



Measurement Engineering for Air Conditioning and Ventilation



Icons



Backlit display



User-friendly operation based on menu-driven operations



Softcase or TopSafe to protect instrument in tough applications



Shock-proof



Infrared printer

Efficient paper documentation of measured results on site



Barcode reader

Helps with data management, customer allocation and tour plan



RS 232 interface

The easy connection to all branch software



Battery and rechargeable battery operation possible



Battery can be recharged in instrument



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For a good climate

Air conditioning and ventilation engineering is a complicated and multifaceted field – You know that as well as we do.

Highly diverse tasks such as planning, initial operation, approval and service with different interfaces and high demands on energy efficiency, hygiene and Indoor Air Quality all have to function in harmony.

Technical requirements are high. Low energy consumption, high operational safety, long-term availability, no refrigerant losses – at the same time, it must be possible to regulate air conditioning and ventilation in the different rooms individually and in real time.

Testo has the measurement engineering required. Complete solutions for all parameters. Our many years of experience are reflected in our practical and efficient measurement solutions.

Nobody offers more

It is impossible to find a comparable range of probes for all the parameters required in air conditioning: flow, humidity, temperature, lux, sound, CO₂, volt and milliamperere. Absolute assurance is

supplied by the Testo Calibration Certificates, regardless for which parameter. Testo has a pacesetter function in the calibration sector.

How accurate are you?

Measuring instruments have to measure accurately, stably and reliably over a period of years. These requirements are the basis of our product philosophy. An indication of how serious we are is made clear by the example of the development of our own, patented humidity sensor. It took eight years until the sensor met our requirements with respect to precision and long-term stability, response time and temperature tolerance. It was then subjected to thorough testing lasting more than a year before it was finally approved for use by our customers. But we were still not satisfied. Over a period of five years, inter-laboratory tests were undertaken involving nine renowned international testing institutes, such as the PTB in Berlin (National metrology institute), which documents the accuracy of the sensor over this time in each of the testing institutes.

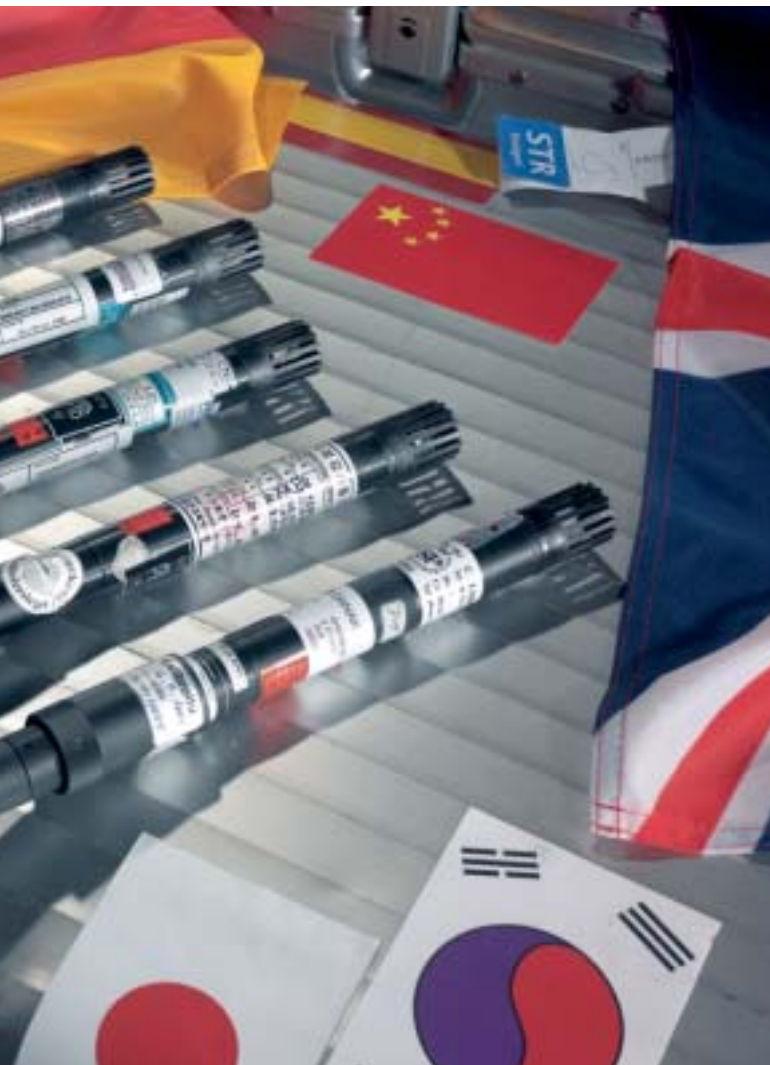
Learning changes

What was the difference again between standard and working volume flow? Or how are draughts in offices assessed?

If you need the answers to the above questions, just give us a call. We will do our best to help you.

Inter-laboratory tests

Three precision probes were tested in extensive inter-laboratory tests at the PTB in Berlin, NIST in the USA, in the French National Institute CETIAT, the Italian national institute IMGC, the English national institute NPL, the Spanish national institute INTA, at JQA in Japan, KRISS in Korea, NRCCRM in Peking and in the Testo DKD calibration laboratory. The results measured confirm the probe accuracy of ± 1 %RH as specified by Testo.



We owe Testo a lot



Wolfgang Schlee,
Head of
Commissioning at
M+W Zander Facility
Engineering GmbH

Mr. Schlee and his team are not only loyal Testo customers, they also attend seminars on air conditioning and ventilation engineering at Testo on a regular basis.

Mr. Schlee, what developments do you see in air conditioning engineering?

In the EU, there is a strong trend towards air conditioning in rooms, particularly in Southern European countries but also in Germany. In particular, split systems, decentralised systems for partial air conditioning in which an outside unit is combined with one or more inside units, are on the increase. The technical development is clearly targeting at a high efficiency level using intelligent system and regulation concepts.

What significance does measurement engineering have in your branch?

In order to be able to ideally adjust air conditioning and ventilation systems, we have to know numerous parameters and adjust them to each other. Without the proper measuring instruments and the know-how as to how to measure, it would simply be impossible to measure.

What do you associate with Testo?

The right instrument for every measurement job in air conditioning and ventilation engineering. I do not know any other company with such a comparable complete and well thought-through range of products for our sector. You could nearly believe that the Testo developers watch us everyday when we are measuring. For example, the SoftCase protection case with magnetic holder so that I can attach my meter to the system and have my hands free to guide the probe and make adjustments.

Service is also first-class. In the case of the few defects which we experienced over the years, we always received help straightaway. When we had to send in an instrument, a replacement instrument was immediately made available to us.

In your sector you could be referred to as an "old hat", why are you still attending seminars at Testo?

Even old hats have to keep up-to-date. I have to pay attention to new developments in measurement engineering and new technical rules and legal stipulations about which I want to be informed. I always choose the aspects which I consider important. The same applies to my colleagues

What would you write for Testo in the register?

Good instruments, good service, a lot of know-how. We owe Testo a lot.

The right VAC measuring instrument



All About
VAC

testo 400
VAC

ent for every task

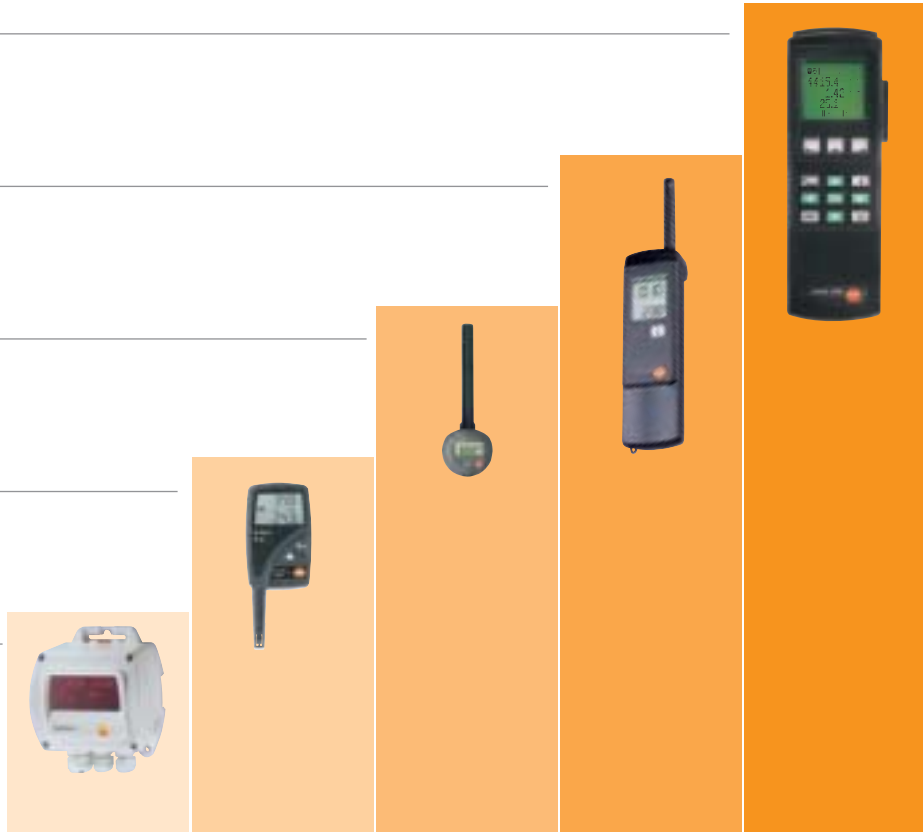
Reference Measuring Instruments (Page 8-9, 13)

Compact Measuring Instruments (Page 6-7, 10-34)

Mini Measuring Instruments (Page 14, 18, 34-35)

Dataloggers (Page 27-32)

Stationary Measurement Engineering (Page 33)



Profiles

Air Temperature	X	X	X	X	X
Surface Temperature		X	X	X	X
Differential Temperature				X	X
Air Humidity	X	X	X	X	X
Vane				X	X
Thermal Probe			X	X	X
Pitot Tube				X	X
Draught/Degree of Turbulence/VAC module					X
Differential Pressure			X	X	X
Absolute Pressure				X	X
CO2				X	X
Light				X	
rpm				X	X
Printout of readings	X	X		X	X
Processing of data on PC	X	X		X	X
Data Memory		X		X	X

Service on air conditioning units

Do you manage to get home by 5pm every day?



Axel Rieple,
Head of Sales,
Germany

Probably not, because your job expects above-average dedication. You also need partners who won't let you down. We are leading the way with our quality service.

Check it out for yourself.

Do you need an accessory, do you have a question about measuring or do you need a replacement instrument? – Testo Service employees are at your service when you need them. Good to know when the situation requires.



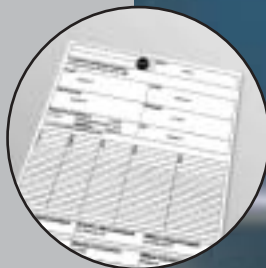
Professional Flow Measurement:

- Vane
- Thermal
- Pitot tube



Indoor Air Quality:

- Temperature
- Humidity
- Flow
- CO2



Convenient data analysis with Testo ComSoft 3 incl. special flow protocol



TopSafe for measurement instrument protection



testo 445

The measuring instrument for initial operation and service in air conditioning systems and for the assessment of Indoor Air Quality:

- Thermal measurement for the assessment of the smallest flows with absolute pressure compensation
- Vane for measuring mean velocities
- Pitot tube for measuring high velocities or dirt ingressed air.

The temperature, humidity, veloc-

ity and CO₂ parameters can be measured to assess Indoor Air Quality.

Measurement data can be saved and analysed on your PC or can be printed on site on the Testo printer.

- Generates mean value automatically and determines volume flow
- Internal data memory (3,000 readings)
- Measures up to 6 parameters simultaneously

testo 445

VAC measuring instrument, incl. Top-Safe, battery and calibration protocol

Part no. 0563 4450

Starter set for flow/VAC measurements in ducts

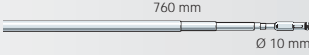



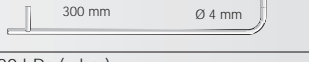




testo 445, VAC measuring instrument, incl. TopSafe, vane probe, Ø 16 mm, standard ambient air probe with connection cable, 1.5 m long, transport case

Part no. 0563 4453

Set for monitoring Indoor Air Quality

testo 445, VAC measuring instrument, incl. TopSafe, CO₂ probe with connection cable, 1.5 m long, three-function probe with connection cable, 1.5 m long, transport case

Part no. 0563 4456

Accessories		Part no.			
Plug-in mains unit, For mains operation and recharging battery in instrument		0554 0088			
Testo printer with cordless IRDA and infrared interface, 1 roll of thermal paper and 4 round batteries, For printout of reading on site		0554 0547			
Recharger for printer (with 4 standard rech. batteries), Rechargeable batteries are recharged externally		0554 0110			
ComSoft 3 - Professional with data management, Incl. database, analysis and graphics function, data analysis, trend curve		0554 0830			
RS232 cable, Connects instrument to PC (1.8 m) for data transfer		0409 0178			
Transport case (plastic) for measuring instrument, probes and accessories		0516 0445			
ISO calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube; calibration points 1; 2; 5; 10 m/s		0520 0004			
ISO calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube; calibration points 5; 10; 15; 20 m/s		0520 0034			
Velocity probes	Illustration	Meas. range	Accuracy	Part no.	
Quick-action hot wire probe, Ø 10 mm, with telescopic handle, for measurements in the lower velocity range with direction recognition		0 to +20 m/s -20 to +70 °C	±(0.03 m/s ±4% of mv) (0 to +20 m/s)	0635 1041	
Vane probe, Ø 16 mm, with telescopic handle, Tmax +60°C		+0.6 to +40 m/s	±(0.2 m/s ±1.5% of mv) (+0.6 to +40 m/s)	0628 0005	
Vane probe, Ø 60 mm, with telescopic handle, for integrating velocity measurement		+0.25 to +20 m/s	±(0.1 m/s ±1.5% of mv) (+0.25 to +20 m/s)	0635 9449	
Pressure probe, 100 hPa, measures differential pressure and velocities (in connection with Pitot tube)		0 to +100 hPa	±0.5% of mv (+20 to +100 hPa) ±0.1 hPa (0 to +20 hPa)	0638 1545	
Pitot tube, 300 mm long, stainless steel, for measuring velocity together with pressure probes		Oper. temp. 0 to +600 °C		0635 2245	
Connection hose, silicone, 5m long, Max. load 700 hPa (mbar)				0554 0440	
Humidity probes	Illustration	Meas. range	Accuracy	t ₉₀	Part no.
Standard ambient air probe up to +70°C		0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (remaining range)	12 s	0636 9740 Conn.: Plug-in head, connection cable 0430 0143 or 0430 0145 required
Temperature probe	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Quick-action surface probe with sprung thermocouple strip, measuring range short-term to +500°C		-200 to +300 °C	Class 2	3 s	0604 0194 Conn.: Plug-in head, connection cable 0430 0143 or 0430 0145 required
Indoor Air Quality	Illustration	Meas. range	Accuracy	Part no.	
3-function probe for simultaneous measurement of temperature, humidity and velocity. With plug-in head, 0430 0143 connection cable required		0 to +10 m/s 0 to +100 %RH -20 to +70 °C	±(0.03 m/s ±5% of mv)(0 to 10 m/s) ±2 %RH (+2 to +98 %RH) ±0.4 °C (0 to +50 °C) ±0.5 °C (remaining range)	0635 1540 Conn.: Plug-in head, connection cable 0430 0143 or 0430 0145 required	
CO ₂ probe measures indoor air quality and monitors the workplace. With plug-in head, connection cable 0430 0143 or 0430 0145 required		0 to +1 Vol. % CO ₂ 0 to +10000 ppm CO ₂	±(50 ppm CO ₂ ±2% of mv)(0 to +5000 ppm CO ₂) ±(100 ppm CO ₂ ±3% of mv)(+5001 to +10000 ppm CO ₂)	0632 1240 Conn.: Plug-in head, connection cable 0430 0143 or 0430 0145 required	
Cable, 1.5 m long, connects probe with plug-in head to meas. instrument, PUR coating material					0430 0143

THE reference for air conditioning/ventilation units

testo 400

The precision measuring instrument from the reference class offers the professional user everything he needs to fulfill complicated measurement tasks.

