

Be sure. **testo**



Building systems always under control with Testo.







Reliable and energy-efficient operation of technical systems in buildings. With smart measurement technology and tailored services from Testo.



Too cold, too draughty, too humid?
With the testo 400, you can deal
with any complaints using objective
comfort values.

Testo – your competent partner for technical facility management.

Facility managers must take care of all building systems, especially:

-  Refrigeration, air conditioning and ventilation plants
-  Heating systems and heat pumps
-  Electrical installations and systems
-  Indoor climate monitoring
-  Mechanical equipment
-  Energy supply

In the process, everything must be kept in view:

- Uninterrupted operation of the plants
- Energy security and efficiency
- Employee productivity
- Operating costs
- User health and comfort
- Environmental protection
- Standards and regulations

A strong partner is needed to solve the many different tasks.

At Testo we're there for you:

- Complete and networked measurement technology and solutions for all technical facility management applications
- Problem-free management of measurement, measurement site and customer data
- Comprehensive services: Consulting, training, service, repair and calibration

Key benefits:

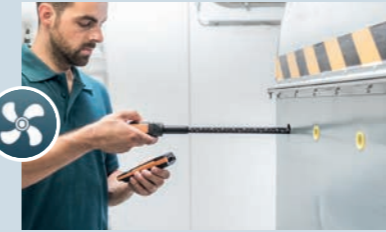
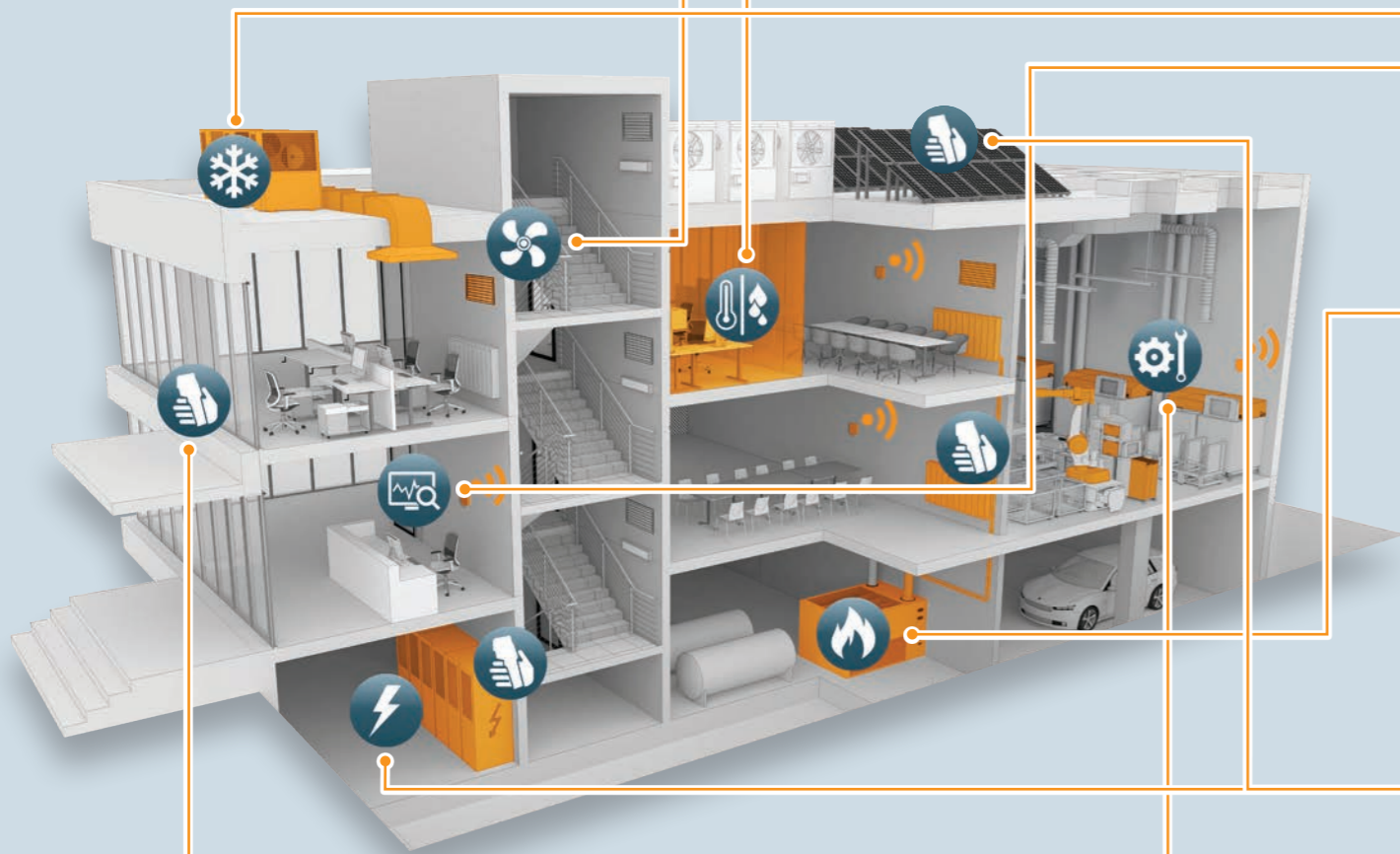
- ✓ One contact for all aspects of measurement technology and services
- ✓ Highest precision, reliability and quality for all measurement requirements
- ✓ Full flexibility with tailored solutions
- ✓ Time savings through efficient workflows
- ✓ Simple and convenient data management
- ✓ Security thanks to digital documentation

