

# Your competent partner for measuring and services.

Intuitive, efficient, reliable – everything for facility management: Welcome to the Smart World of Testo.





# Testo - your competent partner for

# facility management.

Operating costs, user convenience, energy consumption: Facility managers have to keep an eye on a number of things and improve the efficiency of systems and processes at the same time. Thanks to digital measuring technology, these many different tasks can be tackled more easily. To ensure that a building is managed smoothly, the ventilation, air conditioning, refrigeration and heating systems need to be maintained just like electrical systems and switch cabinets.

Testo offers all the measuring equipment needed to carry out all your technical facility management applications. Moreover, you can also obtain a variety of services such as consultancy, made-to-measure probe construction, repairs or calibration from this one provider. For you, this means less outlay in procuring the technology as well as in your day-to-day work.

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. This guarantees smartly configured systems and more efficient workflows in facilities management.

### Your advantages with Testo

### Digital, smart and extremely flexible

Since lots of measuring instruments are equipped with Bluetooth, you can also operate them via smartphone or tablet and use application-specific apps. This makes your work much easier and more accurate.

# Measuring technology for all facility management tasks

At Testo, you will find measuring instruments for heating, air conditioning, ventilation and refrigeration systems, as well as for electrical measurement parameters.

### **Professional multifunction measuring instruments**

An extensive selection of probes will equip you for standard-compliant air velocity & IAQ and comfort level measurements as well as for industrial maintenance.

### **One-stop service**

Loan instruments, repairs, 24-hour spare part service, made-to-measure probe construction, as well as seminars and webinars with valuable practical information – all from one provider, so you can work more efficiently.

### Test equipment management system PRIMAS

PRIMAS is a combination of calibration and documentation management, coupled with a special software and rounded off with logistics and organization.

The modular set-up allows individual adaptation.

### Time-saving thanks to digital documentation

Creating reports automatically, adding photos, saving and sending them by e-mail: all no problem, with our measuring instruments with App connection.

# Guaranteed comfort.

# Increased efficiency.

Measuring technology from Testo can help you to fulfil these tasks.







### Ensure air quality and comfort

Testo's humidity, lux and sound level meters make it easy for you to create a pleasant indoor climate. With the testo 480 multifunction measuring instrument, you can evaluate the comfort level objectively and compliantly in accordance with PMV/PPD. Data loggers also help you to easily identify the causes of mould.



### **Check electrical installations**

Electrical systems and switch cabinets also need to be checked regularly. In addition to the testo 770 clamp meter and the testo 760 digital multimeter, you can also use the testo 871 and 872 thermal imagers for non-contact visualization of superheating. User-specific apps make your work and documentation easier.



### Efficient adjustment of ventilation systems

Only with correctly regulated supply and exhaust air systems can a system achieve full performance with minimum energy consumption. Testo offers you a range of smart devices and probes – for carrying out measurements in ducts as well as at air outlets. Application-specific apps not only offer you a perfect overview, they also make documentation easy.



### Efficient adjustment of heating systems

As well as smart measuring instruments for flue gas analysis, Testo can also provide you with smart measuring instruments for determining the flow and return temperature and differential pressure. Free apps also allow control via smartphone or tablet. For flawless and efficient operation of your heating systems.



### Efficient adjustment of air conditioning systems

With the digital manifolds and the testo Refrigeration App, you have all pressure and temperature values in view on your smartphone. You can create and send personalized reports in just one click. Easy software updates ensure that you are always up-to-date with the latest technology and legal requirements when carrying out your measurements.

# Efficient adjustment of ventilation systems. Guaranteed comfort.

Incorrectly configured ventilation and air conditioning systems consume an unnecessarily large amount of energy. Smart measuring instruments from Testo help you configure your systems accurately and efficiently. Apps with application-specific measurement menus, Bluetooth sensors and intuitive operation not only make your work easier, they also guarantee accurate results. For maximum comfort with minimum energy consumption.





