

Be sure. **testo**



**Air flow and IAQ measurement improved to the max.**

The new universal IAQ instrument testo 400.

# Smarter. Faster. Better:

## The new generation of air flow and IAQ measurement technology.

### Fast on:

Simply exchange probes during the measurement without a re-start.

### Measurement assistant:

Smart support for error-free measurement.



To the videos:





**Universally applicable:**

Wide range of probes for all of your air flow & IAQ measurements.

**Always ready to go:**

Probes can be calibrated independently of the measuring instrument.

**Save time:**

Finish measurement with complete documentation directly on site with the customer.

## Smarter: Easiest handling.

The new universal IAQ measuring instrument testo 400 and its broad selection of precision probes were developed with just one objective in mind: To make carrying out all measurement tasks in the ventilation and air conditioning sector easier and less complicated for you than ever before.



### Everything under control at the touch of a finger

You operate the testo 400 with its Smart-Touch technology just as intuitively as your smartphone.

### All data at a glance

You see all measurement data immediately and clearly on the large 5" HD display.



### Wireless measurement with one click

You simply start and stop measurements with just one button on the probe handle.

### Highly efficient allrounder

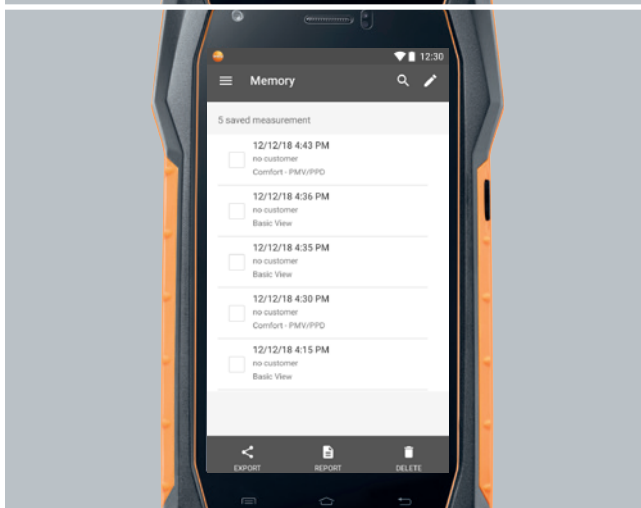
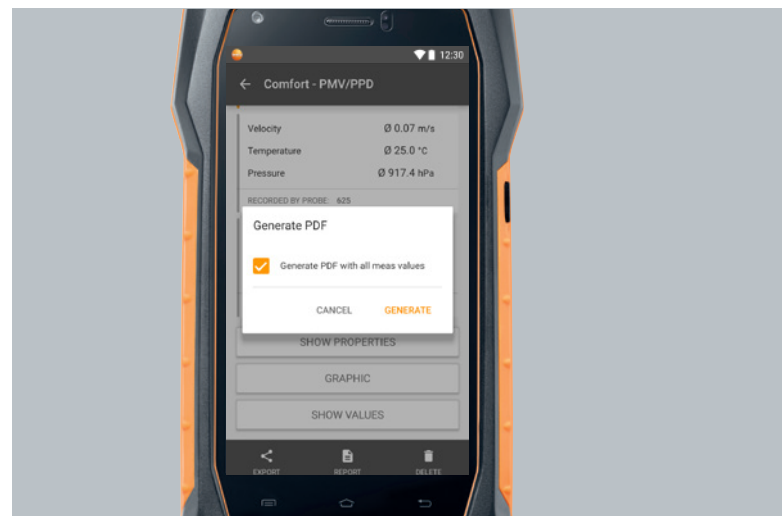
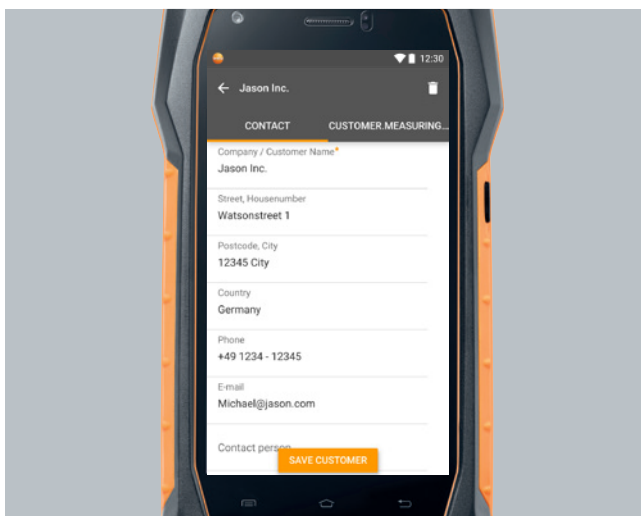
And for more demanding measurements, up to eight probes can be used in parallel (4 x Bluetooth, 4 x cable).