The use of digital technology enables you to reliably adhere to processes in accordance with ISO 9001 and digitally store readings or send them in reports. Application-specific apps and optimized measurement menus make your work easier, faster and therefore cheaper. Bluetooth® connections to the actual sensors make it possible to carry out measurements reliably and precisely, wherever required.

Since all of the measuring technology can be operated intuitively, all procedures are learned quickly, which not only makes the work faster, but also less prone to errors. The measurement results can also be easily documented - including in graphical progression displays and digital images. For reliable plant operation and more efficient workflow in building management.

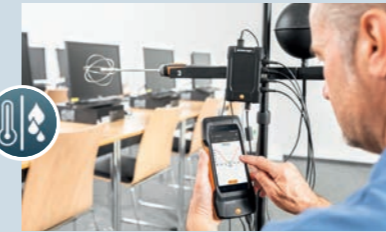
Ensure smooth operation.
Increase energy and process efficiency.
Ensure health and comfort.

Measuring technology from Testo can help you to fulfil these tasks simply, quickly and reliably.



Efficient adjustment of air conditioning and ventilation systems
 Full performance with minimum energy consumption, only with correctly controlled supply and exhaust air systems, through precise and standard-compliant flow measurement with multifunction IAQ measuring instruments testo 400 and testo 440.

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Air quality and comfort guaranteed
 Optimum indoor climate at the workplace with minimum health risk and maximum employee performance, through objective and standard-compliant comfort measurement with the multifunction instrument testo 400 and the CO2, temperature, humidity, lux and sound level measuring instruments from Testo.

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Record all important VAC parameters with indoor climate monitoring
 Safety of processes and health of employees through permanent monitoring of room and process air quality in office and industrial buildings, with data loggers and monitoring systems from Testo.

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Efficient operation of heating systems
 Energy-efficient and safe operation of conventional heating systems through regular flue gas analysis with testo 300 NEXT LEVEL, checking of temperatures and pressures, and detection of gas leaks on heating systems and heat pumps with intelligent measuring instruments from Testo.

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Efficient adjustment of refrigeration systems and heat pumps
 Optimally and energy-efficiently operated refrigeration and heat pump systems thanks to regular inspection, maintenance and documentation with the digital manifold testo 557s, wireless probes, the testo Smart App and the fully automatic charging system testo 560i.