- Thermal, vane and Pitot tube measurement
- Velocity, volume flow
- Humidity, pressure
- CO₂, rpm, current, velocity
- Temperature

Complex but not complicated

The instrument recognises the respective probe connected and shows the next possible steps in the display.

Measurement data processing with "Retrieval guarantee"

Filing is in a clear tree structure with "Retrieval guarantee" – in a large display and, of course, on your PC.

Data memory for monitoring processes

A data memory with up to 48,000 readings is available for long-term measurement. All relevant parameters such as start and finish of measurement, measurement intervals, limits exceeded and date/time can be programmed as required.

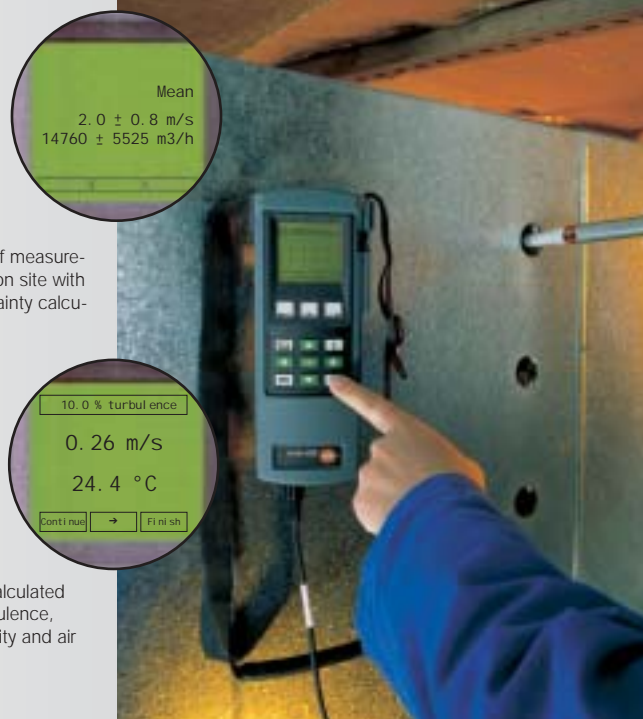
Assessment of measurement directly on site with built-in uncertainty calculation

Display with calculated degree of turbulence, mean air velocity and air temperature

testo 400

Multi-function measuring instrument, incl. battery and calibration protocol

Part no. 0563 4001



The coordinates required for the grid measurement are shown in the display. The depth data on the vane telescope makes your work much easier.

Velocity probes	Illustration	Meas. range	Accuracy	Part no.
Bendable vane probe (can be bent by 90°), Ø 100 mm, attachable to handle or telescopic handle, for measurements on ventilation outlets		+0.1 to +15 m/s Oper. temp. 0 to +60 °C	±(0.1 m/s ±1.5% of mv) (+0.1 to +15 m/s)	0635 9340
Vane/temperature probe, Ø 16 mm, attachable to handle or telescopic handle		+0.4 to +60 m/s -30 to +140 °C	±(0.2 m/s ±1% of mv) (+0.4 to +60 m/s)	0635 9540
Professional telescopic handle for plug-in vane probes, max. 1 m long, extension on request				0430 0941
Quick-action hot wire probe, Ø 10 mm, with telescopic handle, for measurements in the lower velocity range with direction recognition		0 to +20 m/s -20 to +70 °C	±(0.03 m/s ±4% of mv) (0 to +20 m/s)	0635 1041
Pitot tube measurement	Illustration	Meas. range	Accuracy	Part no.
Precision pressure probe, 100 Pa, in robust metal housing with impact protection, incl. magnet for fast attachment, to measure differential pressure and velocity speeds (in connection with Pitot tube)		0 to +100 Pa	±(0.3 Pa ±0.5% of mv)	0638 1347 Conn.: Plug-in head, connection cable 0430 0143 or 0430 0145 required
Pitot tube, 1000 mm long, stainless steel, measures velocity together with pressure probes 0638 1347		Oper. temp. 0 to +600 °C		0635 2345
Indoor Air Quality	Illustration	Meas. range	Accuracy	Part no.
Comfort level probe for measuring degree of turbulence, with telescopic handle and stand. Fulfills DIN 1946 Part 2 or EN 12 599 requirements		0 to +5 m/s 0 to +50 °C	±(0.03 m/s ±4% of mv) (0 to +5 m/s) ±0.3 °C (0 to +50 °C)	0628 0009
Ambient CO probe to measure CO level in ambient air		0 to +500 ppm CO	±5% of mv (+100.1 to +500 ppm CO) ±5 ppm CO (0 to +100 ppm CO)	0632 1247 Conn.: Fixed cable
CO ₂ probe measures indoor air quality and monitors the workplace. With plug-in head, connection cable 0430 0143 or 0430 0145 required		0 to +1 Vol. % CO ₂ 0 to +10000 ppm CO ₂	±50 ppm CO ₂ ±2% of mv (0 to +5000 ppm CO ₂) ±100 ppm CO ₂ ±3% of mv (+5001 to +10000 ppm CO ₂)	0632 1240 Conn.: Plug-in head, connection cable 0430 0143 or 0430 0145 required
Wet Bulb Globe temperature probe to assess workplaces subjected to heat, in accordance with ISO 7243 or DIN 33403, incl. WBGT case		0 to +120 °C	In accordance with ISO 7243 or DIN 33403	0635 8888 ID No. 0699 4239/1
Standard ambient air probe up to +70°C		0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (remaining range)	0636 9740 Conn.: Plug-in head, connection cable 0430 0143 or 0430 0145 required
Quick-action surface probe with sprung thermocouple strip, measuring range short-term to +500°C		-200 to +300 °C	Class 2 t ₉₉ 3 s	0604 0194 Conn.: Plug-in head, connection cable 0430 0143 or 0430 0145 required

For professional assessors

The testo 400 with the VAC module is currently the only measurement system in the world with which a fast and objective assessment of the functionality of a VAC system is possible without the need for additional manual calculations.

Of course, the measurement stipulations are based on the EN Standard 12599 as well as the Ashrae Standard USA.

The measurement technician always has one hand free. Site data, such as location name, measurement coordinates, duct area, offset factor etc. is read automatically into the measuring instrument via the barcode reader.

The measurement data saved in testo 400 is uploaded to the PC at the touch of a button. Time-consuming manual written work will now be a thing of the past, the required calculations are completed automatically by testo 400. Measurement results are documented in an EN standardised layout.

Draught and comfort (IAQ)

Draught air is the most common cause for complaint with respect to ambient conditions. The comfort probe, which is independent of direction, has been designed especially to assess draughts.

The mean air velocity alone is not sufficient to assess the effect on humans. Temporal fluctuations in ambient air velocity is of particular interest. One measure of this is the degree of turbulence required in the corresponding standards and guidelines. This is calculated automatically by testo 400.

- Avoid draughts in workplaces
- Measure ambient air velocity in

air-conditioned rooms in accordance with DIN 1946 Part 2, ISO 7726

- Automatic calculation of the degree of turbulence
- Fulfills the accuracy requirements of the DIN 1946 Part 2, EN 12 599, ISO 7726

Accessories for measuring instrument/probes	Part no.
Rechargeable battery set for instrument (4 rechargeables 2.4V/700mAh), Selected for quick recharging in instrument	0554 0196
Power unit 230 V/ 8 V/ 1 A, for instrument (European plug). For mains operation and battery recharging	0554 1084
Car charging adapter, ready to measure following recharging in car, Battery is recharged while travelling in car	0554 0424
Connection hose, silicone, 5m long, Max. load 700 hPa (mbar)	0554 0440
Software and Accessories	Part no.
ComSoft 3 - Professional with data management, Incl. database, analysis and graphics function, data analysis, trend curve	0554 0830
RS232 cable, Connects instrument to PC (1.8 m) for data transfer	0409 0178

Recommended Set: The assessor case for fast assessment of an air conditioning/ventilation unit	
Multi-function measuring instrument, incl. battery and calibration protocol	0563 4001
Memory upgrade to 500,000 readings, Upgrades memory capacity (by Service)	0554 9481
VAC module upgrade, Volume flow calculation in ducts with error calculation function in instrument	0450 4010
ComSoft 3 - Professional with data management, Incl. database, analysis and graphics function, data analysis, trend curve	0554 0830
VAC module upgrade, PC software, (for ComSoft 3 software), Printout of standard measurement protocols	0554 4030
RS232 cable, Connects instrument to PC (1.8 m) for data transfer	0409 0178
Bendable vane probe (can be bent by 90°), Ø 100 mm, attachable to handle or telescopic handle, for measurements on ventilation outlets	0635 9340
Vane/temperature probe, Ø 16 mm, attachable to handle or telescopic handle	0635 9540
Professional telescopic handle for plug-in vane probes, max. 1 m long, extension on request	0430 0941
Quick-action hot wire probe, Ø 10 mm, with telescopic handle, for measurements in the lower velocity range with direction recognition	0635 1041
Precision pressure probe, 100 Pa, measures differential pressure, in robust metal housing with impact protection, incl. magnet for fast attachment	0638 1347
Pitot tube, 1000 mm long, stainless steel, measures velocity together with pressure probes 0638 1347	0635 2345
Attachable printer (securely attached) including 1 roll of thermal paper and batteries, Quickly prints readings on location	0554 0570
SoftCase (protects instrument from impact) with carrier strap, magnetic holder and probe holder, Protects against impact and falls	0516 0401
SoftCase for attachable printer (protects printer from dirt/impact), Protects from impact and falls	0516 0411
System case (aluminium) for measuring instrument, probes and accessories, Probes in lid make it easy to find parts in case	0516 0410

Recommended Set: The Set for measuring draught and comfort level (IAQ)	
Multi-function measuring instrument, incl. battery and calibration protocol	0563 4001
Comfort level probe for measuring degree of turbulence, with telescopic handle and stand. Fulfills DIN 1946 Part 2 or EN 12 599 requirements	0628 0009
Attachable printer (securely attached) including 1 roll of thermal paper and batteries	0554 0570
Ambient CO probe to measure CO level in ambient air, To measure safe CO level	0632 1247
CO2 probe measures indoor air quality and monitors the workplace. With plug-in head, connection cable 0430 0143 or 0430 0145 required	0632 1240
Wet Bulb Globe temperature probe to assess workplaces subjected to heat, ID No. 0699 in accordance with ISO 7243 or DIN 33403, incl. WBGT case	0635 8888 4239/1
Cable, 1.5 m long, connects probe with plug-in head to meas. instrument, PUR coating material	0430 0143
Standard ambient air probe up to +70°C, Measures all physical parameters in the Mollier diagram	0636 9740
Quick-action surface probe with sprung thermocouple strip, measuring range short-term to +500°C	0604 0194
Cable, 1.5 m long, connects probe with plug-in head to meas. instrument, PUR coating material	0430 0143

Printer and Accessories	Part no.
Attachable printer (securely attached) including 1 roll of thermal paper and batteries	0554 0570
Testo printer with cordless IRDA and infrared interface, 1 roll of thermal paper and 4 round batteries, For printout of reading on site	0554 0547
Softcase for instrument and printer	Part no.
SoftCase (protects instrument from impact) with carrier strap, magnetic holder and probe holder	0516 0401
SoftCase for attachable printer (protects printer from dirt/impact)	0516 0411
System case	Part no.
System case (plastic) for measuring instrument, probes and accessories, Probes in lid make it easy to find parts in case	0516 0400

For more information, refer to the "Portable Reference Measurement Engineering" brochure and www.testo.com.

Measure flow and temperature – Professionally and efficiently

Experts are our favourite customers



Dettlef Higgelke,
Head of Testo
AG Academy

... because they know what they are doing. We offer you our support with our field-oriented trainings on measurement procedures, stipulations and on physical cohesions.

Even more important is the exchange with other specialists from your branch. After all, we are dealing with your competence and your professional routine when using our instruments.

By the way: 98% of our training participants fully recommend our seminars and training.

For more information, refer to our brochure or check out our website at www.testo.com.



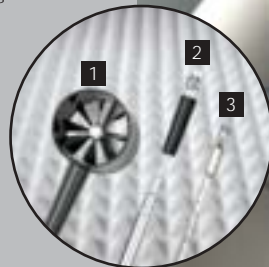
Timed and multi-point mean calculation



Printout of measured data on site on Testo printer (optional)



Volume flow measurement with measurement funnel to inspect exhaust air quantities



Velocity probes for all applications:

- 1** For duct exit
0.25 to 20 m/s
- 2** In duct
0.6 to 40 m/s
- 3** In room, in channel
0 to 20 m/s



testo 435

testo 435, with volume flow calculation (m^3/h , m^3/min ,...), has all the advantages of thermal and vane anemometers.