### Always have the right probe at your fingertips

The flexible Bluetooth and cable probes from the new probe range are completely compatible with each other.

## Faster: Save time in documentation and measurement data management.

With the testo 400, you can now carry out worksteps which were previously only possible with a PC and software – directly on site with just one measuring instrument!



### Customers and measurement sites are always with you

You can save customers and measurement sites directly in the measuring instrument, manage them and re-use them for repeated measurements.

### Digital archive

All measurements are securely stored in the 1.3 GB memory in the instrument. You can retrieve everything quickly thanks to the intelligent search function.

### Beat the paperwork

You create professional reports with all relevant data, images and comments directly on site, and you can send them right away by WiFi/Bluetooth.

### The App for your PC

The measurement data management and analysis software testo DataControl for the most detailed analysis and reporting in the office is included in delivery.

## Better: Error-free results with the measurement data assistant.

With the testo 400, you always have your own personal smart helper with you. The more demanding the measurement, the more the measurement assistant in the instrument supports you in configuration, execution and evaluation of results.



### Fast support

The measurement assistant is there to help you in all relevant measurements. Thanks to intuitive menu structures and graphic presentation, you never lose the overview, even with multiple measurement points.

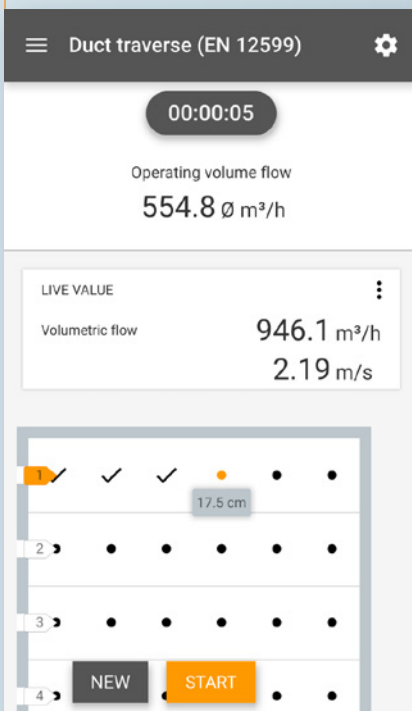
## How the measurement assistant supports you in:

### IAQ measurement according to EN12599 and ASHRAE 111

**Configuration:** Input of duct geometry, apertures and measurement points, calculation of measurement depths

**Measurement:** Graphically guided measurement with all relevant measurement points

**Result:** Statement of volume flow and the exact measurement inaccuracy

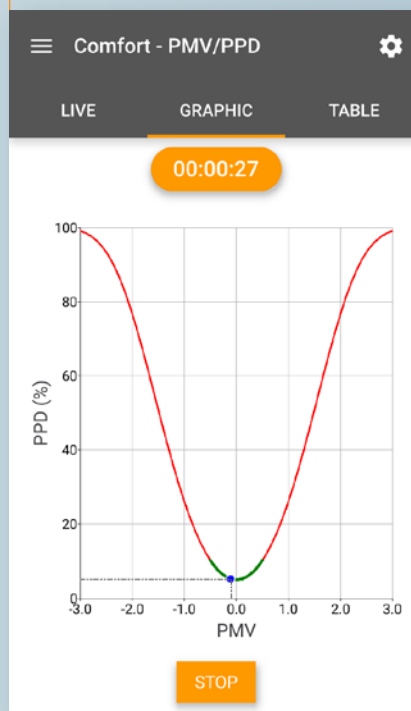


### PMV/PPD measurement in accordance with EN ISO 7730 and ASHRAE 55

**Configuration:** Determination of clothing index and activity

**Measurement:** Parallel measurement of ambient and radiated temperatures, flow velocity and relative humidity

**Result:** Statement as a PMV/PPD curve including evaluation

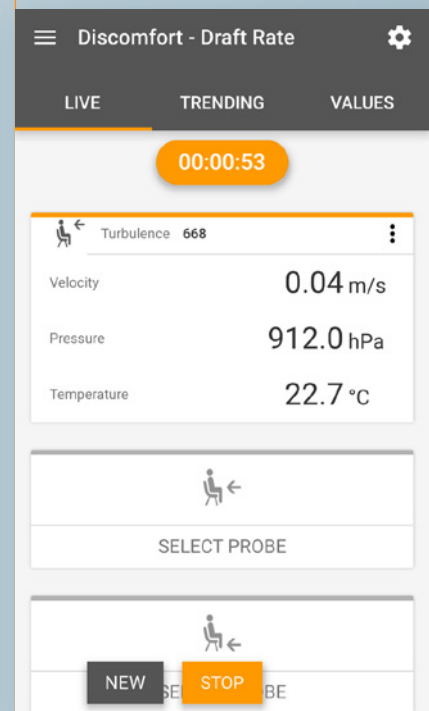


### Turbulence measurement acc. to DIN EN 7730

**Configuration:** Allocation of probes to measurement positions

**Measurement:** Simultaneous measurement at three heights according to norm

**Result:** Statement of measurement values at all heights as a value, table and graph.



# Improved to the max: Volume flow measurements.

## How testo 400 convinces you in ducts and at outlets

- Measurement assistant for volume flow measurement according to norm.
- You have all measurement locations with you at all times and ready at your fingertips.
- Wireless Bluetooth probes for maximum freedom of movement at work.
- You simply finish measurement reports on site – directly with the testo 400.

## Duct measurement



## Suitable probes



**Vane probe**  
(Ø 16 mm)

**Hot wire probe**  
incl. temperature sensor



**Hot wire probe**  
incl. temperature and  
humidity sensor



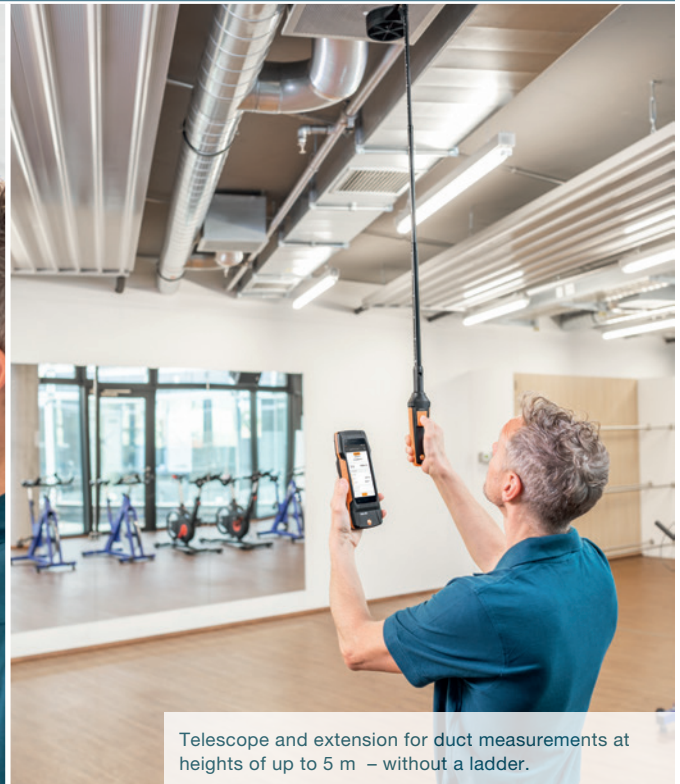
**Vane probe**  
(Ø 16 mm) incl.  
temperature sensor

**Telescope  
extension**  
(0.9 m)





## Outlet measurement



Telescope and extension for duct measurements at heights of up to 5 m – without a ladder.