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Testing electrical installations and photovoltaic systems
 Trouble-free electrical and electronic systems thanks to continuous inspection of electrical systems and control cabinets, but also photovoltaic systems with thermal imagers such as testo 883, as well as checking all electrical parameters with the current clamp meter testo 770 and the digital multimeter testo 760.

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Perform preventive maintenance
 Smooth and power-saving operation of mechanical systems, voltage systems and faulty components or connections through preventive control and maintenance with the smart thermal imager testo 883.

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Save energy through building thermography
 Identify energy losses, thermal bridges and leaks as well as anomalies and damage to building envelopes or interiors quickly, safely and intuitively with smart thermal imagers such as testo 883 or thermometers for non-contact temperature measurement from Testo.

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Efficient adjustment of ventilation systems. Ensure indoor air quality and comfort.

Incorrectly configured ventilation and air conditioning systems consume an unnecessarily large amount of energy and impact on health. Smart measuring instruments from Testo help you regulate your systems accurately and efficiently. Application-specific measurement menus, Bluetooth® sensors and intuitive operation not only make your work easier, they also guarantee accurate results. For optimum indoor air quality and comfort with minimum energy consumption.



The universal **testo 400**

Are you an expert for complete ventilation systems or for proof of comfort – in accordance with norms? You place the highest demands on precision in cleanrooms, laboratories and industrial applications? Then you can fulfil your complex tasks smarter, faster and better with the testo 400. Thanks to the simplest Smart-Touch operation imaginable, complete data management on site and an intelligent measurement assistant.

Order no. 0560 0400



The flexible **probe portfolio**

The probes cover all air conditioning and ventilation applications and can be used with both the testo 400 and the testo 440. All handles and probes are mutually compatible, allowing you to expand your probe selection as required. A particularly practical feature: the digital probes can be calibrated independently of the measuring instrument. That means the measuring instrument remains in use and you can carry on working with other probes. For a selection of probes see p.8.



The compact **testo 440**

Are you a service engineer, taking care of the general functional testing of air conditioning and ventilation systems? Do you only document measurement results occasionally, and when you do, you simply want to transfer the data to a PC? Then the testo 440 with its clear display, easy button operation, measurement data storage in the instrument, as well as .csv- export to your PC, is the ideal choice.

Order no. 0560 4401



testo 440 Air flow combo kit 1 with Bluetooth®

- One measuring instrument for all climate-related parameters
- Intuitive: clearly structured measurement menu for volume flow and parallel determination of flow, humidity and temperature in ventilation ducts or at ventilation outlets
- Clever: Hot wire probe with telescope (0.85 m) for duct measurement, and vane probe (ø 100 mm) with Bluetooth® for outlet measurements

Order no. 0563 4406



testo 400 Air flow kit with 16 mm vane probe

- Standard-compliant determination of the volume flow in ducts using grid measurements as per EN ISO 12599 and ASHRAE 111
- Determination of the volume flow at outlets by measuring the reference pressure and entering the manufacturer-specific K-factor

Order no. 0563 0400 72



Volume flow hood kit **testo 420**

- Less than 2.9 kg in weight
- Flow straightener for higher precision measurements at swirl outlets
- Detachable and tiltable measuring instrument with large display
- App integration via Bluetooth® for fast, easy monitoring and reporting on site
- Compatible with testo 400

Order no. 0563 4200



testo 400 Data logger IAQ and comfort kit with tripod

- Determination of the PMV and PPD comfort level parameters in accordance with EN ISO 7730 and ASHRAE 55
- Determination of the draught and degree of turbulence comfort level parameters in accordance with EN ISO 7730 and ASHRAE 55
- Indoor air quality: Determination of CO₂ concentration, humidity, air temperature and degree of turbulence in workplaces, including long-term measurement with IAQ data logger

