

# Smart pros rely on Smart Probes.

Measure quickly and reliably without cables. Everything in view with one click. testo Smart Probes – compact pro measurement technology for your smartphone.

## High-tech from the Black Forest.

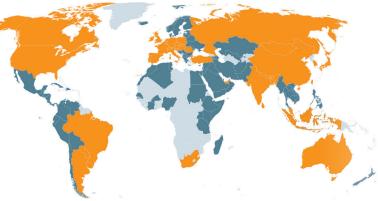


For more than 60 years, Testo has stood for innovative measuring solutions made in Germany. As an expert in measuring technology and global market leader in portable measuring technology, we provide over 650,000 customers worldwide with high-precision measuring instruments for many different sectors. Whether in refrigeration, air conditioning and environmental technology, industrial

applications, for exhaust and flue gas analysis, in the pharmaceutical and health sectors, for the monitoring of indoor air and food quality, or in the electrical field – we measure it. Our products help to save time and resources, to protect the environment and the health of humans, and to increase the value of goods and services.

## With roots in the Black Forest. At home all over the world.

Testo, whose headquarters are in the Black Forest, is an expert for highly precise measurement technology and innovative measurement solutions. In 35 subsidiary companies around the world, roughly 3,200 employees work in research, development, production and marketing for the high-tech company. Testo products, solutions and services help save time and resources, protect the environment and human health and improve the quality of goods.



Subsidiary companies

#### Our innovations are the engine which drive you forward.

The requirements for practical measurement solutions are becoming increasingly more complex and specific. That is why we have set ourselves the key task of identifying these customer requirements in industry and trade and translating them permanently into new technology. We carry out our own intensive research, which has given us a leading role in the market for decades.

Did you know that Testo is the inventor of Smart Probes? For five years, our Smart Probes have already been making many technicians' working day easier.

On the following pages, we will present the intelligent little helpers which make you ready to measure at any time.



## Smart Probes: compact pro measuring instruments - optimized for your smartphone.



## testo Smart Probes offer these features.





## Smart on the job:

## Application examples.

## Pressure test on refrigeration systems



- Long-term measurement of system pressure with the testo 549i high-pressure measuring instrument
- Check for compressor leaks with the testo 549i high pressure measuring instrument

## This is how the testo Smart App supports this job:

- Graphic recording and analysis of the pressure curve

## Superheat / subcool on refrigeration systems



- Measure temperature and pressure on high and low pressure side of the refrigeration system simultaneously with two testo 115i clamp thermometers and two high pressure measuring instruments testo 549i
- Problem-free measurements even at measurement sites which are far apart (indoor and outdoor areas) thanks to long range of up

## This is how the testo Smart App supports this job:

- All relevant refrigerants stored
- Automatic updates of new refrigerants
- Automatic determination of condensation and evaporation temperature, and calculation of superheating and subcooling

## Target superheat on refrigeration systems



- Measurement of wet bulb temperature with the **testo 605i** thermohygrometer
- Measurement of wet bulb temperature with the **testo 605i** thermohygrometer
- Measure temperature and pressure on high and low pressure side of the plant simultaneously with two testo 115i clamp thermometers and two testo 549i high pressure measuring instruments

## This is how the testo Smart App supports this job:

- All relevant refrigerants stored
- Automatic updates of new refrigerants
- Automatic calculation of the target superheat without manually reading off tables

#### **Our recommendation:**

## Refrigeration and heating performance of air conditioning systems



- Measure volume flow with the testo 405i thermal anemometer
- Measure input and exhaust air simultaneously with two testo 605i thermohygrometers

## This is how the testo Smart App supports this job:

 Automatic calculation of refrigeration-heating performance

#### **Our recommendation:**

#### The testo Smart Probes AC & refrigeration test kit



Kit, see page 10.

#### The testo Smart Probes AC & refrigeration test kit plus



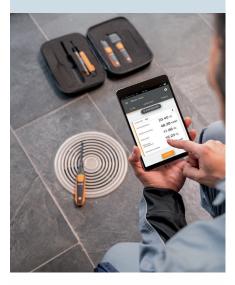
Kit, see page 10.