## Suitable probes

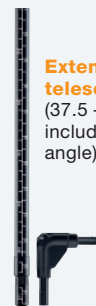


**Vane probe**  
(Ø 100 mm) incl.  
temperature sensor

**High-precision vane probe**  
(Ø 100 mm) incl.  
temperature sensor



**testovent 417 - funnel set**



**Extendable telescope**  
(37.5 – 100 cm,  
including 90°  
angle)

**Telescope extension**  
(0.9 m)



## testo 400 air flow kits

### Components of both kits:

- testo 400 universal IAQ measuring instrument
- High-precision humidity/temperature probe head
- 100 mm vane probe head
- 90° angle for connecting vane probes (Ø 100 mm) + handle
- Volume flow case (dimensions: 520 x 410 x 160 mm)



### With hot wire probe

- Hot wire probe with telescope (length: 1 m), incl. temperature sensor, with Bluetooth

Order no. 0563 0400 71



### With 16 mm vane probe

- 16 mm vane probe with telescope (length: 1 m), incl. temperature sensor, with Bluetooth

Order no. 0563 0400 72



Or

# Improved to the max: Comfort level measurements.

## testo 400 – first choice for comfort

- Measurement assistant for carrying out WBGT and PMV/PPD measurements and determining draught rates.
- IAQ data logger for long-term IAQ measurements independently of the instrument.
- Finish report either directly on site or later at a PC.

## Comfort level measurement



All relevant comfort parameters can be measured with the large selection of probes.

## Suitable probes



**CO<sub>2</sub> probe**  
incl. temperature and humidity sensor



**Turbulence probe**



**Globe thermometer**

**CO probe**



**Lux probe**



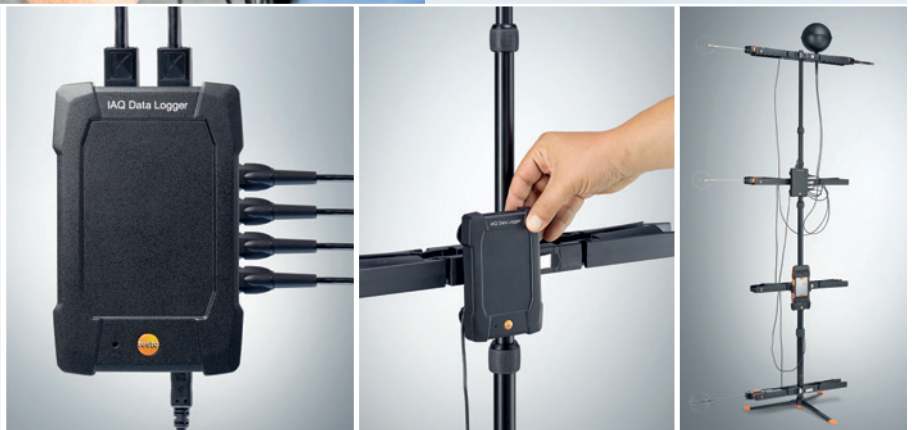
## Comfort level measurement



For a reliable measurement, simply attach all required probes to the tripod.

### The ideal solution for flexible, long-term IAQ measurements

The IAQ data logger is configured and read out using the testo 400. Up to six probes can then be connected. This results in unheard of measurement possibilities for you – for example, you can now carry out turbulence measurements at three different heights simultaneously.