Order no. 0563 0401



Vane anemometer **testo 417**



- Compact 100 mm vane anemometer with App connection
- Easy, fast and precise measurement of flow velocity, volume flow and temperature at air inlets and outlets

Order no. 0563 0417



testo Smart Probes VAC kit

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

Order no. 0563 0003 10



testo 417-2 Funnel kit



- Kit consisting of digital 100 mm vane anemometer, 2 funnels and flow straightener
- Optimal for volume flow measurement at vent and swirl diffusers as well as plate outlets and for the adjustment of ventilation systems

Order no. 0563 2417



Differential pressure measuring instrument **testo 512-1**



- Compact differential pressure measuring instrument (0 to 200 hPa) with App connection
- Simple, fast and precise differential pressure measurement for checking filters and for Pitot tube measurement in ventilation ducts

Order no. 0563 1512

Recommended probes and accessories for testo 400 / testo 440.



Probes	Order no.
Flow probes	
Hot wire probe including temperature and humidity sensor, 90° bendable	0635 1571 0635 1572
Vane probe (Ø 16 mm), including temperature sensor	0635 9571 0635 9572
High-precision vane probe (Ø 100 mm), including temperature sensor	0635 9371 0635 9372
Vane probe (Ø 100 mm), including temperature sensor	0635 9431 0635 9432
Comfort probes	
Turbulence probe, fixed cable	0628 0152
CO ₂ probe, including temperature and humidity sensor	0632 1551 0632 1552
CO probe	0632 1271 0632 1272
Lux probe, fixed cable	0635 0551
Globe thermometer for measuring the radiant heat, Ø 150 mm, TC type K	0602 0743
WBGT Kit for universal IAQ measuring instrument testo 400, incl. globe thermometer (TC Type K), ambient temperature probe and humidity temperature probe (both Pt100), tripod, case	0618 7220

with Bluetooth® fixed cable

Probes	Order no.
Humidity probes	
Humidity/temperature probe	0636 9731 0636 9732
High-precision humidity/temperature probe	0636 9771 0636 9772
Temperature probes	
Fast-action surface probe (TC type K)	0602 0393
Robust air temperature probe (TC type K) – fixed cable 1.2 m	0602 1793

with Bluetooth® fixed cable

Accessories	Order no.
Accessories for comfort level measurement	
Measuring tripod for comfort level measurements with standard-compliant positioning of probes (including case)	0554 1591
Accessories for digital flow probes	
Extendable telescope for testo 400 / 440 flow probes (37.5 to 100 cm including 90° angle)	0554 0960
Telescope extension (0.9 m) for testo 400 / 440 flow probes	0554 0990
90° angle for connecting vane probes (Ø 100 mm)	0554 0991
Handle adapter for connection to flow probes	0554 2160
Extendable telescope with ball head joint	0430 0946

Digital, smart, flexible. More than measuring technology.



Data management is also playing an increasingly important role in building technology. Measuring instruments and solutions from Testo therefore provide **all relevant information on measurement, measurement site and customer data** in different ways. Just the way you need it:

- **Storage of all data** for control, analysis and documentation in measuring instruments, Apps, PC software or the Testo Cloud
- **Export of measurement and customer data** to measuring instruments and Apps for further processing
- **Connection of measuring instruments and Apps** to the specific software solutions (e.g. CAFM)*

Your advantage:

Secure, simple and flexible data management!

In addition, our smart measuring instruments **automatically connect to wireless probes and Apps**. This means **more flexibility, time savings and reliability for you**. Our **testo Smart App** plays a central role in this. Versatile, intuitive and reliable, the multi-talent supports you in all HVAC&R measurement tasks.

* Interface support required

One for all. The testo Smart App.