• The following can be connected to testo 435:

- Vane probes
- Thermal probes
- Temperature probes

- m/s and m^3/h
(Volume flow calculation 0 to 999.999 m^3/h)
- Timed and multi-point mean calculation

testo 435

Anemometer, incl battery and calibration protocol

Part no. 0560 4350

Printer and Accessories	Part no.
Testo printer with cordless IRDA and infrared interface, 1 roll of thermal paper and 4 round batteries	0554 0547
Recharger for printer (with 4 standard rech. batteries), Rechargeable batteries are recharged externally	0554 0110
Spare thermal paper for printer (6 rolls)	0554 0569
Spare thermal paper for printer (6 rolls), Measurement data documentation legible for up to 10 years	0554 0568

Accessories	Part no.
9V rech. battery for instrument, instead of battery	0515 0025
Recharger for 9V rechargeable battery, For external recharging of 0515 0025 battery	0554 0025
testovent 410, volume flow funnel, \varnothing 340mm/330 x 330mm, incl. case	0554 0410
testovent 415, volume flow funnel, \varnothing 210mm/190x190mm, incl. case	0554 0415

Transport and Protection	Part no.
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Accessories set (for instrument without TopSafe) includes multi-function clip, carrier loop, probe holder	0554 0550
Accessories set (for instrument with TopSafe) includes multi-function clip and probe holder	0554 0552
Case for instrument and probes, For safe and orderly storage	0516 0182
Transport case (plastic) for instrument and accessories, For safe and orderly storage	0516 0184

Calibration Certificates	Part no.
ISO calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube; calibration points 1; 2; 5; 10 m/s	0520 0004
ISO calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube; calibration points 5; 10; 15; 20 m/s	0520 0034
DKD calibration certificate/Velocity, Hot wire, vane anemometer; calibration points 0.5; 1; 2; 5; 10 m/s	0520 0244
DKD calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube; calibration points 2; 5; 10; 15; 20 m/s	0520 0204

Recommended Set: The Starter Set for measuring velocity in ducts

Anemometer, incl battery and calibration protocol	0560 4350
Affordable hot wire probe for m/s and $^{\circ}\text{C}$, \varnothing 12mm, with telescopic handle max. 675 mm	0635 1044
Transport case (plastic) for instrument and accessories, For safe and orderly storage	0516 0184

Recommended Set: The Starter Set for measuring flow at outlets

Anemometer, incl battery and calibration protocol	0560 4350
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Vane probe, \varnothing 60mm, with telescopic handle max. 754mm, e.g. for measurements at duct outlets	0635 9344
Robust, affordable air probe to check storage temperatures	0613 1711
Transport case (plastic) for instrument and accessories, For safe and orderly storage	0516 0184

Technical data

Probe type	Hot wire	Vane	NTC	Calc. parameter
Meas. range	0 to +20 m/s	+0.2 to +40 m/s	-50 to +150 $^{\circ}\text{C}$	0 to +999999 m^3/h
Accuracy ± 1 digit	See probe data	See probe data	$\pm 1\%$ of mv (+100 to +150 $^{\circ}\text{C}$) $\pm 0.5^{\circ}\text{C}$ (-25 to +74.9 $^{\circ}\text{C}$) $\pm 0.8^{\circ}\text{C}$ (remaining range)	
Resolution	0.01 m/s (0 to +10 m/s) 0.1 m/s (+10.1 to +20 m/s)	0.01 m/s (0 to +10 m/s) 0.1 m/s (+10.1 to +40 m/s)	0.1 $^{\circ}\text{C}$	
Display	LCD, 2 lines		Auto Off	10 min
Oper. temp.	0 to +50 $^{\circ}\text{C}$		Weight	300 g
Storage temp.	-20 to +70 $^{\circ}\text{C}$			
Battery life	>20 h (thermal probe)		>100 h (vane)	

Velocity probes	Illustration	Meas. range	Accuracy	Part no.
Affordable vane probe, \varnothing 60 mm, e.g. for measurements at duct outlets		+0.25 to +20 m/s Oper. temp. 0 to +60 $^{\circ}\text{C}$	$\pm(0.1 \text{ m/s} \pm 1.5\% \text{ of mv})$ (+0.25 to +20 m/s)	0635 9244
Vane probe, \varnothing 60mm, with telescopic handle max. 754mm, e.g. for measurements at duct outlets		+0.25 to +20 m/s Oper. temp. 0 to +60 $^{\circ}\text{C}$	$\pm(0.1 \text{ m/s} \pm 1.5\% \text{ of mv})$ (+0.25 to +20 m/s)	0635 9344
Vane probe, \varnothing 16 mm, with telescopic handle max. 720mm, e.g. for measurements in ducts		+0.6 to +40 m/s Oper. temp. 0 to +60 $^{\circ}\text{C}$	$\pm(0.2 \text{ m/s} \pm 1.5\% \text{ of mv})$ (+0.6 to +40 m/s)	0635 9544
Affordable hot wire probe for m/s and $^{\circ}\text{C}$, \varnothing 12mm, with telescopic handle max. 675 mm		0 to +20 m/s -20 to +70 $^{\circ}\text{C}$	$\pm(0.05 \text{ m/s} \pm 5\% \text{ of mv})$ (+0 to +20 m/s)	0635 1044
Quick action hot wire probe for m/s and $^{\circ}\text{C}$, \varnothing 10 mm, with telescopic handle max. 835 mm, for measurements in the lower velocity range		0 to +20 m/s -20 to +70 $^{\circ}\text{C}$	$\pm(0.03 \text{ m/s} \pm 4\% \text{ of mv})$ (+0 to +20 m/s)	0635 1043

Temperature probes	Illustration	Meas. range	Accuracy	t_{99}	Part no.
Waterproof immersion/penetration probe		-50 to +150 $^{\circ}\text{C}$ Long-term meas. range +125 $^{\circ}\text{C}$, short-term +150 $^{\circ}\text{C}$ (2 min)	$\pm 0.5\%$ of mv (+100 to +150 $^{\circ}\text{C}$) $\pm 0.2^{\circ}\text{C}$ (-25 to +74.9 $^{\circ}\text{C}$) $\pm 0.4^{\circ}\text{C}$ (remaining range)	10 s	0613 1211 Conn.: Fixed cable
Robust, affordable air probe to check storage temperatures		-50 to +150 $^{\circ}\text{C}$ Long-term meas. range +125 $^{\circ}\text{C}$, short-term +150 $^{\circ}\text{C}$ (2 min)	$\pm 0.5\%$ of mv (+100 to +150 $^{\circ}\text{C}$) $\pm 0.2^{\circ}\text{C}$ (-25 to +74.9 $^{\circ}\text{C}$) $\pm 0.4^{\circ}\text{C}$ (remaining range)	60 s	0613 1711 Conn.: Fixed cable

Measure air flow and air temperature

testo 425

The anemometer with separate, securely attached telescopic probe.

The telescopic probe facilitates measurements at difficult-to-access points e.g. in ceiling and wall outlets, in air conditioning ducts or in extraction hoods.

- Timed or multi-point mean calculation

- Parallel measurement of velocity and temperature

- Switches between: Hold/Max/Min; °C/°F; m/s/fpm

testo 425

Thermal anemometer with separate velocity/temperature probe incl. telescopic handle, battery and calibration protocol

Part no. 0560 4250



Telescopic probe (max. 675 mm long; Ø 20 mm), securely attached



Measuring the flow speed in a ventilation duct

Accessories Ordering data	Part no.
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Case for instrument and probes, For safe and orderly storage	0516 0182
Accessories set (for instrument without TopSafe) includes multi-function clip, carrier loop, probe holder	0554 0550
Accessories set (for instrument with TopSafe) includes multi-function clip and probe holder	0554 0552
9V rech. battery for instrument, Instead of battery	0515 0025
Recharger for 9V rechargeable battery, For external recharging of 0515 0025 battery	0554 0025
ISO calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube: calibration points 1: 2: 5: 10 m/s	0520 0004
ISO calibration certificate/Velocity, Hot wire, vane anemometer; calibration points 0.5: 0.8: 1: 1.5 m/s	0520 0024
ISO calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube: calibration points 5: 10: 15: 20 m/s	0520 0034
DKD calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube: calibration points 2: 5: 10: 15: 20 m/s	0520 0204

Technical data		
Meas. range	0 to +20 m/s	-20 to +70 °C
Accuracy ±1 digit	±(0.05 m/s ±5% of mv) ±0.5 °C (0 to +50 °C) ±0.7 °C (remaining range)	
Resolution	0.01 m/s (0 to +10 m/s) 0.1 m/s (+10.1 to +20 m/s)	0.1 °C (-20 to +70 °C)
Oper. temp.	0 to +50 °C	
Storage temp.	-20 to +70 °C	
Battery life	20 h	
Dimensions	190 x 57 x 42 mm	

Measure pressure and flow – Using one instrument

testo 512

The pressure and flow meter with switchable units displays pressure and velocities when used together with a Pitot tube.

- Adjustable smoothing
- Density compensation integrated
- Switchable units. Pressure: hPa/mbar, mmH₂O, mmHg, psi, inH₂O, inHg; flow: m/s, fpm

0 to 2 hPa/mbar	1
Differential pressure meter, 0 to 2 hPa/mbar, incl. battery and calibration protocol	
Part no. 0560 5120	

0 to 20 hPa/mbar	2
Differential pressure meter, 0 to 20 hPa/mbar, incl. battery and calibration protocol	
Part no. 0560 5121	

0 to 200 hPa/mbar	3
Differential pressure meter, 0 to 200 hPa/mbar, incl. battery and calibration protocol	
Part no. 0560 5122	

0 to 2000 hPa/mbar without flow	4
Differential pressure meter, 0...2000 hPa/mbar, incl. battery and calibration protocol	
Part no. 0560 5123	

Accessories Ordering data	Part no.
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Case for instrument and probes, For safe and orderly storage	0516 0182
Connection hose, silicone, 5m long, Max. load 700 hPa (mbar)	0554 0440
Pitot tube, 350 mm long, stainless steel, measures velocity in connection with pressure probes	0635 2145
ISO calibration certificate/Pressure, Differential pressure, accuracy 0.1 to 0.6 (% of fsv)	0520 0025



Simultaneous display of flow and pressure value



Measures flow with a Pitot tube in a ventilation duct

Technical data	1	2	3	4
Meas. range	0 to +2 hPa +2 to +17.5 m/s	0 to +20 hPa +5 to +55 m/s	0 to +200 hPa +10 to +100 m/s	0 to +2000 hPa
Resolution	0.001 hPa 0.1 m/s (+1 to +17 m/s)	0.01 hPa 0.1 m/s (+3 to +55 m/s)	0.1 hPa 1 m/s (+9 to +100 m/s)	1 hPa
Overload	±10 hPa	±200 hPa	±2000 hPa	±4000 hPa
Accuracy	0.5% of fsv / ±1 digit			
Measuring medium	All non-corrosive gases			
Oper. temp.	0 to +60 °C			
Storage temp.	-10 to +70 °C			
Battery life	120 h			
Dimensions	191 x 57 x 42 mm			
Weight	275 g			

Pressure meters for all measurement ranges

testo 521

Highly accurate with internal differential pressure sensor, ideal for inspecting extraction units and ventilators and for monitoring pressure drops in filters. When used with the Pitot tube, the internal pressure sensor measures velocities from 5 - 100 m/s. The 100 Pa probe, which can be connected externally, measures accurately from 1 - 12 m/s.

- Temp. compensated differential pressure sensor 0 to 100 hPa integrated in instrument
- Calculation of velocity and volume flow via Pitot tube measurement
- Multi-point and timed mean calculation
- 2 probe sockets for pressure and temperature



Save data according to site and analyse on PC/notebook



Pitot tube measurement with external 100 Pa probe

testo 521-1	testo 521-2
Accuracy 0.2% of fsv	Accuracy 0.1% of fsv
Differential pressure meter 0 to 100 hPa incl. battery and calibration protocol	Differential pressure meter 0 to 100 hPa incl. battery and calibration protocol
Part no. 0560 5210	Part no. 0560 5211

Accessories Ordering data	Part no.
Connection hose, silicone, 5m long, Max. load 700 hPa (mbar)	0554 0440
Connection hose set, 2 x 1 m, coiled, incl. 1/8" screw connection, Pressure-tight up to 20 bar, for probe 0638 1647/1747/1847	0554 0441
Cable, 1.5 m long, connects probe with plug-in head to meas. instrument, PUR coating material	0430 0143
TopSafe (protection case), incl. carrier strap, bench stand and magnet. Protects instrument from dust, impact, scratches	0516 0446
Testo printer with cordless IRDA and infrared interface, 1 roll of thermal paper and 4 round batteries	0554 0547
ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend curve	0554 0830
RS232 cable, Connects instrument to PC (1.8 m) for data transfer	0409 0178
Transport case, For measuring instrument, probes, Prandtl Pitot tube, accessories	0516 0527

Technical data			
Probe type	Piezoresistive pressure sensor (internal)	Piezoresistive pressure sensor for external pressure probes	
Meas. range	0 to 100 hPa	0 to 2000 hPa	
Accuracy	±0.2 % of fsv(testo 521-1) ±0.1 % of fsv(testo 521-2)	±0.1 % of mv	
Resolution	0.01 hPa	0.1 Pa (0638 1347) 0.001 hPa (0638 1447) 0.1 hPa (0638 1647; 0638 1747; 0638 1847)	
Overload	300 hPa		
Static pressure	2000 hPa		
Oper. temp. (compensated)	0 to +50 °C	Dimensions	219 x 68 x 50 mm
Storage temp.	-20 to +70 °C	Weight	300 g
Memory	25,000	Display	LCD, 2 lines
PC	RS232 interface	Battery type	9 V (6LR61)

Differential pressure probes	Illustration	Meas. range	Accuracy	Conn.	Part no.
Precision pressure probe, 100 Pa, in robust metal housing with impact protection, incl. magnet for fast attachment, to measure differential pressure and velocity speeds (in connection with Pitot tube)		0 to +100 Pa	±(0.3 Pa ±0.5% of mv)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 1347
Pressure probe, 10 hPa, in robust metal housing with impact protection incl. magnet for fast attachment, to measure differential pressure and velocity speeds (in connection with Pitot tube)		0 to +10 hPa	±0.03 hPa	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 1447
Pressure probe, 1000 Pa, measures differential pressure, in robust metal housing with impact protection, incl. quick-closing coupling (M8 x 0.5), magnet for fast attachment		0 to +1000 hPa	±1 hPa (0 to 200 hPa) ±0.5% of mv (200 to 1000 hPa)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 1647
Pressure probe, 2000 Pa, measures differential pressure, in robust metal housing with impact protection, incl. quick-closing coupling (M8 x 0.5), magnet for fast attachment		0 to +2000 hPa	±2 hPa (0 to 400 hPa) ±0.5% of mv (400 to 2000 hPa)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 1747
Absolute pressure probe	Illustration	Meas. range	Accuracy	Conn.	Part no.
Pressure probe, 2000 hPa, measures absolute pressure, in robust metal housing with impact protection, incl. quick-closing coupling (M8 x 0.5), magnet for fast attachment		0 to +2000 hPa	±5 hPa (0 to +2000 hPa)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 1847
Pitot tubes	Illustration	Meas. range	Accuracy	Oper. temp.	Part no.
Pitot tube, 350 mm long, stainless steel, measures velocity in connection with pressure probes		350 mm	Ø 7 mm	0 to +600 °C	0635 2145
Pitot tube, 500 mm long, stainless steel, measures velocity in connection with pressure probes		500 mm	Ø 7 mm	0 to +600 °C	0635 2045
Temperature probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Pipe wrap probe for pipes with diameter of up to 2", for flow/return temp. meas. in hydronic systems		-60 to +130 °C	Class 2	5 s	0600 4593
Highly accurate air probe for air and gas temperature measurements with bare, mechanically protected sensor		-40 to +130 °C	To UNI curve	60 s	0610 9714



Measure differential and absolute pressure – Practical and robust

testo 511

Pressure meters for tough applications in the field. Integrated temperature compensation and 4/6 mm hose connections make testo 511 highly versatile.

- Automatic switchover of measurement range
- 5 switchable units: hPa/mbar, mmH₂O, mmHg, inH₂O, psi

For checking filters, ventilator characteristics and pressures in air conditioning/ventilation units:

testo 511

0 to 10/200 hPa/mbar

testo 511, differential pressure meter, 0 to 10/200 hPa/mbar, incl. connection hoses and battery

Part no. 0560 5111

Large, easy-to-read display



Absolute pressure for measuring barometric pressure with testo 511

Accessories Ordering data	Part no.
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Connection hose, silicone, 5m long, Max. load 700 hPa (mbar)	0554 0440
9V rech. battery for instrument, Instead of battery	0515 0025
Recharger for 9V rechargeable battery, For external recharging of 0515 0025 battery	0554 0025
ISO calibration certificate/Pressure, Differential pressure; 3 points distributed over meas. range	0520 0095
ISO calibration certificate/Pressure, Absolute pressure; 5 pt. distributed over the whole measurement range	0520 0115

Technical data		
Meas. range	0 to +10 hPa	+10 to +200 hPa
Accuracy	±0.03 hPa (0 to +1 hPa) ±1 digit	±(1 hPa ±1% of mv)
Resolution	0.01 hPa	0.1 hPa
Overload	300 hPa	
Oper. temp.	0 to +40 °C	
Storage temp.	-20 to +70 °C	
Battery life	150 h	
Dimensions	191 x 57 x 42 mm	
Weight	170 g	

Pressure measurement – Practical, efficient and accurate

testo 506

Small, compact differential pressure meters with temperature compensation and practical one-button operation.