## Our recommendation

### testo 400 IAQ and comfort kit with tripod

**Comprising:**

- testo 400 universal IAQ measuring instrument
- CO<sub>2</sub> probe with Bluetooth®, including temperature and humidity sensor
- Turbulence probe
- Globe thermometer
- Measuring tripod
- Transport bag for tripod
- Comfort case

Order no. 0563 0401



### IAQ data logger for long-term measurements with the testo 400

**Comprising:**

- IAQ data logger
- Mains power unit with USB cable

Order no. 0577 0400



### WBGT kit for testo 400

**Comprising:**

- Globe thermometer (TC Type K)
- Ambient temperature probe (Pt100)
- Wet bulb temperature probe (Pt100)
- Tripod
- Case

Order no. 0618 7220

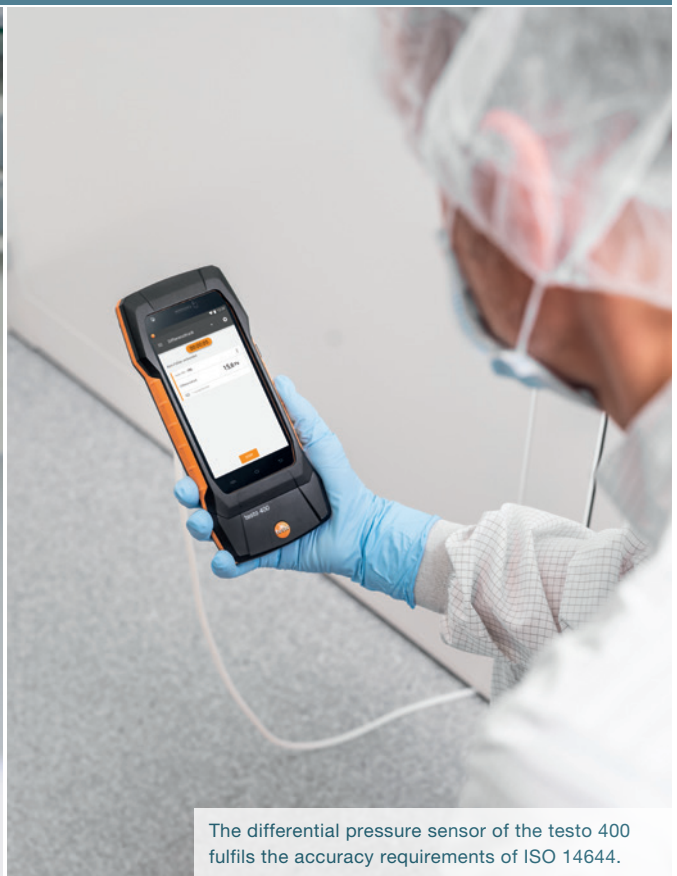


# Improved to the max: Measurements in laboratories, cleanrooms and industry

## Always to hand, even for the highest demands

- Highest precision, especially in pressure and temperature measurements.
- Display all measurements as a table and graphic curve.
- Zero-error adjustment in the instrument for even more accurate measurements.
- Measurement of flow velocity and volume flow at laboratory extractors based on DIN EN 14175-3/-4.

## Measurements in cleanrooms and laboratories



The differential pressure sensor of the testo 400 fulfils the accuracy requirements of ISO 14644.

## Suitable probes



**High-precision vane probe**  
(Ø 100 mm) incl. temperature sensor



**Fume cupboard probe**



**High-precision humidity/temperature probe**



**Calibratable immersion/penetration probe**  
(Pt100)



**Glass-coated laboratory probe**  
(Pt100)

## Industry and production



With the testo 400, you can use up to eight probes simultaneously (4 x Bluetooth, 4 x cable).

## Our recommendation

### testo 400

#### Comprising:

- testo 400 universal IAQ measuring instrument
- Transport case for volume flow measurements
- Connection hose
- Mains unit with USB cable and calibration protocol



Order no. 0560 0400



### Suitable probes for your application

We are happy to advise you personally and individually, in order to find the right probes for your challenges.

Online: [www.testo.com/xxx](http://www.testo.com/xxx)

Telephone: 1234556677

## Unbeatable duo: The new generation of air flow and IAQ measuring instruments.

With the new testo 400 universal IAQ measuring instrument, the already familiar testo 440 and the universal probe portfolio for both measuring instruments, we are completing our range of innovative climate measuring technology for all requirements.