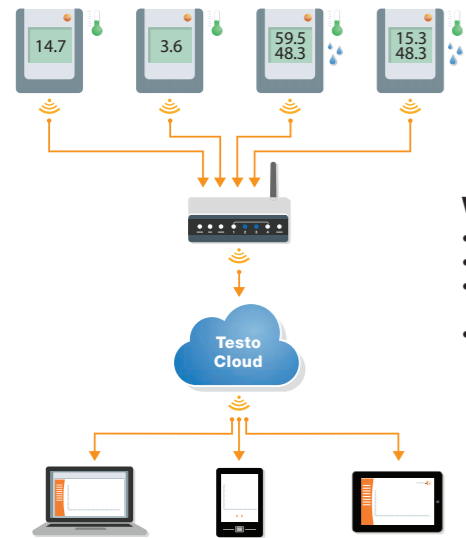
The testo Smart App is the **universal talent for all HVAC&R applications** and works with all app-enabled measuring instruments from Testo. With the testo Smart App, you can evaluate results even faster, e.g. by **graphical progress display**. Apart from that, it helps you to avoid measurement errors, as **stored measurement programs** guide you step by step through the configuration and the measurement. With the integrated **documentation functions**, reports can be created on site, and digital measurement protocols, including photos, can be sent as PDF or CSV files directly by e-mail.



Download now free of charge
For Android and iOS

Record all important VAC parameters with indoor climate monitoring.

Data loggers and monitoring systems from Testo are ideally suited to the continuous monitoring of indoor air quality in office and industrial buildings. They measure and store all climate-relevant parameters and enable timely countermeasures to be taken in the event of deviations, even before serious consequences arise for the health of employees and the safety of processes.



WiFi data logger system **testo Saveris 2**

- Simple: WiFi data loggers measure temperature and humidity automatically
- Reliable: Measurement values are stored in data loggers and in the free Testo Cloud.
- Flexible: Loggers can be placed anywhere, access to measured values with PC or tablet/smartphone at all times
- Practical: System can be adapted to your requirements, and extended without limitation by additional loggers



WiFi data logger for temperature **testo Saveris 2-T1**

- Integrated temperature probe
- Limit value violation alarms by e-mail or (optionally) SMS
- Automated temperature monitoring with integrated probe
- Access to readings anywhere and with any device
- Data transfer by WiFi

Order no. 0572 2031



WiFi data logger for temperature & humidity **testo Saveris 2-H1**

- Integrated temperature and humidity probes
- Limit value violation alarms by e-mail or (optionally) SMS
- Automated temperature monitoring with integrated probe
- Access to readings anywhere and with any device
- Data transfer by WiFi

Order no. 0572 2034



WiFi data logger for temperature, humidity and CO₂ **testo 160 IAQ**

- Continuous remote monitoring of temperature, humidity, CO₂ and atmospheric pressure
- Data transfer via WiFi directly via the Testo Cloud
- Automatic alarms when limit values are violated

Order no. 0572 2014



Temperature/humidity data logger **testo 175 H1**

- Sensor for temperature and humidity
- Continuous monitoring of humidity and temperature in offices and storerooms
- Easy data transfer via USB
- Data evaluation and documentation on a PC

Order no. 0572 1754



Temperature/humidity data logger with display **testo 176 H1**

- Measure humidity and temperature on two channels thanks to its two connections for external sensors
- Temperature measuring range from -20 °C to +70 °C
- Data evaluation and documentation on a PC