## Smart on the job:

## Application examples.

#### **Functional testing on**

air conditioning systems



- Measure air humidity with the thermohygrometer testo 605i
- Record volume flows with the vane anemometer testo 410i and the thermal anemometer testo 405i
- Measure air humidity with the thermohygrometer testo 605i

#### This is how the testo Smart App supports this job:

- Easy parameterization of the outlet/duct cross-section for volume flow measurement
- Listing of several volume flows and calculation of total volume flow
- Calculation of dewpoint and wet bulb temperature

**Functional testing on** 

heating systems

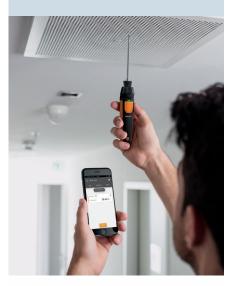


- Non-contact temperature measurement with infrared thermometer testo 805i
- Measurement of flow and return temperature with clamp thermometer testo 115i
- Measurement of gas flow pressure incl. pressure drop test with differential pressure measuring instrument testo 510i

#### This is how the testo Smart App supports this job:

- Pressure drop test incl. alarms
- Fast image documentation with infrared temperature measurement values and measurement spot marking

#### **Flexible** temperature measurement



#### testo 915i Temperature Probe Kit

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

#### This is how the testo Smart App supports this job:

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

#### **Our recommendation:**

#### testo Smart Probes VAC kit



#### **Our recommendation:**

testo Smart Probes heating kit



Kit, see page 11.

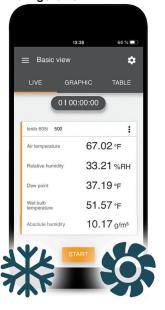




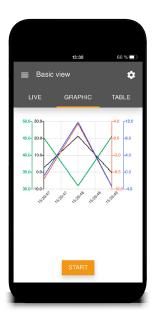


## New: The testo Smart App. All Smart Probes. One App. Many advantages.

One App for all measurements in air conditioning and refrigeration



**Graphically presented** measurement values



Intuitive measurement menus for numerous applications



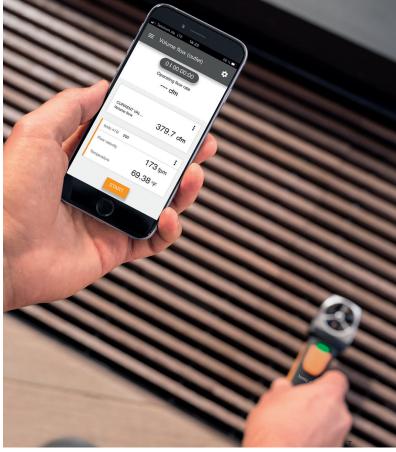
Customer data management, measurement reports created and sent by e-mail



#### Further advantages:

- Wireless read-out of measurement values on your smartphone/tablet from up to 328 ft distance to the measuring instrument
- Display several Smart Probes at the same time
- Data synchronization with testo Datacontrol PC software for fast preparation and finishing of jobs
- Compatible and with other measuring instruments from Testo including the new testo 550s, testo 557s, and testo 550i Smart Digital manifolds, and other testo Bluetooth enabled instruments







### For smart

## temperature measurement.

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

- Wireless temperature measurement in the most diverse applications thanks to large selection of probes and compatibility with common Type K thermocouple probes
- Robust and fast-reaction probes for quick temperature measurements
- Fast identification of temperature change by graph curve display
- Probe Kit available with air, immersion/penetration and surface probes TC Type K, Class 1
- Large measuring range up to -58 to 752 °F
- High measurement accuracy up to  $\pm 1.0~{}^{\circ}\text{F}$  thanks to factory system calibration.

testo 915i with flexible probe

Order no. 0563 4915

testo 915i Temperature Probe Kit Incl. Air, Penetration, and Surface Probes Order no. 0602 5093





#### testo 115i: Clamp thermometer operated via smartphone

- Measurement of flow and return temperature in heating systems
- Temperature measurement on refrigeration systems for automatic calculation of superheating and subcooling
- Problem-free use at measuring points that are a long distance apart -Bluetooth® range up to 328 ft
- Measuring range -40 to 302 °F

Order no. 0560 2115 03





#### testo 805i: Infrared thermometer operated with your smartphone

- Non-contact infrared measurement of surface temperature
- Measuring spot marking via highly visible 8-point laser circle
- Easy selection of emission level via stored materials list
- Optics 10:1, measuring range -22 to 482 °F

Order no. 0560 1805





### For smart

## humidity measurement.

#### testo 605i: Thermohygrometer operated via smartphone

- Measurement of air humidity and temperature in rooms and ducts
- Determination of refrigeration/heating performance with two testo 605i
- Automatic calculation of the dewpoint and wet bulb temperature
- Problem-free use at measuring points that are a long distance apart Bluetooth® range up to 328 ft
- Measuring ranges 0 to 100 %RH and -4 to 140 °F

Order no. 0560 2605 03









### For smart

### flow measurement.

#### testo 405i: Thermal anemometer operated with your smartphone

- Measurement of air velocity, volume flow and temperature
- Easy configuration of the dimensions and geometry of the duct cross-section for determining volume flow
- Telescopic tube which can be extended to 15 inches
- Measuring ranges 0 to 5906 fpm and -4 to 140 °F

Order no. 0560 1405





## testo 410i: Vane anemometer operated with your smartphone - Measurement of air velocity, volume flow and temperature - Presentation of the volume flow of several outlets for the purposes.