- 5 switchable units: Pa/hPa, mmH₂O, mmHg, inH₂O, psi
- Integrated air flow measurement to 27 m/s (version 2)

Measures pressure and air flow in air conditioning/ventilation and in cleanrooms with air density compensation:

testo 506

0 to 500 Pa, m/s

Differential pressure meter, incl. connection hoses and battery

Part no. 0560 5062

Built-in magnetic holder and suspension loop



Measuring air flow with the Pitot tube

Technical data		
Meas. range	0 to 500 Pa	0 to 27 m/s
Accuracy	±2.5 Pa	
Resolution	1 Pa	0.01 m/s
Overload	±2000 Pa	
Battery life	150 h	
Oper. temp.	0 to +40 °C	
Storage temp.	-20 to +70 °C	

Accessories Ordering data	Part no.
Connection hose, silicone, 5m long, Max. load 700 hPa (mbar)	0554 0440
Pitot tube, 350 mm long, stainless steel, measures velocity in connection with pressure probes	0635 2145
ISO calibration certificate/Pressure, Differential pressure; 5 points distributed over meas. range	0520 0005

Measurement, logging and adjustment of refrigeration units and heat pumps

testo 560

The electronic manifold for all applications on refrigeration systems and heat pumps. The instrument with high-quality sensors to measure pressure, vacuum and temperature. Incl. valve bank to temporarily change the flow paths in the unit.

Convenient PC software is used for data management: data overviews of all measurements, displays in table and graph form, automatic acceptance of company, fitter, customer and system data.

- Vacuum measurement with accurate vacuum sensor
- Internal temperature sensor and external temperature probe socket
- Superheating, subcooling, temperature difference calculation
- Convenient data analysis on your notebook/PC



Robust design, instrument protection thanks to rubber sleeve SoftCase



Service and maintenance incl. initial operation of a refrigeration unit



Recommended Set: For the refrigeration technician

Electronic manifold with SoftCase, brass valve block, incl. battery	0560 5601
PC software for data analysis and documentation	0554 5600
Mains unit for external power supply	0628 1084
Pipe wrap probe with Velcro strip, for temperature measurement on pipes with diameter from 6 mm to max. 75 mm, Tmax +120°C	0609 5600
RS232 cable	0628 0178
System case for measuring instrument and accessories	0516 5601

testo 560-1

Electronic manifold with SoftCase, brass valve block, incl. battery

Part no. 0560 5601

testo 560-2

Electronic manifold with SoftCase, stainless steel valve block (also for ammonia), incl. battery

Part no. 0560 5602

Temperature probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Robust, waterproof immersion/penetration probe	110 mm Ø 4 mm 30 mm Ø 3.2 mm	-50 to +400 °C	Class A	12 s	0628 1272 Conn.: Fixed cable
Robust, waterproof surface probe with widened measuring tip, for smooth surfaces	110 mm Ø 4 mm Ø 9 mm	-50 to +400 °C	Class B	40 s	0628 1972 Conn.: Fixed cable
Robust, affordable air probe	110 mm Ø 4 mm	-50 to +400 °C	Class A	70 s	0628 1772 Conn.: Fixed cable
Pipe wrap probe with Velcro strip, for temperature measurement on pipes with diameter from 6 mm to max. 75 mm, Tmax +120°C	280 mm 20 mm	-50 to +120 °C	Class B	90 s	0609 5600 Conn.: Fixed cable
Adapter to probe/RS 232 connection for acdoor instruments PCD 312					0554 5603

Accessories Ordering data	Part no.
Mains unit for external power supply, Mains unit is recommended for long-term measurements	0628 1084
Transport case (plastic), Basic case without pockets, space for instrument and accessories	0516 0008
System case for measuring instrument and accessories, Simply click on to tools system case 0516 0329	0516 5601
PC software for data analysis and documentation, With data management incl. diagram and table displays	0554 5600
RS232 cable, Cable to connect instrument to PC (1.8m) for data transfer	0628 0178
ISO calibration certificate/Pressure, Absolute pressure; 5 pt. distributed over the whole measurement range	0520 0115
ISO calibration certificate/Temperature, For air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
DKD calibration certificate/Pressure, Absolute pressure; 11 measuring points distributed over meas. range	0520 0212

Technical data		
Meas. range Pressure (abs)	0 to +50 bar (Pressure)	0 to +200 hPa (Vacuum)
Overload	±75 bar	
Accuracy ±1 digit	±0.5% of fsv	
Resolution	0.1 bar (Pressure)	0.1 hPa (Vacuum)
Meas. range Temperature	-50 to +400 °C	
Oper. temp.	-20 to +60 °C	
Battery life	40 h	
Pressure media	CFC, fluorinated hydrocarbon, nitrogen, (ammonia, testo 560-2 only)	
Compensation	-10 to +50 °C	
Memory	Approx. 100,000 readings	
Conn.	3 x 7/16" - UNF	

Humidity and Temperature Measurement – Professional and Efficient

How many degrees are there really?



Wolfgang Schwörer, Head of Competence Center VAC

How can you be sure that your analyser measures exactly what it should be measuring? Our certified DKD laboratories are unbeatable in their accuracy and

give the values for all Testo measuring instruments - That's what true measurement efficiency is all about.

The competence of our engineers is held in high esteem by expert groups and committees in Berlin and Brussels where they are involved in the developments of future guidelines in their capacity as representatives of industry.

A comprehensive exchange of knowledge and experience with official measurement institutes around the world (e.g. DKD) ensures that your Testo measuring instrument can hold up to any comparison. Indeed, these efforts do have an objective: whoever uses Testo measurement engineering, can be assured that he is using the industrial standard.

Of further benefit to you: We know today about the guidelines and test specifications we will be faced with in the future.



The following can be connected:

- Temperature probe
- Humidity probe with 2 year guaranteed long-term stability



Easy to determine dew-point difference thanks to display of surface and dewpoint temperature



Data documentation printed on site on printer (optional)



TopSafe, saves instrument from dirt and impact (optional)



testo 635

The testo 635 measuring instrument has two probe sockets. One combination probe socket for %RH/°C and a temperature probe socket e.g. to determine the difference in dew point between ambient air and a wall surface.

Relative humidity and temperature are shown simultaneously in the display. Dewpoint is quickly calculated.

- Humidity sensor insensitive to condensation
- Easy and fast accuracy check on site
- Testo printer to print data on site

testo 635

Humidity/temperature measuring instrument, incl. battery and calibration protocol

Part no. 0560 6350

Technical data			
Probe type	Testo humid. sensor, cap.	Type K (NiCr-Ni)	Calc. parameter
Meas. range	0 to +100 %RH	-50 to +1000 °C	-20 to +70 °C td
Resolution	0.1 %RH (0 to +100 %RH)	0.1 °C (-50 to +200 °C) 1 °C (+200.1 to +1000 °C)	
Accuracy ±1 digit	See probe data	±(1 °C ±0.5% of mv) (-40 to +900 °C) ±(2 °C ±1% of mv) (remaining range)	
Oper. temp.	0 to +50 °C	Storage temp.	-20 to +70 °C
Dimensions	190 x 57 x 42 mm	Weight	300 g
Battery life	100 h		

Humidity Probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Standard ambient air probe up to +70 °C	144 mm Ø 12 mm	0 to +100 %RH -20 to +70 °C	±2 %RH (0 to +100 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (remaining range)	15 s	0636 9769
Robust humidity probe for measurements up to +140 °C in e.g. exhaust ducts and for measuring equilibrium moisture in e.g. bulk material	300 mm Ø 12 mm	0 to +100 %RH -20 to +125 °C	±2 %RH (0 to +100 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (remaining range)	30 s	0636 2161
Temperature probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Waterproof immersion/penetration probe	110 mm Ø 4 mm 30 mm Ø 3.2 mm	-60 to +400 °C	Class 2	7 s	0602 1292 Conn.: Fixed cable
Quick-action, waterproof immersion/penetration probe for measurements in viscoplastic material, ideal for plastic, food etc.	60 mm Ø 3 mm 20 mm Ø 1.5 mm	-60 to +800 °C	Class 1	3 s	0602 2692 Conn.: Fixed cable
Waterproof surface probe with widened measuring tip for flat surfaces	110 mm Ø 4 mm 6 mm	-60 to +400 °C	Class 2	30 s	0602 1992 Conn.: Fixed cable
Quick-action surface probe with spring-loaded thermocouple, also for rough surfaces, measuring range short-term up to 500 °C	150 mm Ø 4 mm 10 mm	-60 to +300 °C	Class 2	3 s	0602 0392 Conn.: Fixed cable
Robust, affordable air probe	110 mm Ø 4 mm	-60 to +400 °C	Class 2	25 s	0602 1792 Conn.: Fixed cable

Time for the essentials

"To be quite honest, the phones are usually quiet between 6 and 7pm but the few people who do call are delighted when somebody answers the phone. That's why I'm happy to be here. Testo at your service"



Regina Marx
Sales

Printer and Accessories	Part no.
Testo printer with cordless IRDA and infrared interface, 1 roll of thermal paper and 4 round batteries, For printout of reading on site	0554 0547
Recharger for printer (with 4 standard rech. batteries), Rechargeable batteries are recharged externally	0554 0110
Spare thermal paper for printer (6 rolls), Measurement data documentation legible for up to 10 years	0554 0568
Accessories Ordering data	Part no.
Adapter for surface humidity measuring, for humidity probes Ø 12mm, Locates damp spots on walls, for example	0628 0012
Cap for bore holes, for humidity probe Ø 12 mm, Measures equilibrium moisture in bore holes	0554 2140
Control and humidity adjustment set 11.3%RH/75.3%RH incl. adapter for humidity probes	0554 0660
Transport and Protection	Part no.
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Accessories set (for instrument without TopSafe) includes multi-function clip, carrier loop, probe holder	0554 0550
Teflon sintered filter, Ø 12 mm, for corrosive substances, High humidity range (long-term measurements), high velocities	0554 0756
Case for instrument and probes, For safe and orderly storage	0516 0182
Transport case (plastic) for instrument and accessories, For safe and orderly storage	0516 0184
Transport case (plastic) for measuring instrument, probes and accessories. Larger version, suitable for robust humidity probe 0636 2161	0516 0445
Calibration Certificates	Part no.
ISO calibration certificate/Humidity, Electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +25 °C	0520 0006
DKD calibration certificate/Humidity, Electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +25 °C	0520 0206

Check ambient conditions – Flexible and robust

testo 615 / 625

The compact thermohygrometer testo 615 with built-in probe measures ambient conditions e.g. in buildings, offices, warehouses etc. The testo 625 with a securely attached flexible humidity probe is ideal for measurements at difficult to access points and in air conditioning ducts.

- Dewpoint calculation (td)
- Humidity sensor unaffected by water
- Accuracy adjustment can be carried out by the user

testo 615

Humidity meter, with built-in humidity/temperature probe, battery and calibration protocol

Part no. 0560 6150

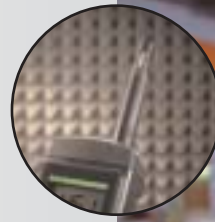
testo 625

Humidity meter, with securely attached humidity/temperature probe incl. 1 m probe cable, battery and calibration protocol

Part no. 0560 6250

Accessories Ordering data	Part no.
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Case for instrument and probes, For safe and orderly storage	0516 0182
Control/adjustment containers (75.3%RH), for 1 point control and adjustment of instrument	0554 0638
ISO calibration certificate/Humidity, Electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +25°C	0520 0006

testo 615 with probe integrated in housing



Monitor ambient conditions, e.g. in open-plan offices, using testo 625

Technical data	testo 625	testo 615
Meas. range	+5 to +95 %RH -10 to +60 °C -20 to +50 °C td	+5 to +95 %RH 0 to +50 °C -20 to +50 °C td
Accuracy ±1 digit	±3 %RH (+5 to +95 %RH) ±0.5 °C (-10 to +60 °C)	
Resolution	0.1 %RH (+5 to +95 %RH) 0.1 °C (-10 to +60 °C)	
Oper. temp.	0 to +50 °C	
Storage temp.	-20 to +70 °C	
Battery life	100 h	

Monitor Ambient Conditions – Efficient and Accurate

testo 608-H1 /-H2

The affordable standard testo 608-H1 hygrometer measures humidity, temperature and dewpoint.

The efficient testo 608-H2 alarm hygrometer with LED alarm function for accurate signals when limits are exceeded.

- With dewpoint calculation td and Max/Min value display
- Humidity sensor not affected by condensation

testo 608-H1

Humidity/dewpoint/temperature measuring instrument incl. battery

Part no. 0560 6081

testo 608-H2 with alarm

Humidity/dewpoint/temperature measuring instrument, incl. LED alarm, battery and calibration protocol

Part no. 0560 6082

Technical data	testo 608-H1	testo 608-H2
Meas. range	+10 to +95 %RH 0 to +50 °C -20 to +50 °C td	+2 to +98 %RH -10 to +70 °C -40 to +70 °C td
Accuracy ±1 digit	±3 %RH (+10 to +95 %RH) ±0.5 °C (at +25 °C)	±2 %RH (+2 to +98 %RH) ±0.5 °C (at +25 °C)
Oper. temp.	0 to +50 °C	-10 to +70 °C
Resolution	0.1 %RH / 0.1 °C	Measuring rate 18 s
Storage temp.	-40 to +70 °C	Dimensions 120 x 89 x 40 mm
Battery life	8736 h	Weight 168 g

Display can be read from a great distance



testo 608-H2 with LED alarm



Monitors ambient conditions

Accessories Ordering data	Part no.
ISO calibration certificate/Humidity, Electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +25°C	0520 0006

Non-contact temperature measurement – With memory and site management

testo 860-T2

Using testo 860-T2, you can quickly measure temperatures from -30 to +900 °C, without contact. The laser sighting shows the actual measurement point. You then know exactly where you are measuring.

Measurements over large distances are possible on account of the 60:1 optics. The last 10 measurements are shown in the graphics display in an automatically scaled bar diagram.