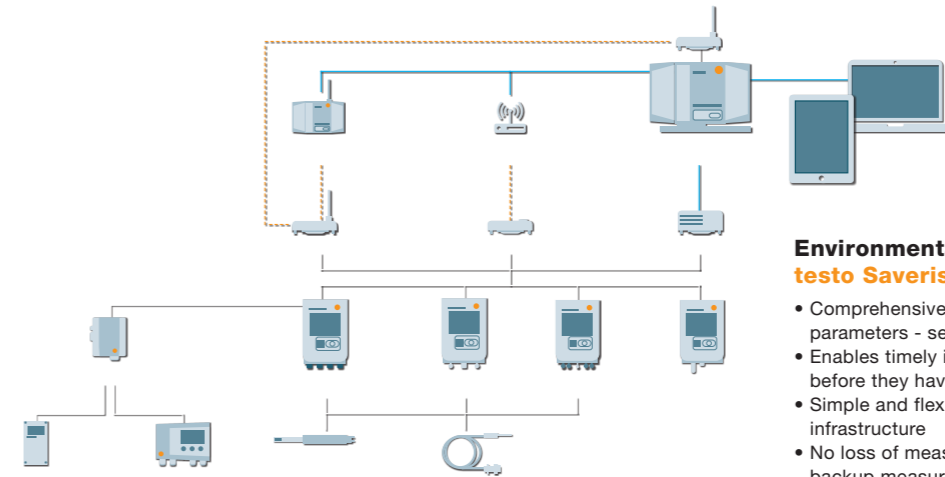
Order no. 0572 1765



Temperature/humidity data logger **testo 176 H2**

- For two external temperature/humidity probes
- Measurement data memory 2 million readings
- Data evaluation and documentation on a PC
- With robust metal housing

Order no. 0572 1766



Environmental monitoring system **testo Saveris 1**

- Comprehensive monitoring of all important environmental parameters - seamless and automated
- Enables timely intervention in the event of deviations - before they have any far-reaching consequences.
- Simple and flexible installation to match your existing infrastructure
- No loss of measurement data due to redundant system backup measures



Base station **testo Saveris Base V3.0**

The core component of the Saveris 1 environmental monitoring system



Data logger module **testo 150 TC4**

Four connections for digital probes



Data logger module **testo 150 TUC4**

Four connections for all Testo sensors with TUC connector



Data logger module **testo 150 DIN2**

Two connections for standard probes via miniDIN



Data logger module **testo 150 T1**

Internal NTC temperature sensor

Efficient adjustment of heating systems.

Use smart, flexible measuring technology from Testo and application-specific Testo apps to analyze flue gases with precision, to measure flow and return temperatures, to locate gas leaks and to carry out pressure drop tests. Doing this enables you to optimize the efficiency of the system as well as to eliminate weak points and incorrect user behaviour.



Flue gas analyser **testo 310 / testo 300 NEXT LEVEL**



testo 310 kit

testo 310 Basic kit

- testo 310 Flue gas analyser instrument including lithium battery, calibration protocol for measurement of O₂, CO, hPa and °C
- 180mm probe with cone
- USB mains unit incl. cable
- Silicon tubing for pressure measurement
- particle filters
- sturdy case
- 2-year warranty

Order no. 0563 3100



testo 300 Basic kit

testo 300 NEXT LEVEL Basic kit

- testo 300 Flue gas analyser instrument including O₂, CO sensor (upto to 4,000 ppm)
- testo Bluetooth® Connector
- USB mains unit incl. cable
- Compact Flue gas probe
- Spare dirt filters for compact probe (10x)
- System case for instrument and accessories
- Downloadable testo EasyHeat software

• 2-year warranty

Order no. 5305 6430 70



testo 300 Professional kit

testo 300 NEXT LEVEL Professional kit

- testo 300 Flue gas analyser instrument including O₂, CO sensors (up to 15,000 ppm)
- NO sensor retrofittable
- Modular Flue gas probe 335mm with max. temperature 1000 °C
- testo Bluetooth® Connector
- High-quality sensor technology
- Large system case for instrument and accessories
- Downloadable testo EasyHeat software

• 2-year warranty

Order no. 5305 6430 73



testo Bluetooth® Connector

testo Bluetooth® Connector for connecting the testo 300 flue gas analyzer to testo Smart Probes.

