0590 0017



# Guarantee comfort level. Increase efficiency.

Measuring technology from Testo helps you to fulfil these tasks.

**Set refrigeration systems efficiently**



**Check electrical installations**



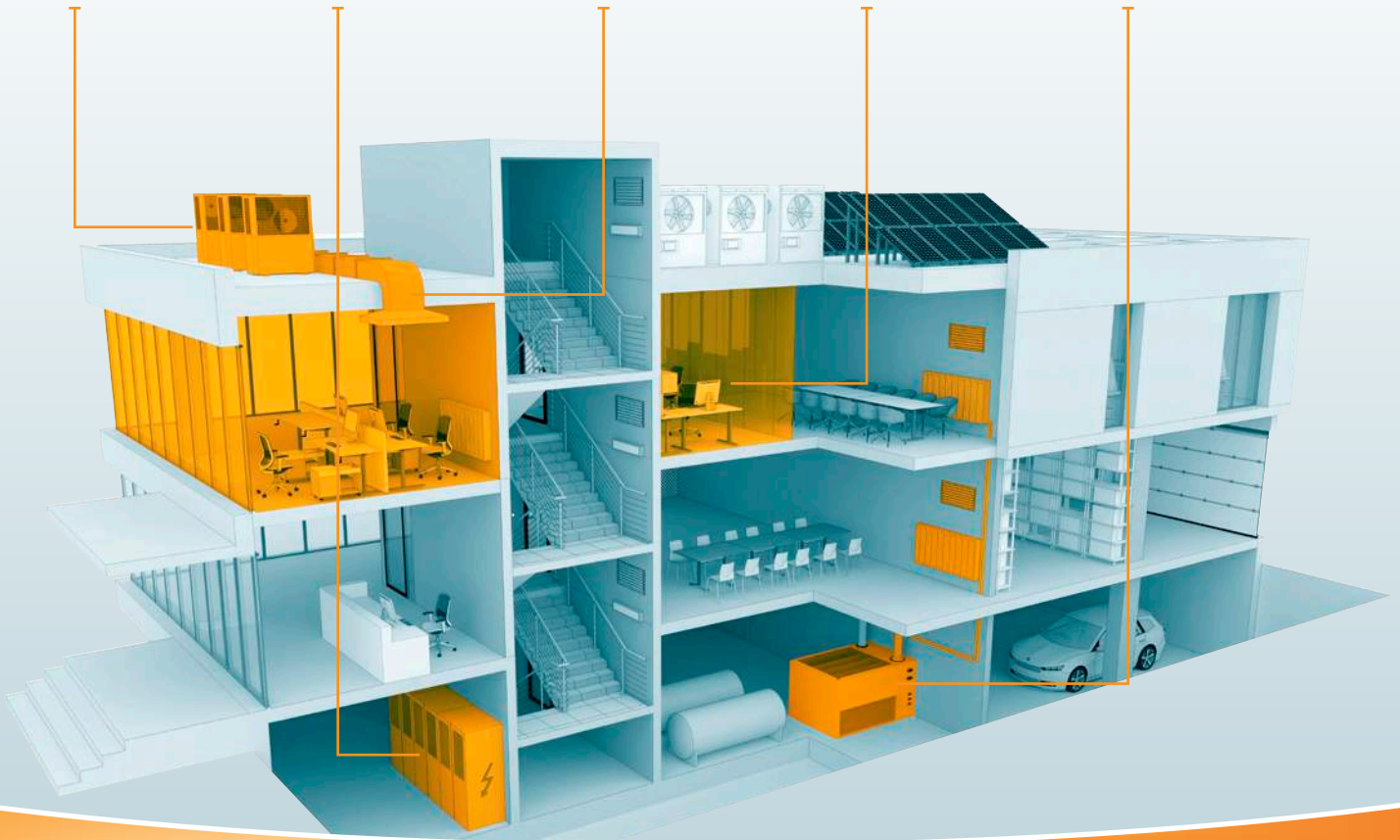
**Set ventilation systems efficiently**



**Ensure air quality and comfort level**



**Set heating systems efficiently**



Subject to change, including technical modifications, without notice.

