

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.



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, hotline, service, repair and calibration

Key benefits:

- ✓ One contact for all aspects of measurement technology
- ✓ 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

Please get in touch with Vocal conditions

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 man-

PRIMAS - the integral test equipment management system for facility managers.

External allocation of the entire test equipment management system is something you should be able to rely on. Each company has specific products and processes as well as specific measuring technology.

With the test equipment management system from Testo Industrial Services, you will have nothing to worry about, because this is the integrated solution for your test equipment and is based on collaborative partnership

between customers, Testo Industrial Services, suppliers and logistics partners.

PRIMAS is a combination of calibration and documentation management, coupled with a special software and rounded off with logistics and organization. Thanks to its modular structure, PRIMAS can be perfectly tailored to your facility management requirements.

Calibration

- · DAkkS calibration in accredited laboratories
- ISO calibrations
- On-site calibration
- · Calibration at the sites of manufacturers and partners

Logistics · Pick-up and delivery

- service
- Shipping containers
- · Transport partners
- Express service On-site calibration
- Please adapt to local conditions

Documentation

- Norm-compliant calibration certificates
- Paperless
- . Clear marking of the test equipment
- GMP-compliant validation documentation

Organization

- Planning and consultancy
- Barcode labelling
- Individual process adjustment
- Deadline monitoring

- PRIMAS online
- PRIMAS validated
- PRIMAS mobile PRIMAS connect
- PRIMAS exchange





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.

Page 6



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.

Page 6



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.

Page 10



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.

Page 12



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.

Page 14



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 testo 770 and the digital multimeter testo 760. Thermal imagers are also ideal for inspecting photovoltaic systems.

Page 15



Perform preventive maintenance

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

Page 15



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.



Page 16

4

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

EUR xxx.xx



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 plants? 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 store in the instrument, as well as .csv- export to your PC, is the ideal choice.

Order no. 0560 4401

EUR xxx.xx



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 EUR xxx.xx



Volume flow hood kit

• 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

EUR xxx.xx



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 0402

testo 417-2

flow straightener

Funnel kit

EUR xxx.xx



Vane anemometer



- 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 EUR xxx.xx





 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 EUR xxx.xx



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

EUR xxx.xx

NEW)



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

EUR xxx.xx

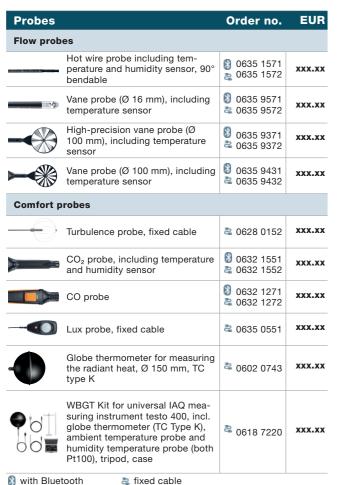






Be sure. testo

Recommended probes and accessories for testo 400 / testo 440.





Probes		Order no.	EUR		
Humidity probes					
	Humidity/temperature probe	8 0636 9731 ≥ 0636 9732	ххх.хх		
	High-precision humidity/temperature probe	8 0636 9771 2 0636 9772	ххх.хх		
Temperature probes					
	Fast-action surface probe (TC type K)	0602 0393	xxx.xx		
	Robust air temperature probe (TC type K) – fixed cable 1.2 m	0602 1793	xxx.xx		
🕽 with Blue	tooth 💈 fixed cable				

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

Digital, smart, flexible.

More than measuring technology.



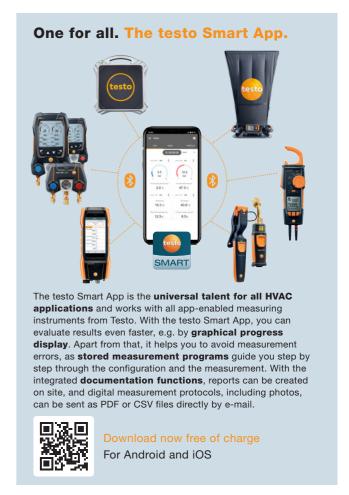
Data management is also playing an increasingly important role in building technology. Measuring instruments and solutions from Testo therefore provide **all relevant information on measurement, measurement site and customer data** in different ways. Just the way you need it:

- 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 insturments 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 measurement tasks.







^{*} Interface support required

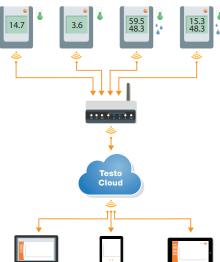
Be sure. (CS)

Record all important **VAC** parameters with

indoor climate monitoring.

Data loggers and monitoring systems from Testo are ideally suited to the permanent 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.