Order no. 0554 3004

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

Gas leak detector **testo 316**



testo 316i with flexible measuring probe

- Multi-colour LED on sensor head as well as audible alarm
- Flexible probe for inaccessible areas
- Connection to testo Smart App for documentation and ppm display

Order no. 0560 3161



testo 316-1 with multi-colour display

- All information at a glance thanks to the multi-colour display
- Flexible probe for inaccessible areas
- Connection to testo Smart App for documentation and ppm display

Order no. 0560 3162



testo 316-1 EX with EX protection

- ATEX (EU/EFTA) certification
- Fine mode for precise detection of leaks
- Auto-identification of the most common gases
- Connection to testo Smart App

Order no. 0560 3163



testo 316-2 EX with 2-in-1 sensor and EX protection

- 2-in-1 sensor for leak detection of fuel gases and refrigerants without changing sensor
- ATEX (EU/EFTA) certification
- Fine mode and auto-identification of the most common gases
- Connection to testo Smart App

Order no. 0560 3164



Differential pressure measuring instrument with smartphone operation **testo 510i**

- For differential pressure measurements (0 to 150 hPa) on gas heaters
- Measurement menu for pressure-drop test, including alarms
- Magnetic fixture for easy attachment

Order no. 0560 1510



Clamp thermometer with smartphone operation **testo 115i**

- Measurement of flow and return temperature in heating systems
- Temperature measurement on refrigeration systems for calculation of superheating and subcooling
- Problem-free use at measuring points that are a long distance apart – Bluetooth® range up to 100 m
- Measuring range -40 to +150 °C

Order no. 0560 2115 02



Thermometer with air probe and smartphone operation **testo 915i**

- Smart Probe for wireless measurement of air and ambient temperature with measuring range -50 to +400 °C
- Easy operation, evaluation and documentation with cost-free testo Smart App

Order no. 0563 3915



testo Smart Probes Heating kit

- Measurement of gas flow pressure and static pressure
- Non-contact temperature measurement on underfloor heating systems and radiators
- Measurement menu for pressure-drop test, including alarms
- Fast image documentation with IR temperature readings and measurement spot marking

Order no. 0563 0004 10



Differential pressure measuring instruments **testo 512-1 / 512-2**

- Compact differential pressure measuring instruments (testo 512-1: 0 to 200 hPa; testo 512-2: 0 to 2000 hPa) with App connection
- Simple, fast and precise differential pressure measurement on gas boilers

Order no. 0563 1512 (testo 512-1)
Order no. 0563 2512 (testo 512-2)



Differential temperature measuring instrument **testo 922**

- Compact 2-channel temperature measuring instrument for TC Type K with App connection
- Display of differential temperature
- Large measuring range from -50 °C to +1000 °C

Order no. 0563 0922

Efficient adjustment of refrigeration systems and heat pumps.

The power consumption of refrigeration and air conditioning systems is immense. If you can achieve optimal configuration for your systems and check them regularly, you will save money. Testo can help make the commissioning and maintenance of refrigeration systems and heat pumps as convenient and reliable as possible for you, with new digital manifolds, suitable probes and the testo Smart App. For the easy testing of refrigeration systems, there is the testo Smart Probes AC & refrigeration test kit. testo 316-3 reliably detects leaks in refrigerant containers and hoses.



Smart digital manifolds testo 570s, testo 557s and testo 550s

- All results at a glance thanks to the large graphic display
- Exceptionally compact and reliable with IP 54 protection class
- Perfect and wireless interaction with Smart Probes, refrigerant scale and Smart App thanks to automatic Bluetooth® connection
- Even greater flexibility for your measurements and documentation with the testo Smart App

testo 557s Smart Vacuum Kit

Smart digital 4-way manifold with wireless temperature probes in practical case

Order no. 0564 5571

testo 570s Smart Vacuum Kit

Smart digital 4-way manifold for long-term measurements with super long battery life and with wireless temperature probes in practical case