- Internal data memory (100 pos.) with location management
- Alarm function, audible and visual
- User-defined emissivity from 0.10 to 1.00

Technical data	
Meas. range	-30 to +900 °C
Accuracy ±1 digit	±0.75% of mv (+75 to +900 °C) ±0.75 °C (-4.9 to +74.9 °C) ±2 °C (-30 to -5 °C)
Resolution	0.1 °C
Reproducibility	±0.5 % of mv or ±1 °C, the larger value applies respectively
Spectral sensitivity	8 to 14 μm
Reaction time	0.25 s
Oper. temp.	0 to +45 °C
Storage temp.	-20 to +50 °C
Battery life	10 h
Dimensions	200 x 170 x 50 mm
Weight	480 g

testo 860-T2 Professional Set

Measuring instrument, fast action surface probe for contact measurement to 500°C, Windows compatible software, RS 232 computer cable, plug-in power unit, transport case

Part no. 0563 8602

Contact probe can be attached

Convenient data management

Monitoring temperature in ventilation units

Non-contact temperature measurement with laser sighting

testo 830-T1

The fast and versatile infrared thermometer with 1 point laser sighting

- 10:1 focus
- Backlit display
- Audible/visual alarm
- Emissivity adjustable from 0.2 to 1.0

testo 830-T1

Infrared thermometer with 1 point laser sighting, adjustable limit values and alarm function

Part no. 0560 8301

testo 830-T2

The testo 830-T2 additionally has a 2 point laser sighting and connection option for an external probe for contact measurement.

- 12:1 focus
- Emissivity measurement with an external T/C probe

testo 830-T2

Infrared thermometer with 2 point laser sighting, adjustable limit values, alarm function and connection of external probes

Part no. 0560 8302

830-T2, 2 point laser sighting (real measurement point)

830-T2, connection option for an external probe

Fast measurement of surface temperatures

Technical data	Infrared thermometer	Contact thermometer
Meas. range	-30 to +400 °C	-50 to +500 °C
Accuracy ±1 digit	±1.5 °C or 1.5 % of mv (+0.1 to +400 °C) ±2 °C or 2 % of mv (-30 to 0 °C)	±(0.5 °C ±0.5 % of mv)
Resolution	0.5 °C	0.1 °C
Oper. temp.	-20 to +50 °C	Battery type 9V block battery
Storage temp.	-40 to +70 °C	Battery life 15 h

Accessories Ordering data

Waterproof immersion/penetration probe

Part no. 0602 1292

Leather case to protect measuring instrument, including belt holder

Part no. 0516 8302

testo 830-T2 Set

Measuring instrument, fast-action surface probe for contact meas. and leather protection case

Part no. 0563 8302



Robust thermometers with a wide range of probes

The versatile testo 925/922/935 thermometers with a wide range of probes. The tough TopSafe case protects the instrument from dirt, water and impact.

- Large display

- Hold button to freeze readings
- Large range of probes for every application
- TopSafe case

testo 925 – Robust and versatile

- Affordable and robust
- For daily temperature measurements

testo 925

Thermometer incl. battery and calibration protocol

Part no. 0560 9255

testo 922 – Measures differential temperature

- 2 probes connectable, Type K
- T1, T2 display and differential temperature
- HOLD button to freeze readings

testo 922

Thermometer, incl. battery and calibration protocol

Part no. 0560 9224

testo 935 – Measures and documents differential temperature

- 2 probes connectable, Type K/J/T
- 2 line display
- Printout of readings on Testo printer

testo 935

Thermometer, incl. battery and calibration protocol

Part no. 0560 9350

Technical data testo 935

Probe type	Type K (NiCr-Ni)	Type J (Fe-CuNi)	Type T (Cu-CuNi)
Meas. range	-50 to +1000 °C	-50 to +750 °C	-50 to +350 °C
Accuracy ±1 digit	±(0.7 °C ±0.5% of mv) (-40 to +900 °C) ±(1 °C ±1% of mv) (remaining range)	±(0.7 °C ± 0.5% of mv)	±0.6 °C (-20 to +70 °C) ±(1 °C ±0.5% of mv) (remaining range)
Display	LCD, 2 lines		
Auto Off	10 min		

Technical data testo 922 and testo 925

Probe type	Type K (NiCr-Ni)
Meas. range	-50 to +1000 °C
Accuracy ±1 digit	±(0.7 °C ±0.5% of mv) (-40 to +900 °C) ±(1 °C ±1% of mv) (remaining range)
Display	LCD, 1 line

Common Technical Data

Resolution	0.1 °C (-50 to +199.9 °C) 1 °C (remaining range)
Oper. temp.	0 to +50 °C
Storage temp.	-20 to +70 °C
Battery life	150 h
Dimensions	190 x 57 x 42 mm
Weight	300 g



testo 922 / 935: 2 probes can be connected, display of differential temperature



testo 935: Documentation of data on printer (optional)



Inspecting floor heating with testo 925 in a practical TopSafe

Printers and Accessories

Printers and Accessories	Part no.
9V rech. battery for instrument, Instead of battery	0515 0025
Recharger for 9V rechargeable battery, For external recharging of 0515 0025 battery	0554 0025

Transport and Protection

Transport and Protection	Part no.
TopSafe (protection case) with bench stand, Protects measuring instrument from water, dust, impact..., IP68 with waterproof probes (drop symbol) (For testo 925)	0516 0186
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt (For testo 922/935)	0516 0183
Accessories set (for instrument without TopSafe) includes multi-function clip, carrier loop, probe holder	0554 0550
Accessories set (for instrument with TopSafe) includes multi-function clip and probe holder	0554 0552

Case for instrument and probes, For safe and orderly storage	0516 0182
Transport case (plastic) for instrument and accessories, For safe and orderly storage	0516 0184

Calibration Certificates

Calibration Certificates	Part no.
ISO calibration certificate/Temperature, For air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
ISO calibration certificate/Temperature, Thermometers with surface probe; calibration points +60°C; +120°C; +180°C	0520 0071
ISO calibration certificate/Temperature, Measuring instruments with air/immersion probe; calibration points 0°C; +300°C; +600°C	0520 0031
DKD calibration certificate/Temperature, Meas. instr. with air/immersion probe; calibration points -20°C; 0°C; +60°C	0520 0211

Additional accessories for testo 935

Additional accessories for testo 935	Part no.
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Testo printer with cordless IRDA and infrared interface, 1 roll of thermal paper and 4 round batteries, For printout of reading on site	0554 0547
Recharger for printer (with 4 standard rech. batteries), Rechargeable batteries are recharged externally	0554 0110
Spare thermal paper for printer (6 rolls)	0554 0569
Spare thermal paper for printer (6 rolls), Measurement data documentation legible for up to 10 years	0554 0568

Suitable Probes

Description	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Waterproof immersion/penetration probe	110 mm Ø 4 mm 30 mm Ø 3.2 mm	-60 to +400 °C	Class 2	7 s	0602 1292 Conn.: Fixed cable
Waterproof super-quick needle probe, highly accurate measurements without visible penetration hole. Specially for food, ideal for hamburgers, steaks, pizza, eggs etc.	150 mm Ø 1.4 mm 15 mm Ø 1 mm	-60 to +250 °C	Class 1	1 s	0628 0026 Conn.: Fixed cable
Quick-action, waterproof immersion/penetration probe for measurements in viscoplastic material, ideal for plastic, food etc.	60 mm Ø 3 mm 20 mm Ø 1.5 mm	-60 to +800 °C	Class 1	3 s	0602 2692 Conn.: Fixed cable
Accurate and quick-action immersion probe, waterproof	300 mm Ø 1.5 mm	-60 to +1000 °C	Class 1	2 s	0602 0592 Conn.: Fixed cable
Immersion tip, flexible	500 mm Ø 1.5 mm	-200 to +1000 °C	Class 1	5 s	0602 5792
Waterproof surface probe with widened measuring tip for flat surfaces	110 mm Ø 4 mm Ø 6 mm	-60 to +400 °C	Class 2	30 s	0602 1992 Conn.: Fixed cable
Quick-action surface probe with spring-loaded thermocouple, also for rough surfaces, measuring range short-term up to 500°C	150 mm Ø 4 mm Ø 10 mm	-60 to +300 °C	Class 2	3 s	0602 0392 Conn.: Fixed cable
Quick-action surface probe, bent, with sprung thermocouple strip, also for rough surfaces, measuring range short-term up to +500°C	80 mm Ø 4 mm 70 mm Ø 10 mm	-60 to +300 °C	Class 2	3 s	0602 0992 Conn.: Fixed cable
Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces	35 mm Ø 20 mm	-50 to +170 °C	Class 2		0602 4792 Conn.: Fixed cable
Magnetic probe, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces	75 mm Ø 21 mm	-50 to +400 °C	Class 2		0602 4892 Conn.: Fixed cable
Accurate, waterproof surface probe with a small measuring head for smooth surfaces	150 mm Ø 2.5 mm Ø 4 mm	-60 to +1000 °C	Class 1	20 s	0602 0692 Conn.: Fixed cable
Accurate, waterproof surface probe, bent, with small measuring head for smooth surfaces	130 mm Ø 2.5 mm Ø 4 mm 20 mm	-60 to +1000 °C	Class 1	20 s	0602 0792 Conn.: Fixed cable
Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Measuring range short-term to +280°C	35 mm 15 mm	-60 to +130 °C	Class 2	5 s	0602 4592 Conn.: Fixed cable
Spare meas. head for pipe wrap probe	35 mm 15 mm	-60 to +130 °C	Class 2	5 s	0602 0092
Clamp probe for measurements on pipes, pipe diameter 15 to 25 mm (max. 1"), meas. range short-term up to +130°C	15 mm	-50 to +100 °C	Class 2	5 s	0602 4692 Conn.: Fixed cable
Pipe wrap probe with Velcro strip, for temperature measurement on pipes with diameter up to max. 120 mm, Tmax +120°C	395 mm 20 mm	-50 to +120 °C	Class 1	90 s	0628 0020 Conn.: Fixed cable
Robust, affordable air probe	110 mm Ø 4 mm	-60 to +400 °C	Class 2	25 s	0602 1792 Conn.: Fixed cable
Thermocouple, flexible, 800mm long, fibre glass	800 mm Ø 1.5 mm	-50 to +400 °C	Class 2	5 s	0602 0644
Thermocouple, flexible, 1500mm long, fibre glass	1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2	5 s	0602 0645
Thermocouple, flexible, 1500mm long, Teflon	1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2	5 s	0602 0646

Accessories for temperature probes	Part no.
Handle for attachable measurement tips: For measurement tip 0602 5792, thermocouples 0602 0644, 0602 0645, 0602 0646	0409 1092
Extension cable, 5m, for Type K thermocouple probe	0554 0592
Silicone heat paste (14g), Tmax = +260°C, improves heat transfer in surface probes	0554 0004

☑ The measuring instrument inside TopSafe is waterproof with this probe.

Temperature measurement – High accuracy

testo 110

The testo 110 is a highly efficient temperature measuring instrument. The engineering used has been designed specially for applications in refrigerated store rooms, cabinets and for can-
teens.

- High accuracy level

testo 110

testo 110, thermometer, with battery and calibration protocol

Part no. 0560 1106

The TopSafe case protects from dirt, water and impact (optional)



Temperature measurement in refrigerated store rooms or cabinets.

Accessories	Part no.
9V rech. battery for instrument, Instead of battery	0515 0025
Recharger for 9V rechargeable battery, For external recharging of 0515 0025 battery	0554 0025
Transport and Protection	Part no.
TopSafe (indestructible protection case) with bench stand, Protects thermometer from corrosive substances, water, impact...Instrument has IP68 with all probes	0516 0187
Accessories set (for instrument without TopSafe) includes multi-function clip, carrier loop, probe holder	0554 0550
Accessories set (for instrument with TopSafe) includes multi-function clip and probe holder	0554 0552
Case for instrument and probes, For safe and orderly storage	0516 0182
Transport case (plastic) for instrument and accessories, For safe and orderly storage	0516 0184
Calibration Certificates	Part no.
ISO calibration certificate/Temperature, For air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
ISO calibration certificate/Temperature, Thermometers with surface probe; calibration points +60°C; +120°C; +180°C	0520 0071
ISO calibration certificate/Temperature, For air/immersion probes, calibration points -8°C; 0°C; +40°C	0520 0181
ISO calibration certificate/Temperature, For air/immersion probes, calibration points -18°C; 0°C	0520 0041

Assurance when purchasing

"Often, interested customers do not expect a visit from me following consultation by telephone. If a customer gets to see the instrument it gives him maximum assurance when making the decision to buy."



Uwe Becker
Head of Customer Center, Southwest Germany

Technical data

Probe type	NTC
Meas. range	-50 to +275 °C
Accuracy ±1 digit	±0.5% of mv (+100 to +275 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)
Oper. temp.	0 to +40 °C
Battery life	100 h
Dimensions	190 x 57 x 42 mm
Weight	300 g

Description	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Waterproof immersion/penetration probe		-50 to +150 °C 1)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	10 s	0613 1211 Conn.: Fixed cable
Pipe probe with Velcro, for pipe diameter of max. 80 mm		-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)		0613 4611 Conn.: Fixed cable
Waterproof surface probe with widened measuring tip, for flat surfaces		-50 to +150 °C 1)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	35 s	0613 1911 Conn.: Fixed cable
Robust, affordable air probe to check storage temperatures		-50 to +150 °C 1)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	60 s	0613 1711 Conn.: Fixed cable

The measuring instrument inside TopSafe is waterproof with this probe.

1) Long-term measurement range +125 °C, short-term +150 °C (2 minutes)

Monitor Indoor Air Quality – With fast documentation

testo 535

Bad air quality in rooms caused by high CO₂ concentrations (greater than 1000 ppm) can lead to tiredness, lack of concentration and illness.

- Repeated calibration is unnecessary
- Long-term monitoring

testo 535 is a highly accurate and reliable CO₂ measuring instrument.

testo 535

CO₂ measuring instrument with securely attached probe, batteries and calibration protocol

Part no. 0560 5350

Long-term monitoring with maximum and mean calculation



Monitors Indoor Air Quality e.g. in open-plan offices and fast data documentation on Testo printer

Accessories Ordering data	Part no.
TopSafe (protection case) with bench stand, Protects instrument from impact and dirt	0516 0183
Testo printer with cordless IRDA and infrared interface, 1 roll of thermal paper and 4 round batteries	0554 0547
Recharger for printer (with 4 standard rech. batteries), Rechargeable batteries are recharged externally	0554 0110
Spare thermal paper for printer (6 rolls)	0554 0569
Spare thermal paper for printer (6 rolls), Measurement data documentation legible for up to 10 years	0554 0568
9V rech. battery for instrument, instead of battery	0515 0025
Recharger for 9V rechargeable battery, For external recharging of 0515 0025 battery	0554 0025
Plug-in mains unit	0554 0088
Case, For secure storage of measuring instrument	0516 0191
Transport case (plastic) for instrument and accessories, For safe and orderly storage	0516 0184
ISO calibration certificate/CO ₂ , CO ₂ probes; calibration points 0: 1000; 5000 ppm	0520 0033

Technical data

Probe type	2 channel infrared sensor		
Meas. range	0 to +9999 ppm CO ₂		
Accuracy	±(50 ppm CO ₂ ±2% of mv) (0 to +5000 ppm CO ₂) ±1 digit ±(100 ppm CO ₂ ±3% of mv) (+5001 to +9999 ppm CO ₂)		
Resolution	1 ppm CO ₂	Storage temp.	-20 to +70 °C
Measuring medium	Air	Battery life	6 h
Oper. temp.	0 to +50 °C	Dimensions	190 x 57 x 42 mm

Check light intensity – With site management

testo 545

The light intensity in workplaces must fulfill minimum values and have to be checked regularly. Using the software, a site list can be stored and individual luminous intensity values can be connected to form a curve. This light profile provides information on the uniformity of the lighting.