- Presentation of the volume flow of several outlets for the purposes of regulating systems  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($
- Easy parametrization of the outlet (dimension and geometry)
- Measuring ranges 78.7 to 5906 fpm and -4 to 140 °F

Order no. 0560 1410





### For smart

## pressure measurement.

#### testo 552i: Vacuum measuring instrument operated via smartphone

- Wireless and hoseless vacuum measurement
- Identify vacuum quickly and easily thanks to graphic presentation in the App of on the manifold display
- Automatic Bluetooth® connection with the testo Smart App and all digital manifolds, range up to 492 ft
- Compact, reliable and robust thanks to housing with IP 54 protection class
- Easy installation at any service port thanks to the integrated  $45^{\circ}$  angle
- Measuring range 0 to 20,000 micron

Order no. 0564 2552 01

#### testo 549i: High-pressure gauge operated via smartphone

- Measurement of high and low pressure
- Quick and easy installation at the pressure connection
- Low refrigerant loss thanks to hoseless application
- Problem-free use at measuring points that are a long distance apart Bluetooth® range up to 328 ft
- Measuring range -15 to 870 psi

Order no. 0560 2549 03



#### testo 510i: Differential pressure measuring instrument operated via smartphone

- Measurement of gas flow and static pressure
- Measurement menu for pressure drop test including alerts
- Easy configuration and determination of the volume flow with Pitot tube
- Magnetic holder for easy attachment
- Measuring range -60 to +60 InH<sub>2</sub>O

Order no. 0560 1510









NEW

## Smart sets for air conditioning, refrigeration and heating technicians.

#### The testo Smart Probes AC & refrigeration test kit:

#### 2x testo 549i and 2x testo 115i in testo Smart Case.

- Application-specific menus: Superheating/subcooling
- All relevant refrigerants stored in the testo Smart App, plus automatic refrigerant updates
- 328 ft Bluetooth® range for especially flexible use
- Measurement data analysis and reporting in the testo Smart App



Order no. 0563 0002 20

#### The testo Smart Probes AC & refrigeration test and load kit:

#### 2x testo 549i, 2x testo 115i and 2x testo 605i in testo HVAC softcase.

- Application-specific menus: superheating and subcooling, target superheating, heating/cooling output
- All relevant refrigerants stored in the testo Smart App, plus automatic refrigerant updates
- Measurement data analysis and reporting via testo Smart App



Order no. 0563 0009

#### The testo Smart Probes VAC kit:

#### testo 405i, testo 410i, testo 605i and testo 805i in testo Smart Case.

- For the measurement of air and surface temperature, humidity, air flow velocity and volume flow
- Application-specific menus: Volume flow measurement in ducts and at vents, identification of mold danger, easy image documentation
- Easy parameterization of the outlet/duct cross-section
- Calculation of total volume flow
- Measurement data analysis and dispatch via testo Smart App

Order no. 0563 0003 10

#### The testo Smart Probes HVAC/R ultimate kit:

2x testo 115i, 2x testo 549i, 2x testo 605i, testo 405i, testo 410i, testo 510i, testo 805i and testo 915i in testo HVAC softcase.

- Deal with all measurements in the fields of heating, air conditioning, refrigeration and ventilation with one kit
- All Smart Probes for temperature, pressure, humidity and flow velocity in one kit
- Display of measurement data progression as a graph or table
- Measurement data analysis and dispatch via testo Smart App



Order no. 0563 0007



#### The testo Smart Probes heating kit:

#### testo 115i, testo 510i and testo 805i in testo Smart Case.

- For all temperatures and pressures in a heating system
- Flow and return temperature, temperatures of underfloor heating and radiators
- Measurement data analysis and dispatch via testo Smart App



Order no. 0563 0004 10

#### The testo 915i accessories

#### testo 915i Smart Case

- Rugged storage case for Smart Probe testo 915i and TC probe (available separately)
- Outside: impact-resistant, flexible hard shell with zip
- Inside: protective foam insert with precise-fit compartments