### The probes

For more details on the fixed cable and Bluetooth probes with order nos., please see Order no. 0560 4401 page 12

# Air velocity & IAQ measuring instrument testo 440

- Measure all air velocity & IAQ parameters with one instrument – selection of probes for turbulence, flow, lux, CO<sub>2</sub>, temperature, humidity, radiant heat, pressure, differential pressure
- Intuitive operation thanks to a large display with clearly structured measurement menus
- · Parallel display of 3 readings
- Wireless measurement convenience with Bluetooth probes
- Safe and reliable due to internal data memory and USB interface for data export



# WiFi data logger system testo 160 IAQ

- Continuous remote monitoring of temperature, humidity, CO<sub>2</sub> and atmospheric pressure
- Data transfer via WLAN directly to your Testo Cloud
- Automatic alerts when limit values are violated

Order no. 0572 2014



# Data logger for temperature and humidity testo 175 H1

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

Order no. 0572 1754



# Lux meter testo 540

 Entry-level model for uncomplicated and fast light intensity measurement in workplaces

Order no. 0560 0540



### Sound level meter

testo 816-1

 Measurement of sound volume (noise, air outlets) at workplaces, and monitoring adherence to limit values

Order no. 0563 8170











### The probes

\*See page 12 for more details with order numbers

# Multifunction air velocity & IAQ measuring instrument testo 480

- Measure all air velocity & IAQ parameters with one instrument: Selection of probes for temperature, %RH, draught, flow velocity, CO<sub>2</sub>, lux
- Present comfort values objectively in accordance with PMV/PPD
- Carry out standard-compliant HVAC grid measurements
- Practical, step-by-step menu guidance
- Individually calibratable probes
- With analysis software
- High-precision differential pressure sensor for Pitot tube measurement or filter monitoring

Order no. 0563 4800



### testo Smart Probes

### VAC kit

- Easy determination of flow velocity, volume flow, surface temperature, humidity and
- Always at hand in a compact case

Order no. 0563 0003



### Vane anemometer kit

### testo 417

- For measuring volume flow, flow velocity and temperature
- Precise recording of volume flow, independently of swirl direction
- Accurate measurement even in turbulent flows, thanks to patented flow straightener

Order no. 0563 4172



### Volume flow hood

### testo 420

- Precise measurement of incoming and outgoing air at large outlets, even in turbulent flows
- 2.9 kg light
- With app for convenient measurement at outlets

testo 420 App Order no. 0563 4200



### Thermal anemometer

### testo 405

- Measures air velocity, volume flow and air temperature
- · Can be used in ventilation ducts and rooms
- Telescope can be extended to 300 mm

Order no. 0560 4053

### Check

electrical installations.

The inspection of electrical 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, ventilation systems, heat pumps and air conditioning and heating equipment. With Testo thermal imagers, you can reliably identify problem areas in the electrical control cabinet and overheated components, 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.









raphy App

### Clamp meter

### testo 770-3

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

Order no. 0590 7703



### **Digital multimeter**

### testo 760-2

- Reliable work thanks to automatic measurement parameter detection
- 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

# Thermal imager with App

### testo 871

- Very good image quality thanks to IR resolution of 240 x 180 pixels (480 x 360 with testo SuperResolution)
- Temperature differences from 0,09 °C can be detected
- · Integrated digital camera
- Special humidity palette for detecting mould
- · testo ScaleAssist ensures objectively comparable and error-free thermal images
- Wireless connection to testo 770-3 clamp meter and testo 605i thermohygrometer

Order no. 0560 8712



raphy App

### Thermal imager with App

### testo 872

- · Highest image quality thanks to IR resolution of 320 x 240 pixels (640 x 480 with testo SuperResolution)
- Highest precision measurement with 0.06 °C thermal sensitivity
- Integrated digital camera
- Special humidity palette for detecting mould
- · testo ScaleAssist ensures objectively comparable and error-free thermal images
- Wireless connection to testo 770-3 clamp meter and testo 605i thermohygrometer

Order no. 0560 8721





Efficient adjustment of air conditioning

systems and heat pumps.

The power consumption of 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 air conditioning systems as convenient and accurate as possible for you, with digital manifolds and tailor-made apps. The testo Smart Probes AC & refrigeration test kit is available for easy testing of air conditioning systems. The testo 316-3 reliably detects leaks in refrigerant containers and hoses. For trouble-free, efficient operation of your systems.





## **Digital manifold**

### testo 550

- For the easy servicing of air conditioning and refrigeration systems
- Temperature and pressure as a progression
- Customized reports in just one click

Order no. 0563 1550



### Digital manifold

### testo 557

- For the convenient installation and servicing of air conditioning and refrigeration systems
- Temperature and pressure as a progression
- Vacuum measurement with external Pirani probe
- Customized reports in just one click

Order no. 0563 1557



### testo Smart Probes AC & refrigeration test kit

- For fast and easy testing of air conditioning refrigeration systems
- No hoses no refrigerant loss
- Temperature and pressure as a progression
- Customized reports in just one click

Order no. 0563 0002 02



### Refrigerant leak detector

### testo 316-3

- For CFC, HFC (partially and completely halogenated), H<sub>2</sub>
- High sensitivity (< 4 g/a)
- Fulfils the requirements of the F-gas regulation