- Logger function (3000 readings)
- Multi-point or timed mean calculation

- Stores up to 99 file locations

testo 545

Light meter, incl. probe, battery and calibration protocol

Part no. 0560 0545

Data is printed on site on the Testo printer (optional)



Measures light in the workplace

Accessories Ordering data	Part no.
Case, For secure storage of measuring instrument	0516 0191
ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend curve	0554 0830
RS232 cable, Connects instrument to PC (1.8 m) for data transfer	0409 0178
ISO calibration certificate/Light, Lux probes; calibration points 500; 1000; 2000 Lux	0520 0010

Technical data

Meas. range	0 to +100000 Lux		
Accuracy	Accuracy to DIN 5032, Part 6: f1 = 8% = V (Lambda) adaptation f2 = 5% = cos like rating		
Resolution	1 Lux (0 to +32000 Lux)	10 Lux (0 to +100000 Lux)	
Oper. temp.	0 to +50 °C		
Storage temp.	-20 to +70 °C		
Battery life	50 h		
PC	RS232 interface		
Memory	3000		
Dimensions	220 x 68 x 50 mm		
Weight	500 g		

Recommended Set: testo 545 Comfort Set

Light meter, incl. probe, battery and calibration protocol	0560 0545
TopSafe (indestructible protection case) incl. bench stand and belt clip	0516 0441
Testo printer with IRDA and infrared interface	0554 0547
Transport case (plastic) for measuring instrument, probes and accessories	0516 0445



Fiberscopes – The versatile tools for fast diagnoses

testo 318

The fiber-optic inspection tools from the testo 318 Series provide you with a clear picture at difficult-to-access points. The lens can focus on objects as close as 19 mm (3/4"). The sealed lens and shaft may be immersed in

liquids without worry.

- Thin flexible probe shaft
- Easy one-hand operation



Optimum halogen illumination



Easy detection of blocked duct channels

testo 318-1 S

914 mm long, Ø 6 mm
Fiberscope, probe 914 mm long/Ø 6 mm, halogen lamp and batteries

Part no. 0632 3181

testo 318-2 S

457 mm long, Ø 6 mm
Fiberscope, probe 457 mm long/Ø 6 mm, halogen lamp and batteries

Part no. 0632 3182

testo 318-1

914 mm long, Ø 10 mm
Fiberscope, probe 914 mm long/Ø 10 mm, halogen lamp, batteries

Part no. 0632 0318

testo 318-2

457 mm long, Ø 10 mm
Fiberscope, probe 457 mm long/Ø 10 mm, halogen lamp, batteries

Part no. 0632 0319

Accessories Ordering data	Part no.
Spare halogen lamp	0213 0017
Clip on 45° mirror, Ø 6 mm	0554 1325
Clip on 45° mirror, Ø 10 mm	0554 1320
Attachable clip incl. magnet, Ø 6 mm	0554 1324
Attachable clip incl. magnet, Ø 10 mm	0554 1321

testo 318-6

1830 mm long, Ø 10 mm

Complete 318-6 Kit consisting of fiberscope, probe 1830 mm long/Ø 10 mm, halogen lamp, clip-on 45° mirror, clip with magnet, spare lamp, batteries and hard shell case

Part no. 0563 3186

Technical data

Number of pixels	6,000
Field of view	40°
Min. focus distance	19 mm
Max. bending radius	203 mm
Light source	Halogen lamp (3220 K)

Hand-held stroboscope – Light-intensive

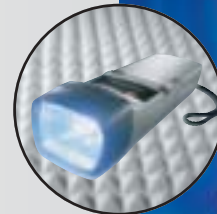
testo 476

The Pocket Strobe™ hand-held stroboscope measures and inspects rotations and vibrations. It is possible to measure during operation. The stationary image enables inspection and a qualitative assessment of high-frequency moving parts.

- High setting accuracy and stability thanks to dynamic setting dial
- Powerful rechargeable battery

pack for min. 1 hour operation time over the frequency range

- Automatic trigger to synchronize flash sequence



Light-intensive xenon flashlamp, light intensity approx. 800 lux



rpm measurement on a turbo ventilator

testo 476

Hand-held stroboscope Pocket Strobe™, incl. transport case, recharger with 4 country adaptors and trigger signal plug

Part no. 0563 4760

Accessories Ordering data	Part no.
Belt bag with clip for hand-held stroboscope	0516 4760
Spare xenon flashlamps (2 off) for hand-held stroboscope	0554 4760
ISO calibration certificate/rpm, Optical and mechanical rpm measuring instruments; cal. points 500; 1000; 3000 rpm	0520 0012

Technical data

Meas. range	+30 to +12500 rpm
Accuracy ±1 digit	±0.01% of mv
Resolution	1 rpm
Dimensions	240 x 65 x 50 mm
Oper. temp.	0 to +40 °C
Weight	465 g
Illumination: 800 Lux at distance of approx. 20 cm	
Flash energy: max. 150 mJ	
Operating time: 1h at 30 to 12,500 rpm and 23°C (typically)	

Rpm measurement – Non-contact

testo 465

Using testo 465, rpm can be easily measured without contact. Simply attach a reflector to the object to be measured and then point the visible, red light beam at the reflector and measure.

- Easy one-hand operation
- Saves mean/maximum value (last reading)



Technical data	
Probe type	Optically with mod. light beam
Meas. range	+1 to +99999 rpm
Accuracy ±1 digit	±0.02% of mv
Resolution	0.01 rpm (+1 to +99.99 rpm) 0.1 rpm (+100 to +999.9 rpm) 1 rpm (+1000 to +99999 rpm)
Oper. temp.	0 to +50 °C
Storage temp.	-20 to +70 °C
Dimensions	144 x 58 x 20 mm
Weight	145 g



Non-contact (optical) rpm measurement



Rpm measurement on fans and ventilators

Accessories Ordering data	Part no.
Reflectors, self-adhesive (1 pack = 5 off, each 150 mm long)	0554 0493
ISO calibration certificate/rpm, Optical and mechanical rpm measuring instruments; cal. points 500; 1000; 3000 rpm	0520 0012
ISO calibration certificate/rpm, Optical rpm measuring instruments; calibration points 10; 100; 1000; 10000; 99500 rpm	0520 0022

Rpm measurement – Non-contact and mechanical

testo 470

The ideal combination of optical and mechanical rpm measurement. An optical measurement becomes a mechanical measurement by simply attaching an adapter for a probe tip or surface speed disc.

- Measurement of rpm, speeds and lengths
- Low Batt warning



- Easy one-hand operation

Technical data		
Probe type	Optically with mod. light beam	Mechanical
Meas. range	+1 to +99999 rpm	+1 to +19.999 rpm
Accuracy ±1 digit	±0.02% of mv	
Resolution	0.01 rpm (+1 to +99.99 rpm) 0.1 rpm (+100 to +999.9 rpm) 1 rpm (+1000 to +99999 rpm)	
Oper. temp.	0 to +50 °C	
Storage temp.	-20 to +70 °C	
Dimensions	175 x 60 x 28 mm	
Weight	190 g	
Speed: 0.10 to 1.999 m/min; 0.30 to 6500ft/min; 4.00 to 78,000in/min Lengths: 0.02 to 99,000m; 0.01 to 99,000 ft; 1.00 to 99,999 in Accuracy: (±1 digit/0.02m/1.00 inch depending on resolution)		



Non-contact (optical) rpm measurement



Mechanical rpm measurement



Rpm measurement on rotating parts, non-contact and mechanical

Accessories Ordering data	Part no.
Reflectors, self-adhesive (1 pack = 5 off, each 150 mm long)	0554 0493
ISO calibration certificate/rpm, Optical rpm measuring instruments; calibration points 10; 100; 1000; 10000; 99500 rpm	0520 0022



Sound level measurement – To DIN/IEC 60651, Class 2

testo 815

The ideal instrument for daily use. Whether it is for air conditioning or heating, disco noise, machine noise or noise in combustion systems, testo 815 is the ideal partner.

Common features:

- Accuracy class 2 to IEC 60651
- Easy to adjust (adjustment screwdriver included)
- Frequency weighting to Characteristic A and C
- Maximum and minimum value memory
- Built-in tripod knuckle screw (1/4 inch)
- High accuracy level (Class 2)
- Switchable time weighting Fast / Slow

testo 816

When compared to testo 815, the larger model has additional features which make it ideal for assessors, workplace measurements and for measuring industry and environmental noise.

Additional benefits of testo 816:

- Automatic range switchover
- Backlit display
- Mains unit connection
- BarGraph display
- AC output to connection from recorders and amplifiers
- DC output with 10 mV/dB to connect recorders or dataloggers



testo 815:
Frequency weighting
Current value
Time weighting
Section measurement range



testo 815, Monitoring measurements on ventilation



testo 816:
Time weighting
Section measurement range
Frequency weighting
Current reading



testo 816, Checking noise control

testo 815

Sound level meter, accuracy class 2, incl. microphone, wind protection cap and battery

Part no. 0563 8155

testo 816

Sound level meter, accuracy class 2, incl. microphone, wind protection cap, battery, stereo jack 3.5 mm, in a practical measurement case

Part no. 0563 8165

Technical data	testo 815	testo 816
Meas. range	+32 to +130 dB	+30 to +130 dB
Accuracy ±1 digit	Class 2 ±1.0 dB	Class 2 ±1.0 dB
Resolution	0.1 dB	0.1 dB
Battery life	70 h	50 h
Weight	195 g	315 g
Dimensions	255 x 55 x 43 mm	309 x 68 x 50 mm
Battery type	9V block battery	
Oper. temp.	0 to +40 °C	
Storage temp.	-10 to +60 °C	
Other features	Section measurement ranges: 30 to 80 dB; 50 to 100 dB; 80 to 130 dB Time weighting: FAST 125 ms setting / SLOW 1 s setting Pressure dependency: -0.0016 dB/hPa	

Accessories Ordering data

Part no.

Calibrator, for regular calibration of testo 815, testo 816 0554 0452

Power unit 230 V/ 8 V/ 1 A, for instrument (European plug), For mains operation and battery recharging 0554 1084

ISO calibration cert./Sound pressure, Calibration points 94 dB(A); 104 dB(A); 114 dB(A) at different frequencies 0520 0111

Service Warranty

"Authentic quality: one of Testo's major claims. Warranties of up to 3 years are proof of our lasting quality - this thoroughness has made us one of the leading manufacturers in the world."



Jörg Wittmer
Head of Customer Service

Technical data

Sound level calibrator



Battery type 9V block battery
Battery life 40 h
Accuracy ±0.5 dB in accordance with Class 2 to IEC 60942

Sound pressure level: 94 dB/114 dB, switchable
Frequency: 1000 Hz

Also suitable for 1/2 and 1 inch microphones by other manufacturers

Monitor ambient temperature – Practical and compact

testo 174

The testo 174 mini datalogger can log room temperatures and therefore monitor the behaviour of a thermostat valve. The display shows the current reading. The following can be called up: stored minimum and maximum value, limit values and battery life.

testo 174

Mini temperature data logger, 1 channel, incl. wall holder, lock and battery

Part no. 0563 1741

Technical data

Meas. range	-30 to +70 °C
Memory	3900 readings
Measuring rate	1 min to 4 h (selectable)
Battery life	500 days (typical)
Analysis software	MS Windows 95b / 98 / ME / NT4-Sp4 / 2000 / XP
Dimensions	55 x 35 x 14 mm
Weight	24 g

- Accurate, punctual temperature logging with up to 3900 readings
- Alarm display if user-defined maximum/minimum values are exceeded
- Software to read out data, data analysis and parameter setting (optional)
- Secure data even if battery is spent

testo 174, Starter Set

Mini temperature data logger, 1 channel, ComSoft 3 Basic, wall holder, lock, interface incl. PC connection cable, battery

Part no. 0563 1742

Tamper-proof installation on the site

Data upload to PC or notebook via interface (optional)

Room temperature logging with immediate alarm display when limits are exceeded

Printers and Accessories

	Part no.
Transport case for up to 10 testo 174 dataloggers and accessories	0516 1740
Spare Li cell to save RAM data	0515 0028
ISO calibration certificate/Temperature, Temperature datalogger, calibration points -18°C, +60°C	0520 0443

Document ambient temperature – Fast and easy

testo 175-T1

The testo 175-T1 temperature data logger guarantees uninterrupted documentation of up to 7800 readings.

- Provides quick overview of current reading, last value saved, max/min value, number of times limits exceeded
- Secure data even if battery is empty

testo 175-T1

Internal °C
Temperature datalogger, 1 channel with internal sensor, incl. wall holder and calibration protocol

Part no. 0563 1754

Data is printed on fast testo 575 printer (optional)

Records temperature fluctuations in warehouses

Technical data

Chann. intern	1
Probe type	NTC
Meas. range	-35 to +70 °C
Accuracy	±0.5 °C (-20 to +70 °C) ±1 °C (-35 to -20.1 °C)
Resolution	0.1 °C (-20 to +70 °C) 0.3 °C (-35 to -20.1 °C)
Memory	7800
Measuring rate	10 s ... 24 h
Battery life	2.5 years at a meas. rate of 15 min (-10 to +50 °C)
Analysis software	MS Windows 95b / 98 / ME / NT4-Sp4 / 2000 / XP
Dimensions	82 x 52 x 30 mm
Weight	90 g
Protection class	IP68

Recommended Set: testo 175-T1, Starter Set

Temperature datalogger, 1 channel with internal sensor, incl. wall holder and calibration protocol	0563 1754
Lock for wall holder for testo 175/177 dataloggers	0554 1755
ComSoft 3 Set - Basic with RS 232 interface	0554 1759

Accessories Ordering data See page 32



Log temperature – Simultaneously at two sites

testo 175-T2

With an additional external probe connection, the temperature datalogger provides a further temperature measurement option.