Order no. 0516 0032



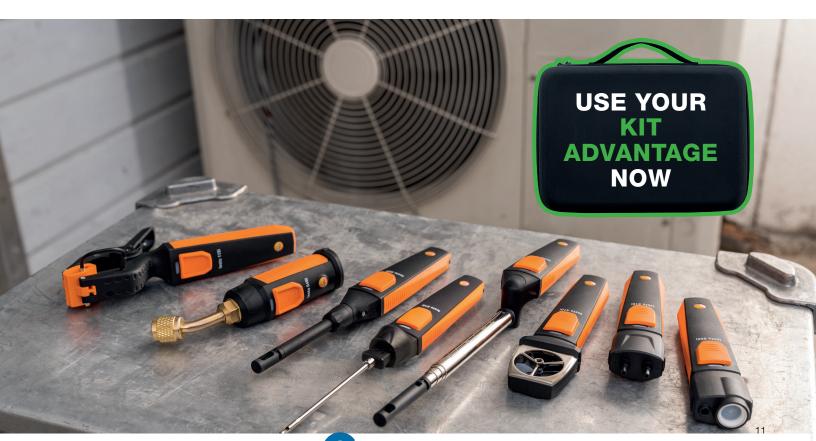


Order no. 0602 5093

#### testo 915i Temperature Probe Kit

- In the kit:

Air probe (measuring range -58 to 752 °F), Immersion/penetration probe (measuring range -58 to 752 °F) Surface probe (measuring range -58 to 482 °F) - all probes TC type K, class 1





## Ordering information.

Smart Probes	Order no.
testo 915i with flexible probe, wireless Smart Probe testo 915i with flexible probe (TC Type K), incl. batteries and calibration protocol	0563 4915
testo 915i temperature probe kit, universal temperature kit consisting of plug-in immersion/penetration probe, air probe and surface probe	0602 5093
testo 115i, clamp thermometer operated by smartphone, for measurements on pipes up to 1.5 in. diameter, incl. batteries and calibration protocol	0560 2115 03
testo 805i, infrared thermometer operated by smartphone, incl. batteries and calibration protocol	0560 1805
testo 605i, thermohygrometer operated by smartphone, incl. batteries and calibration protocol	0560 2605 03
testo 405i, thermal anemometer operated by smartphone, incl. batteries and calibration protocol	0560 1405
testo 410i, vane anemometer operated by smartphone, incl. batteries and calibration protocol	0560 1410
testo 510i, differential pressure measuring instrument operated by smartphone, incl. hose set (∅ 0.15 and 0.2 in) with adapter, batteries and calibration protocol	0560 1510
testo 549i, high-pressure measuring instrument operated by smartphone, incl. batteries and calibration protocol	0560 2549 03
testo 552i, App-controlled wireless vacuum probe testo 552i, incl. batteries and calibration protocol	0564 2552 01

testo Smart Probes kits	Order no.
testo Smart Probes AC & refrigeration test kit for testing and fault localization on air conditioning and refrigeration plants as well as heat pumps. Consisting of: 2x testo 115i, 2x testo 549i, testo HVAC softcase, batteries, calibration protocol	0563 0002 20
testo Smart Probes AC & refrigeration test / load kit for testing and fault localization on air conditioning and refrigeration plants as well as heat pumps. Consisting of: 2x testo 115i, 2x testo 549i, 2x testo 605i, testo HVAC softcase, batteries, calibration protocol	0563 0009
testo Smart Probes - VAC kit for servicing ventilation and air conditioning plants. Consisting of: testo 405i, testo 410i, testo 605i, testo 805i, testo softcase (HVAC), batteries, calibration protocol	0563 0003 10
testo Smart Probes HVAC/R ultimate kit Consisiting of: 2x testo 115i, 2x testo 549i, 2x testo 605i, testo 405i, testo 410i, testo 510i, testo 805i, testo 915i, testo HVAC softcase, batteries, calibration protocol	0563 0007
testo Smart Probes – heating kit for pressure and temperature measurement on heating systems. Consisting of: testo 115i, testo 510i incl. hose set (0.15 and 0.2 in) with adapter, testo 805i, testo Smart Case (heating), batteries, calibration protocol	0563 0004 10
testo Smart Cases	Order no.
testo Smart Case (Ultimate) for the storage and transportation of the testo 115i (2x), 405i, 510i, 549i (2x), 610i (2x), 805i and 915i	0516 0283
testo Smart Case (HVAC) for the storage and transportation of testo 405i, testo 410i, testo 510i, testo 605i and testo 805i	0516 0260
testo Smart Case (temperature) for the storage and transportation of testo 915i with TC probes	0516 0032
testo Smart Case (refrigeration) for the storage and transportation of 2x testo 115i and 2x testo 549i	0516 0240
testo Smart Case (heating) for the storage and transportation of testo 115i, testo 410i, testo 510i, testo 549i and testo 805i	0516 0270