Radio data logger system testo Saveris 2

- Simple: Radio 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/
- · Practical: System can be adapted to your requirements, and extended without limitation by additional loggers



Radio 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 WLAN

Order no. 0572 2031

EUR xxx.xx



Radio data logger for temperature and 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
- Data transfer by WLAN

Order no. 0572 2034



Radio data logger for temperature, humidity and CO, testo 160 IAQ

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

Order no. 0572 2014

EUR xxx.xx



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 EUR xxx.xx



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

Order no. 0572 1765 EUR xxx.xx

• Data evaluation and documentation on a PC

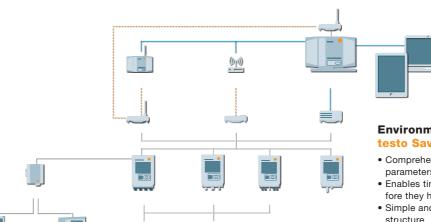


Temperature/humidity data logger

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 EUR xxx.xx



Environmental monitoring system

- 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 infra-
- 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



Data logger module testo 150 DIN2

Two connections for standard probes via



Data logger module testo 150 T1

Internal NTC temperature



EUR xxx.xx



10

11

Efficient adjustment

of heating systems.

A building's greatest energy-saving potential is often hidden in its 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 testo 300 NEXT LEVEL





testo 300 kit

Kit 1

- Incl. O and CO sensor up to 4,000 ppm
- Large 5-inch HD display see all the system's readings at a glance
- 2-year warranty

Set consisting of instrument incl. mains power unit, compact flue gas probe (180 mm, Ø 6 mm), 10 spare filters, PC software Easy-Heat, instrument bag

Order no. 0564 3002 70 **EUR xxx.xx**

Kit 1

12

with printer

As kit 1, but additionally with printer incl. spare paper (order no. 0564 3004 71)

Order no. 0564 3002 71 EUR xxx.xx





testo 300 Longlife kit

Longlife kit 1

- Incl. O2 and CO sensor up to 4.000 ppm • NO, NO_{low}, CO_{low} sensor retrofit-
- High-quality sensor technology with up to 6 years' service life
- 4-vear warranty

Kit consisting of instrument incl. mains power unit, compact flue gas probe (180 mm, Ø 6 mm), 10 spare filters. PC software Easy-Heat, instrument case

Order no. 0564 3004 70 **EUR xxx.xx**

Longlife kit 1 with printer

As Longlife kit 1, but additionally with printer incl. spare paper (order no. 0564 3004 71)

Order no. 0564 3004 71 EUR xxx.xx

Longlife kit 2

- Incl. O₂, CO H₂-compensated sensor up to 30,000 ppm
- NO, NO_{low}, CO_{low} sensor retrofit-
- · High-quality sensor technology with up to 6 years' service life
- 4-vear warranty

Kit consisting of instrument incl. mains power unit, modular flue gas probe (180 mm, Ø 6 mm), 10 spare filters, PC software Easy-Heat, instrument case

Order no. 0564 3004 82 **EUR xxx.xx**

Longlife kit 2 with printer

As Longlife kit 2, but additionally with printer incl. spare paper (order no. 0564 3004 71)

Order no. 0564 3004 89 EUR xxx.xx



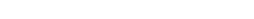
testo Bluetooth®

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 de-livery. The testo Bluetooth® Connector is only designed for connecting testo Smart Probes.













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 **EUR xxx.xx**



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 **EUR xxx.xx**



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 **EUR xxx.xx**





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

- 2-in-1 sensor for fuel gases and refrigerants, for leak detection 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

EUR xxx.xx







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

EUR xxx.xx 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

EUR xxx.xx Order no. 0560 2115 02



testo 915i

Thermometer with air probe and smartphone operation

- · 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 qqA

Order no. 0563 3915 **EUR** xxx.xx



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 tempera-

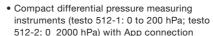
ture readings and measurement spot marking

EUR xxx.xx



Differential pressure measuring EW instruments

testo 512-1 / 512-2



• Simple, fast and precise differential pressure measurement on gas boilers

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



Differential temperature NEW measuring instrument testo 922

Order no. 0563 0004



• 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

EUR xxx.xx









13

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 550s and testo 557s
- 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
- Even greater flexibility for your measurements and documentation with the testo Smart App



testo 550s Smart Kit

Smart digital 2-way manifold with wireless temperature probes in practical case

Order no. 0564 5502

EUR xxx.xx

testo 557s Smart Vacuum Kit

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

Order no. 0564 5571

EUR xxx.xx



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 marketMaximum 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 certificate and batteries

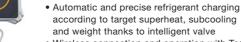
Order no. 0564 3550

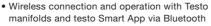
EUR xxx.xx





Automatic filling system testo 560i





Order no. 0564 2560

EUR xxx.xx



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 02 **EUR xxx.xx**



Leak detector for refrigerants

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

Order no. 0563 3163

EUR xxx.xx



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 / 872s

- 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)





image management testo 883 • Infrared resolution 320 x 240 pixels (with

 Infrared resolution 320 x 240 pixels (with testo SuperResolution technology 640 x 480 pixels)

Thermal imager with intelligent

Be sure. (esto

- 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 **EUR xxx.xx**



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





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
- Low-pass filter for accurate measurements on motors controlled by frequency converters

Order no. 0590 7602 **EUR xxx.xx**









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 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