- Monitors 2 temperatures simultaneously
- Fast overview of current reading, last value saved, max/min values, number of times limits exceeded
- User-friendly operation, convenient analysis

testo 175-T2

Internal °C + external °C

Temperature datalogger, 2 channels, with internal sensor and external probe socket, wall holder and calibration protocol

Part no. 0563 1755

Technical data

Chann. intern	1	
Meas. range	-35 to +70 °C	
Accuracy ±1 digit	±0.5 °C (-20 to +70 °C)	±1 °C (remaining range)
Resolution	0.1 °C (-20 to +70 °C)	0.3 °C (remaining range)
Chann. external (var.)	1	
Meas. range	-40 to +120 °C	
Accuracy ±1 digit	±0.3 °C (-25 to +70 °C)	±0.5 °C (remaining range)
Resolution	0.1 °C (-25 to +70 °C)	0.3 °C (remaining range)
Memory	16000	
Measuring rate	10 s to 24 h	
Battery life	2.5 years at meas. rate of 15min (-10 to +50°C)	
Analysis software	MS Windows 95b / 98 / ME / NT4-Sp4 / 2000 / XP	
Oper. temp.	-35 to +70 °C	
Storage temp.	-40 to +85 °C	
Protection class	IP68	
Dimensions	82 x 52 x 30 mm	
Weight	84 g	

Collects data on site, uploads to PC and analyses



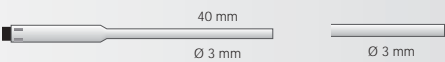
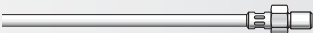

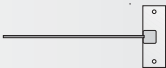
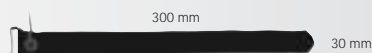
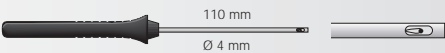
Tamper-proof with wall holder and lock (optional)

Simultaneous monitoring of ambient air temperature and temperature in a refrigeration unit

Recommended Set: testo 175-T2, Starter Set

Temperature datalogger, 2 channels, with internal sensor and external probe socket, wall holder and calibration protocol	0563 1755
Lock for wall holder for testo 175/177 dataloggers	0554 1755
Mounting probe with aluminium sleeve, IP 65	0628 7503
ComSoft 3 Set - Basic with RS 232 interface	0554 1759

Accessories Ordering data See page 32

Description	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Stub probe, IP 54	 35 mm Ø 3 mm	-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (+40.1 to +70 °C)	15 s	0628 7510
Mounting probe with aluminium sleeve, IP 65	 40 mm Ø 6 mm	-30 to +90 °C	±0.2 °C (0 to +70 °C) ±0.5 °C (remaining range)	190 s	0628 7503 * Conn.: Fixed cable
Accurate imm./pen. probe, 6m cable, IP 67	 40 mm Ø 3 mm	-35 to +80 °C	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	5 s	0610 1725 * Conn.: Fixed cable
Accurate immersion/penetration probe, cable: 1.5 m long, IP 67					0628 0006 *
Screw-in probes for measurements at hard-to-access points, M6 thread, IP 54		-50 to +80 °C	±0.5% of mv	70 s	0628 7514 * Conn.: Fixed cable
Probe for surface measurement	 40 mm Ø 8 x 8 mm	-50 to +80 °C	±0.2 °C (0 to +70 °C)	150 s	0628 7516 * Conn.: Fixed cable
Wall surface temperature probe, e.g. to prove damage in building material		-50 to +80 °C	±0.2 °C (0 to +70 °C)	20 s	0628 7507 Conn.: Fixed cable
Pipe probe with Velcro, for pipe diameter of max. 80 mm	 300 mm 30 mm	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)		0613 4611 Conn.: Fixed cable
Robust, affordable air probe to check storage temperatures	 110 mm Ø 4 mm	-50 to +150 °C Long-term meas. range +125 °C, short-term +150 °C (2 min)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	60 s	0613 1711 * Conn.: Fixed cable

The specified seal class of the dataloggers is achieved with these probes.

* Probe tested to EN 12830 for suitability in the transport and storage sectors

Log high temperatures – With external thermocouples

testo 175-T3

The temperature datalogger records the temperature simultaneously at two different points over a period of several days, weeks or months.

- Specially for the measurement of low and high temperatures
- Data analysis as table or graph, with e-mail function
- Alarm message, reliable indication when limits are exceeded

Data upload to PC or notebook via attachable interface (optional)



Measurement of air inlet and outlet temperature in refrigeration units

testo 175-T3

2 x external °C

Temperature datalogger, 2 channels, with 2 probe sockets, wall holder and calibration protocol

Part no. 0563 1756

Technical data

Chann. external (var.)	2		
Probe type	Type T (Cu-CuNi)	Meas. range	-50 to +400 °C
Probe type	Type K (NiCr-Ni)	Meas. range	-50 to +1000 °C
Accuracy ±1 digit	±0.7% of mv (+70.1 to +1000 °C) ±0.5 °C (-50 to +70 °C)		
Resolution	0.1 °C	Memory	16000
Measuring rate	10 s to 24 h	Protection class	IP54
Battery life	2.5 years at a meas. rate of 15 min (-10 to +50 °C)		
Analysis software	MS Windows 95b / 98 / ME / NT4-Sp4 / 2000 / XP		
Oper. temp.	0 to +70 °C	Storage temp.	-40 to +85 °C
Dimensions	82 x 52 x 30 mm	Weight	90 g

Recommended Set: testo 175-T3, Set for monitoring temperature in processes

Temperature datalogger, 2 channels, with 2 probe sockets, wall holder and calibration protocol	0563 1756
Lock for wall holder for testo 175/177 dataloggers	0554 1755
Thermocouple, flexible, 1500mm long, fibre glass	0602 0645
Thermocouple, flexible, 1500mm long, fibre glass	0602 0645
testo 580 data collector including readout holders	0554 1778
ComSoft 3 - Basic Set for testo 175, Basic software incl. interface, desk-top holder, PC connection cable	0554 1759

Accessories Ordering data See page 32

Description	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Industrial probe with stainless steel sleeve	40 mm Ø 6 mm	-50 to +205 °C	Class 2	20 s	0628 7533 Conn.: Fixed cable
Pipe wrap probe with Velcro strip, for temperature measurement on pipes with diameter up to max. 120 mm, Tmax +120°C	395 mm 20 mm	-50 to +120 °C	Class 1	90 s	0628 0020 Conn.: Fixed cable
Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Measuring range short-term to +280°C		-60 to +130 °C	Class 2	5 s	0602 4592 Conn.: Fixed cable
Surface temperature probe fitting with M 14 x 1.5 outer thread and 2 nuts, fast action surface probe with crossed strip		-50 to +180 °C	Class 2	3 s	0628 7521 Conn.: Fixed cable
Thermocouple, flexible, 800mm long, fibre glass	800 mm Ø 1.5 mm	-50 to +400 °C	Class 2	5 s	0602 0644
Thermocouple, flexible, 1500mm long, fibre glass	1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2	5 s	0602 0645
Thermocouple, flexible, 1500mm long, Teflon	1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2	5 s	0602 0646
Immersion tip, flexible	500 mm Ø 1.5 mm	-200 to +1000 °C	Class 1	5 s	0602 5792
Magnetic probe, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces	75 mm Ø 21 mm	-50 to +400 °C	Class 2		0602 4892 Conn.: Fixed cable
Robust, affordable air probe	110 mm Ø 4 mm	-60 to +400 °C	Class 2	25 s	0602 1792 Conn.: Fixed cable

The specified seal class of the dataloggers is achieved with these probes.



Monitor ambient conditions – Efficiently and accurately

testo 175-H2

The compact humidity/temperature logger with display. It provides you with a fast on-site overview of current readings, the last values saved, max and min values and the number of times limits were exceeded.

- Fast documentation with infrared printer, 6 lines/s

- Collect data using testo 580 and download to your PC/notebook for analysis

testo 175-H2

Humidity/temperature logger, 2 channels, with integrated sensors, wall holder and calibration protocol

Part no. 0563 1758

Technical data

Chann. intern	2	
Probe type	Testo humid. sensor, cap.	NTC
Meas. range	0 to +100 %RH*	-20 to +70 °C
Accuracy ±1 digit	±3 %RH	±0.5 °C
Resolution	0.1 %RH	0.1 °C
Measuring rate	10 s to 24 h	Memory 16000
Oper. temp.	-20 to +70 °C	Storage temp. -40 to +85 °C
Dimensions	82 x 52 x 30 mm	Weight 85 g
Battery life	2.5 years at a meas. rate of 15 min (-10 to +50 °C)	
Analysis software	MS Windows 95b / 98 / ME / NT4-Sp4 / 2000 / XP	

* not affected by condensation

Accessories Ordering data See Page 32

Data analysis with easy-to-use Windows® software



Logging ambient air conditions with immediate display of limits exceeded

Recommended Set: testo 175-H2, Starter Set

Humidity/temperature logger, 2 channels, with integrated sensors, wall holder and calibration protocol	0563 1758
Lock for wall holder for testo 175/177 dataloggers	0554 1755
ComSoft 3 Set - Basic with RS 232 interface	0554 1759

Long-term temperature monitoring – Professional and non-stop

testo 177-T2

The professional datalogger provides you with a quick overview of the current readings, the last values stored, min/max values and the number of limits exceeded. All of the values collected by testo 580 during long-term monitoring over months/years can be uploaded to your notebook/PC. Convenient analysis via Windows® software.

- Memory for up to 48,000 readings

- On site: Fast documentation on the infrared printer, 6 lines/s

testo 177-T2

Temperature datalogger, 1 channel, with internal sensor, wall holder and calibration protocol

Part no. 0563 1772

Technical data

Chann. intern	1	Probe type	NTC
Meas. range	-40 to +70 °C	Resolution	0.1 °C
Accuracy ±1 digit	±0.4 °C (-25 to +70 °C)	±0.8 °C (-40 to -25.1 °C)	
Measuring rate	2 s to 24 h	Memory	48000
Oper. temp.	-40 to +70 °C	Storage temp.	-40 to +85 °C
Dimensions	103 x 64 x 33 mm	Weight	122 g
Battery life	5 years with a meas. cycle of 15 min (-10 to +50 °C)		
Analysis software	MS Windows 95b / 98 / ME / NT4-Sp4 / 2000 / XP		

Accessories Ordering data See Page 32

Collect data on site, upload to PC and analyse



Long-term temperature logging with immediate display when limits are exceeded e.g. during transport, in refrigerated rooms, warehouses etc.

Recommended Set: testo 177-T2, Starter Set

Temperature datalogger, 1 channel, with internal sensor, wall holder and calibration protocol	0563 1772
Lock for wall holder for testo 175/177 dataloggers	0554 1755
ComSoft 3 Set - Basic with RS 232 interface	0554 1774

Long-term monitoring of ambient conditions – Professional and non-stop

testo 177-H1

Sensitive products require the right ambient conditions during production and storage. Efficient measurement and documentation of the readings over months/years is possible with the testo 177-H1 professional datalogger.

Additional surface, immersion and air probes can be attached to the datalogger e.g. for uninterrupted measurement of the dewpoint difference.

- Long-term stable humidity sensor with fast response time
- Memory for up to 48,000 readings
- Control and adjustment option with adjustment set
- Protective caps for dirt-ingressed air or corrosive gases

testo 177-H1



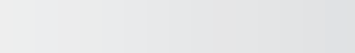

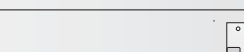
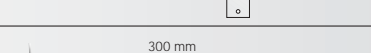
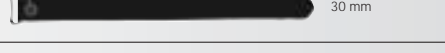
Intern. %RH, °C, °C td + extern. °C
Humidity/temperature logger, 4 channel, with internal sensors and an external temperature probe socket, wall holder and calibration protocol

Part no. 0563 1775

Technical data

Chann. intern	3		
Meas. range	0 to +100 %RH	-20 to +70 °C	-40 to +70 °C td
Accuracy ±1 digit	±2 %RH	±0.5 °C	
Resolution	0.1 %RH	0.1 °C	0.1% of mv
Chann. external (var.)	1		
Meas. range	-40 to +120 °C		
Accuracy ±1 digit	±0.2 °C (-25 to +70 °C)		±0.4 °C (remaining range)
Resolution	0.1 °C		
Memory	48000		
Measuring rate	2 s to 24 h	Protection class	IP54
Battery life	5 years at a meas. cycle of 15 min (-10 to +50 °C)		
Analysis software	MS Windows 95b / 98 / ME / NT4-Sp4 / 2000 / XP		
Oper. temp.	-20 to +70 °C	Storage temp.	-40 to +85 °C
Dimensions	103 x 64 x 33 mm	Weight	130 g

Accessories Ordering data See Page 32

Description	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Stub probe, IP 54	 35 mm Ø 3 mm	-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (+40.1 to +70 °C)	15 s	0628 7510
Mounting probe with aluminium sleeve, IP 65	 40 mm Ø 6 mm	-30 to +90 °C	±0.2 °C (0 to +70 °C) ±0.5 °C (remaining range)	190 S	0628 7503 * Conn.: Fixed cable
Refrigeration storeroom probe with aluminium sleeve, IP 54, with silicone insulated ribbon cable	 40 mm	-40 to +90 °C (Short-term to +105 °C)	±0.2 °C (0 to +70 °C) ±0.4 °C (-35 to 0 °C) ±0.5 °C (remaining range)	190 S	0628 0042
Probe for surface measurement	 40 mm 8 x 8 mm	-50 to +80 °C	±0.2 °C (0 to +70 °C)	150 S	0628 7516 * Conn.: Fixed cable
Wall surface temperature probe, e.g. to prove damage in building material	 40 mm	-50 to +80 °C	±0.2 °C (0 to +70 °C)	20 s	0628 7507 Conn.: Fixed cable
Pipe probe with Velcro, for pipe diameter of max. 80 mm	 300 mm 30 mm	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)		0613 4611 Conn.: Fixed cable
Robust, affordable air probe to check storage temperatures	 110 mm Ø 4 mm	-50 to +150 °C Long-term meas. range +125 °C, short-term +150 °C (2 min)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	60 s	0613 1711 * Conn.: Fixed cable

☑ The specified seal class of the dataloggers is achieved with these probes.



Collect data on site, upload to PC and analyse



Alarm message, reliable notification when limits are exceeded



Efficient measurement of production and storage conditions

Recommended Set: Professional set for measuring differential dewpoint

Humidity/temperature logger, 4 channel, with internal sensors and an external temperature probe socket, wall holder and calibration protocol	0563 1775
Lock for wall holder for testo 175/177 dataloggers	0554 1755
Wall surface temperature probe, e.g. to prove damage in building material	0628 7507
Fast testo 575 printer, incl. 1 roll of thermal paper and batteries	0554 1775
ComSoft 3 - Professional with data management	0554 0830
RS 232 interface for testo 175/177 incl. desk-top holders, PC connection cable	0554 1757



* Probe tested to EN 12830 for suitability in the transport and storage sectors

Accessories for testo 175 and 177

testo 575 fast printer

- Fast-action print mechanism, 6 lines/s.
- Prints tables/graphics
- Brief info. or full memory can be printed as required
- Determine section to be printed
- Your language can be set
- Self-adhesive Testo paper can also be used



High speed documentation and logger rebooting with testo 575

Part no. 0554 1775

testo 581 alarm signal output

- Transmission of alarm messages – e.g. when programmed limit values in the datalogger are exceeded – to external components such as horns, lamps, PLC etc.
- Signal transfer via floating signal output



Alarm signal output for reliable notification of limits exceeded

Part no. 0554 1769

testo 580 data collector

- Can read out up to 25 full testo 175 loggers or 10 full testo 177 loggers
- Displays all status information
- Download collected data to PC using Testo ComSoft 3



The testo 580 data collector collects data on site for upload to PC and analysis

Part no. 0554 1778

Ethernet adapter

- Fast transfer of readings
- Use of an existing network without additional cabling
- Long transmission paths
- Identification of measuring instruments in system network
- In connection with ComSoft 3



Read out the data stored in the logger via the PC network using the Ethernet adapter