Order no. 0564 5702



App-controlled digital manifold testo 550i

- All activities, from measurement through to documentation, using the testo Smart App on your smartphone
- The smallest digital manifold on the market
- Maximum reliability thanks to the extremely robust housing with IP54 protection class
- Optionally expandable with testo Smart Probes for wireless measurement of temperature, humidity and vacuum

testo 550i Smart Kit

App-controlled digital 2-way manifold with wireless temperature probes in practical case, incl. calibration protocol and batteries

Order no. 0564 3550



Automatic filling system testo 560i



- Automatic and precise refrigerant charging according to target superheat, subcooling and weight thanks to intelligent valve
- Wireless connection and operation with Testo manifolds and testo Smart App via Bluetooth®

Order no. 0564 2560 (kit with scale and valve)



testo Smart Probes AC & refrigeration test kit

- App-controlled professional measuring instruments for pressure, temperature and humidity measurement
- For fast and easy testing of refrigeration systems
- Pressure measurement without hoses – without refrigerant loss
- 100 m Bluetooth® range for especially flexible use
- Customized reports in just one click

Order no. 0563 0002 10



Leak detector for refrigerants testo 316-3

- For CFC, HFC (partially and completely halogenated), H₂
- High sensitivity (< 4 g/a)
- Fulfills the requirements of the F-gas regulation

Order no. 0563 3163

Test electrical installations and carry out preventive maintenance.

The inspection of electrical and mechanical systems and switch cabinets is one of the most important facility management tasks. Testo offers you a whole range of smart devices for testing electrical connections and determining the performance of switch cabinets, refrigeration systems, heat pumps and air conditioning and heating equipment. With Testo thermal imagers, you can reliably identify problem areas such as overheated components in mechanical plants or in electrical control cabinets, so that you can replace them in good time. The Testo apps make it easier for you to take measurements and also to document them.



Thermal imager with App testo 872

- Infrared resolution 320 x 240 pixels (with testo SuperResolution technology 640 x 480 pixels)
- Thermal sensitivity 0.06 °C
- Integrated digital camera
- With connection to the testo Thermography App
- Wireless measurement data transfer from testo 770-3 clamp meter and testo 605i humidity measuring instrument
- testo ScaleAssist (automatic contrast adjustment)

Order no. 0560 8721



Thermal imager with intelligent image management testo 883

- Infrared resolution 320 x 240 pixels (with testo SuperResolution technology 640 x 480 pixels)
- Thermal sensitivity 0.04 °C
- Integrated digital camera and laser marker
- With connection to the testo Thermography App
- Wireless measurement data transfer from testo 770-3 clamp meter and testo 605i humidity measuring instrument
- With testo SiteRecognition (intelligent image management) and testo ScaleAssist (automatic contrast adjustment)

Order no. 0560 8830



Clamp meter testo 770-3

- Comfortable working even in tight spaces, thanks to completely retractable pincer arm
- Easy power measurement
- TRMS for highly accurate results, even in large electrical installations with irregular patterns
- Measurement of inrush current
- All readings in view, and at a safe distance from the measuring location, with the testo Smart App

Order no. 0590 7703






Digital multimeter testo 760-2

- Reliable work thanks to automatic measurement parameter recognition
- TRMS for highly accurate results, even in large electrical installations with irregular patterns
- Low-pass filter for accurate measurements on motors controlled by frequency converters



Order no. 0590 7602



Save energy costs with measurement technology and solutions.

-  Checking the energy efficiency of buildings with Testo thermal imagers
-  Optimally adjusted air conditioning, refrigeration, ventilation and heating systems with HVAC&R measuring instruments and monitoring systems from Testo
-  Preventive maintenance of mechanical equipment and electrical installations with thermal imagers and electrical measuring instruments from Testo

And ensure sustainable energy production.

-  Ensure trouble-free operation of solar energy plants with Testo thermal imagers
-  Easy and fast installation and testing of heat pumps with digital manifolds from Testo