Order no. 0563 3163

# Efficient adjustment of heating systems.

A building's greatest energy-saving potential is often hidden in its basement boiler room. 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 analyzer Bluetooth complete kit testo 330-2 LL

- Flue gas analyzer with fresh air valve to protect the CO measuring cell
- Single-hose connection: all channels for the flue gas measurement can be securely connected in just one simple movement
- Maximum reliability when configuring solid fuel and oil systems

### The kit consists of:

- testo 330-2 LL flue gas analyzer with H<sub>2</sub>-compensated CO measuring cell and Bluetooth
- Modular flue gas probe, length 180 mm, ø 8 mm, hose 2.2 m
- Combustion air temperature probe, length 190 mm
- · Wireless infrared printer
- Professional instrument case
- International mains unit

Order no. 0563 3372 78



### Heating engineering kit testo 330i

- For official acceptance test measurements on gas, oil and solid fuel systems
- Smart handling: operation, display and documentation via 330i App on the smartphone
- Longlife sensors with up to 6 years' service life, which can be replaced by the user

### The kit consists of:

- testo 330i flue gas analyzer including O<sub>2</sub> and CO H<sub>2</sub>compensated sensor and Bluetooth
- USB mains unit
- TÜV-certified modular flue gas probe
- · Combustion air temperature probe

Order no. 0563 3000 73











# Gas leak detector for leakages in natural gas pipes

### testo 316-1

- Rapid gas leak localization on natural gas pipes
- Acoustic and two-stage visual alarm when a limit value is exceeded
- Flexible measuring probe even reaches areas that are difficult to access

Order no. 0632 0316



# Promo kit for heating installers testo 922

- Two-channel measuring instrument with optional wireless probe
- Display of temperature difference
- Continuous display of minimum and maximum values

Order no. 0563 9221



# Differential pressure measuring instrument testo 510i

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

Order no. 0560 1510



### 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 alerts
- Fast image documentation with IR temperature readings and measurement spot marking

Order no. 0563 0004



# Differential pressure measuring instrument testo 510 kit

- For differential pressure measurements (0 to 100 hPa) on gas heaters and air conditioning system filters
- Optional Pitot tube for flow measurements in ventilation ducts

Order no. 0563 0510



### Infrared thermometer

### testo 810

- Simultaneous non-contact measurement of surface and air temperature
- Automatic display of the temperature difference
- Adjustable emissivity

Order no. 0560 0810



# Recommended probes for

# testo 440 and testo 480.

Probes for testo 440	Order no.	Probes for testo 480	Order no.
low		Flow	
Hot wire probe including temperature and humidity sensor, 90° bendable		Vane probe Ø 100 mr ments at ventilation o	
Vane probe (Ø 16 mm), including temperature sensor		Vane probe Ø 16 mn telescope (scaling m and built-in measure	nax. 960 mm)
High-precision vane probe (Ø 100 mm), including temperature sensor	<pre></pre>	Thermal flow probe (mm, 90° bendable (2	200 mm), with
Vane probe (Ø 100 mm), including temperature sensor	8 0635 9431 ≥ 0635 9432	telescope (scaling mand built-in measure	
omfort level		Comfort level	
Turbulence probe, fixed cable	≥ 0628 0152	Comfort probe for tu measurement in acc EN 13779*	
CO <sub>2</sub> probe, including temperature and humidity sensor		IAQ probe for evalua indoor air quality, Co temperature and abs	O <sub>2</sub> , humidity,
CO probe		measurement, include tripod*	
Lux probe, fixed cable	≥ 0635 0551	Lux probe for measu illuminance	uring 0635 0543
Humidity		Globe thermometer	
Humidity/temperature probe	8 0636 9731 ≥ 0636 9732	the radiant heat, Ø 1 TC type K	50 mm,
High-precision humidity/	8 0636 9771	Humidity	
temperature probe	≥ 0636 9771 ≥ 0636 9772	High-precision humi	
emperature		temperature probe (x	<i>5</i> 12 mm)
Fast-action surface probe (TC type K)	0602 0393	Temperature	
Robust air temperature probe (TC type K) – fixed cable 1.2 m	0602 1793	Fast-action surface (TC type K)	probe 0602 0393
	∦ with BI	Pooth Robust air temperation (TC type K) – fixed c	

<sup>🖇</sup> with Bluetooth

a fixed cable

<sup>\*</sup>Plug-in head cable required (order no. 0430 0100)