### 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.

### The flexible probe portfolio

The probes cover all air conditioning and ventilation applications and can be used with both the testo 440 and the testo 400. All handles and probes are mutually compatible, allowing you to expand your probe selection as required. Particularly useful: 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.

### New: 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.

# Instruments and features in comparison.

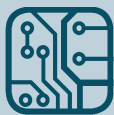
	testo 440 dP	testo 400
<b>General</b>		
Colour graphic display	✓	✓ HD display
Operation	Buttons	SmartTouch
Camera	–	✓ Rear camera: 8.0 MP Front camera: 5.0 MP
Magnets on the rear	✓	✓
Integrated differential pressure sensor	✓	✓ High-precision and position-independent
Integrated absolute pressure sensor	–	✓
Compatible with the new Testo probe portfolio	✓ with cable 1x with Bluetooth® 1x	✓ with cable 2x with Bluetooth® 4x
Thermocouple Type K connection	✓ 1x	✓ 2x
Intelligent calibration concept	✓	✓
Zero-error display: Adjustment function at up to 6 measuring points	–	✓
<b>Measurement menus</b>		
Volume flow measurement	✓	✓
Volume flow measurement in accordance with EN 12599 (including measurement uncertainty) and ASHRAE 111	–	✓
Pitot tube measurement	✓ As from 15 m/s	✓ As from 5 m/s
Outlet measurement with funnel	✓	✓
Volume flow measurement using K factor (differential pressure)	✓	✓
Turbulence measurement in accordance with EN ISO 7730	✓	✓ At 3 heights at the same time
PMV/PPD measurement in accordance with EN ISO 7730 and ASHRAE 55	–	✓
NET measurement in accordance with DIN 33403	–	✓ (To follow)
WBGT measurement in line with DIN 33403 and EN ISO 7243	–	✓ (To follow)
Logging mode	✓	✓
Stand-alone, configurable IAQ data logger	–	✓
<b>Measurement data management</b>		
Internal memory (number of measurement values)	✓ (225,000)	✓ (1,000,000)
Customer and measuring point management	–	✓
PC software for analyzing, archiving and documenting measurement data	–	✓
Personalized measurement protocols (including own logo)	–	✓
Integrated camera for on-site documentation	–	✓
On-site printing	✓	✓
Export formats	CSV via USB interface	CSV, PDF, JSON via PC software or directly from the measuring instrument (e-mail or Bluetooth)
<b>Technical data</b>		
Power supply	3x AAA	Li-ion/li-poly rechargeable battery
Dimensions	154 x 65 x 32 mm	210 x 95 x 39 mm
Weight	250 g	500 g

## More precision and reliability with the testo 400.

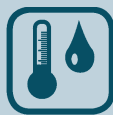
### Calibration and test equipment management from Testo Industrial Services

With our subsidiary company Testo Industrial Services, we offer you a competent partner in the field of calibration and test equipment management. Testo Industrial Services has over 200 accredited calibration procedures, making it one of the leading providers of metrological services. A team of qualified, motivated and service-oriented staff allows a high level of quality, with which norms, guidelines and certifications are always fulfilled. The regular calibration of your measuring instruments leads to reliable measurement results for quality assurance.

#### Unique calibration service



Electrics



Thermodynamics



Mechanics

Measurement  
of length

Flow rate



Analysis



Acoustics

- **All from one source:**

New instrument and calibration directly from Testo

- **Broad service portfolio:**

Over 200 calibration procedures according to ISO & DAkkS

- **Holistic test equipment management:**

From the organization to the pick-up and delivery service to calibration

- **Independent of manufacturer:**

Calibration of measuring instruments from all manufacturers

#### Our recommendation

Regular calibration of measuring instruments is required anywhere they are used in quality-related areas. The digital probes can be calibrated independently of the measuring instrument. That means your universal IAQ measuring instrument testo 400 remains in use and you can carry on working with other probes.