Part no. 0554 1711

Printer and Accessories	Part no.
Fast testo 575 printer, incl. 1 roll of thermal paper and batteries, Infrared thermal line printer with graphics function	0554 1775
Spare thermal paper for printer (6 rolls)	0554 0569
Spare thermal paper for printer (6 rolls), Measurement data documentation legible for up to 10 years	0554 0568
Label thermal paper (Testo patent) for testo 575 printer (6 rolls), can be applied directly	0554 0561
Additional accessories	Part no.
testo 580 data collector including readout holders, For testo 175/177 dataloggers	0554 1778
testo 581 alarm signal output, floating, for testo 175/177, Forwards information efficiently when limits are exceeded to e.g. horns, lamps, PLC etc.	0554 1769
Battery, 3.6 V/0.8 Ah 1/2 AA, for testo 175-T3/175-H1/175-H2/175-S1	0515 0175
Battery, 3.6 V/1.9 Ah 1AA, for testo 175-T1/175-T2 and all testo 177 loggers	0515 0177
Transport and Protection	Part no.
Lock for wall holder for testo 175/177 dataloggers	0554 1755
Transport case for up to 5 testo 175 dataloggers, testo 575 printer, testo 580 data collector and accessories	0516 1750
Transport case for up to 5 testo 177 dataloggers, testo 575 printer, testo 580 data collector and accessories	0516 1770
Accessories for humidity probes	Part no.
Control and humidity adjustment set 11.3%RH/75.3%RH incl. adapter for humidity probes, Quick checks or calibration of humidity probe	0554 0660
Metal protection cage, Ø 12 mm for humidity probes, For velocities of less than 10 m/s	0554 0755
Cap with wire mesh filter, Ø 12 mm	0554 0757
Teflon sintered filter, Ø 12 mm, for corrosive substances, High humidity range (long-term measurements), high velocities	0554 0756
Stainless steel sintered cap, Ø 12 mm, is screwed onto humidity probe, For measurements at high velocity speeds or in dirt ingressed air	0554 0647

Software and Accessories	Part no.
For testo 175: ComSoft 3 Set - Basic with RS 232 interface, Basic software with diagram and table function, incl. desk-top holder, PC connection cable	0554 1759
For testo 175: ComSoft 3 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1766
For testo 177: ComSoft 3 Set - Basic with RS 232 interface, Basic software with diagram and table function, incl. desk-top holder, PC connection cable	0554 1774
For testo 177: ComSoft 3 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1767
ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend curve (without interface)	0554 0830
ComSoft 3 - For requirements to CFR 21 Part 11, incl. database, analysis and graphics function, data analysis, trend curve	0554 0821
RS 232 interface for testo 175/177 incl. desk-top holders, PC connection cable, (please also order for ComSoft 3 - Professional)	0554 1757
USB interface, for testo 175/177 incl. desk-top holders, PC conn. cable, (Please order with ComSoft 3 - Professional)	0554 1768
Ethernet adapter, RS 232 - Ethernet incl. software driver, mains unit, Facilitates data communication in network	0554 1711
Calibration Certificates	Part no.
ISO calibration certificate/Temperature, Temp. datalogger; calibration points -18°C; 0°C; +60°C per channel/instrument	0520 0151
ISO calibration certificate/Temperature, Temp. datalogger; calibration points -8°C; 0°C; +40°C per channel/instrument	0520 0171
ISO cal. cert./Humidity, Humidity datalogger; calibration points 11.3%RH and 75.3%RH at +25°C; per channel/instrument	0520 0076
DKD calibration certificate/Temperature, Temp. datalogger; cal. points -20°C; 0°C; +60°C; per channel/instrument	0520 0261
DKD calibration cert./Humidity, Humidity datalogger; cal. points 11.3%RH and 75.3%RH at +25°C; per channel/instrument	0520 0246

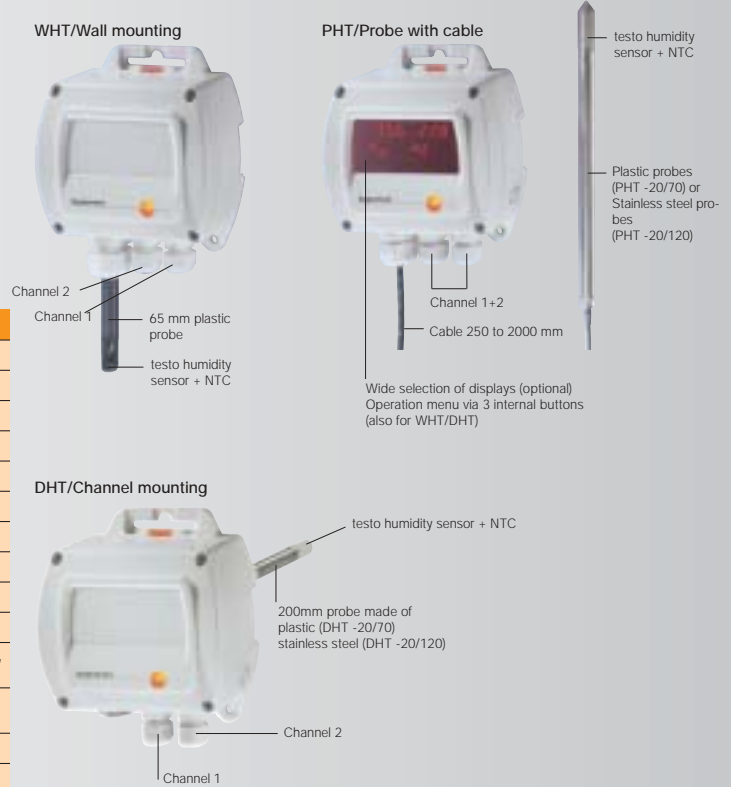
The ideal transmitter for humidity and temperature

hygrotest 600

Humidification and dehumidification generate high operation costs. The high accuracy and long-term stability of the hygrotest 600 help to reduce these costs drastically.

- High long-term stability saves on operating costs
- 2% humidity accuracy
- 4 to 20 mA outputs
- Relay outputs optional
- Display optional
- RS485 networking optional

Technical data		
Housing	Material	ABS, grey colour (RAL 7035)
	Size	130 x 140 x 53 mm
	Screw connections	2x M16 x 1.5 (ABS)
	Ambient temperature	-10 to +70 °C
	Storage temperature	-40 to +80 °C
Sensor	Humidity	Testo humidity sensor
	Temperature	NTC
	Protection class	IP 65
Meas. range	Humidity	0 to 100 %RH
	Temperature	See ordering option "M1"
Accuracy	Humidity	± 2%RH (in range 0 to 90%RH), ± 3%RH (90 to 100%RH)
	Temperature	± 0.3 °C (-20 to +50 °C), 1.5 % of reading (> 50 °C)
Analog outputs	Humidity and temperature	4 to 20 mA (2 wire system)
Power		24 V DC (10 to 30 V DC)



hygrotest 600 equipment and optional extras

Optional Standard

Part number for the hygrotest 600 product line: 0555 0600 plus Order code

Order code	Name	600 WHT -20/70	600 DHT -20/70	600 DHT -20/120	600 PHT -20/120
	Analog output				
B1	4...20 mA (2 wire system)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Probe				
	Probe material	Plastic (PC)	Plastic (PC)	Stainless steel 1.4571	Stainless steel 1.4571
C1	Probe length, Standard incl. sensor protection cap	65 mm	200 mm	200 mm	200 mm
C2	Stainless steel special probe l...(min 100(DHT)/150(PHT), max 800mm)			<input type="checkbox"/>	<input type="checkbox"/>
C3	Plastic special probe length 100 mm		<input type="checkbox"/>		
D1	Standard cable length 2 m				<input checked="" type="checkbox"/>
D2	Special cable length to probe tip... (min. 250 mm; max. 2 m)				<input type="checkbox"/>
	Adjustment				
F1	Humidity adjustment ±2 %RH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Sensor protection caps				
G1	Stainless steel sintered filter	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G2	Cap with wire mesh filter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G3	Teflon sintered filter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G4	Metal protection cage, open	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G5	ABS cap, open	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Displays/Communication				
H1	Display – loop feed with limited load (50 Ohm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H2	Display – external feed with maximum load (500 Ohm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H3	Display with RS485 – No analog outputs possible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H4	Display with RS485 + Analog outputs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H5	Display w/ RS485 and 2 x 2 limit signal outputs + analog outputs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H6	Display with 2 x 2 limit signal outputs + analog outputs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Scaling				
K1	Standard scaling, channel 1; 4 to 20 mA ± 0...100 %RH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
K2	Special scaling, channel 1; 4 to 20 mA ± ...selected unit under "L"				
	Important: indicate the upper and lower scaling limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L1	Relative humidity in %RH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L2	Dewpoint in °Ctd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L3	Dewpoint in °Ftd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M1	Standard scaling, channel 2; 4 to 20 mA ± temperature scaling	-20 to +70 °C	-20 to +70 °C	-20 to +120 °C	-20 to +120 °C
M2	Special scaling, channel 2; 4...20 mA ± ...selected unit under "N"				
	Important: Indicate upper and lower scaling limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
N1	Temperature in °C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
N2	Temperature in °F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Temperature measurement – Fast and easy

Mini thermometer

The fast immersion/penetration thermometer for measuring temperature in the air, in soft or powdery substances and liquids.

The measurement tip is widened in the surface thermometer.

- Easy to read thanks to the large display
- Battery can be changed quickly and easily

Mini thermometer 1

Up to +150 °C, 120 mm long

Part no. 0900 0525

Mini thermometer 2

Up to +250 °C, 200 mm long

Part no. 0900 0526

Water-proof mini thermometer 3

Up to +230 °C, 120 mm long

Part no. 0900 0528

Mini surface thermometer 4

Up to +250 °C, 120 mm long

Part no. 0900 0519

1 + 2 + 3

Immersion/penetration probe Ø 4 mm

4

Surface probe, measuring tip Ø 14 mm

3

Water-proof IP67



Measurements in air conditioning units

Technical data	1	2	3	4	
Meas. range	-50 to +150 °C	-50 to +250 °C	-40 to +230 °C	-50 to +250 °C	
Accuracy ±1 digit	±1 °C (-10 to +99.9 °C) ±2 °C (-50 to -10.1 °C) ±2% of mv (+100 to +150 °C)	±1 °C (-10 to +99.9 °C) ±2% of mv (+100 to +199.9 °C) ±3% of mv (+200 to +250 °C)	±0.3 °C (+54 to +90 °C) ±1 °C (-20 to +53.9 °C / 90.1 to +180 °C) ±1.5% of mv (remaining range)	±2% of mv (+100 to +199.9 °C) ±3% of mv (+200 to +250 °C) ±1 °C (-10 to +99.9 °C) ±2 °C (-50 to -10.1 °C)	
Resolution	0.1 °C (-19.9 to +150 °C) 1 °C (remaining range)	0.1 °C (-19.9 to +150 °C) 1 °C (remaining range)	0.1 °C	0.1 °C (-19.9 to +150 °C) 1 °C (remaining range)	
Battery life	150 h	Oper. temp.	0 to +40 °C	Storage temp.	-20 to +70 °C

Accessories Part no.

Button cell batteries, Type LR 44, 1.5 Volt (4 off) 0515 0032

testo 905-T1

One of the fastest mini penetration thermometers with a wide measuring range and high accuracy level.

testo 905-T1 1

Penetration thermometer, 200 mm long, incl. fixing clip, battery

Part no. 0560 9051

testo 905-T2

The surface thermometer in professional quality with sprung thermocouple measuring head, very fast response time and high accuracy level.

testo 905-T2 2

Surface thermometer with spring loaded probe, 150 mm long, incl. fixing clip, battery

Part no. 0560 9052

Technical data	1	2
Meas. range	-50 to +350 °C Short-term to +500 °C	-50 to +350 °C Short-term to +500 °C
Accuracy ±1 digit	±1 °C (-50 to +99.9 °C) ±1% of mv (remaining range)	±(1 °C ±1% of mv) (-50 to +500 °C)
Resolution	0.1 °C	Battery life 150 h
Oper. temp.	0 to +40 °C	Storage temp. -20 to +70 °C

Accessories testo 905-T1 Part no.

ISO calibration certificate/Temperature, For air/immersion probes, calibration points -18°C; 0°C; +60°C 0520 0001

Accessories testo 905-T2 Part no.

ISO calibration certificate/Temperature, Thermometers with surface probe; calibration points +60°C; +120°C; +180°C 0520 0071

1

testo 905-T1: Immersion/penetration probe Ø 3 mm with professional sensor (Type K thermocouple)

2

testo 905-T2: Spring-loaded thermocouple Ø 12 mm adapts to every surface



Monitoring the temperature of a refrigeration unit

Measure air humidity – Flexibly and easily

testo 605

The humidity measurement stick you can bend; small, compact and accurate. The long-term stable sensor guarantees correct results even after years of use.

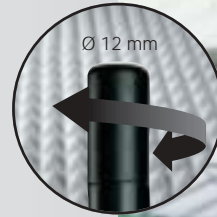
- With dewpoint calculation °C td (testo 605-H1) or psychrometric wet bulb temperature calculation °C Tw (testo 605-H2)
- Humidity sensor unaffected by condensation
- Use clip for attachment to breast pocket

testo 605-H1

%RH, °C, °C td
Humidity measurement stick, with duct holder, incl. fixing clip and battery

Part no. 0560 6051

Sensor protected by pivotable protection cap, long measurement stick 125 mm



With flexible joint

Checks air humidity in garden centres

Accessories Ordering data	Part no.
ISO calibration certificate/Humidity, Electronic hygrometers; calibration point 75.3%RH at +25°C	0520 0096
ISO calibration certificate/Humidity, Electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +25°C	0520 0006

Technical data			
Meas. range	+5 to +95 %RH 0 to +50 °C -20 to +50 °C td		
Accuracy ±1 digit	±3 %RH (+5 to +95 %RH) / ±0.5 °C (0 to +50 °C)		
Resolution	0.1 %RH / 0.1 °C	Battery life	200 h
Oper. temp.	0 to +50 °C	Storage temp.	-20 to +70 °C

Measure air flow and temperature – Flexibly and easily

testo 405-V1

testo 405-V1 is the first thermal anemometer in this price range which can measure air velocity, volume flow and temperature.

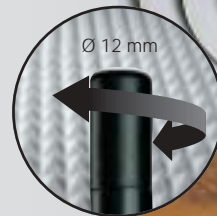
- m/s and m³/h (volume flow calculation 0 to 99.990 m³/h)
- Measurement in duct and at the duct outlet
- Duct holder and fixing clip for fast positioning

testo 405-V1

Velocity measurement stick, with channel holder, incl. fixing clip, battery

Part no. 0560 4051

Sensor protection thanks to pivotable protection cap, measurement stick 300 mm long



Measurement in VAC duct with duct holder

Measures air velocity in a ventilation duct

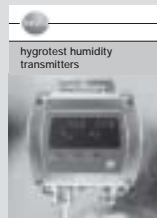
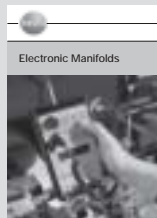
Accessories Ordering data	Part no.
testovent 410, volume flow funnel, Ø 340mm/330 x 330mm, incl. case	0554 0410
testovent 415, volume flow funnel, Ø 210mm/190x190mm, incl. case	0554 0415
ISO calibration certificate/Velocity, Two point calibration; calibration points 5m/s and 10m/s	0520 0094
ISO calibration certificate/Velocity, Hot wire, vane anemometer, Pitot tube; calibration points 1; 2; 5; 10 m/s	0520 0004

Technical data			
Meas. range	0 to +10 m/s	-20 to +50 °C	0 to +99990 m ³ /h
Accuracy ±1 digit	±(0.1 m/s ±5% of mv) (0 to +2 m/s) ±(0.3 m/s ±5% of mv) (+2.1 to +10 m/s) ±0.5 °C (-20 to +50 °C)		
Resolution	0.01 m/s / 0.1 °C	Battery life	20 h
Oper. temp.	0 to +50 °C	Storage temp.	-20 to +70 °C



Testo: At Your Service

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