

2010

## Measurement Engineering for Restaurants, Catering and Supermarkets









## Testo measuring instruments – The important ingredient for good food

Of course your customers expect from you food products which are fresh and food which is prepared with care and is wholesome. To achieve this, ambient conditions on display surfaces, in refrigerated cabinets and storage rooms must be monitored along with the temperatures of cooking units or the condition of the oil in a deep-fat fryer.

Testo is here to help you with all your measurement tasks. We make a point of following closely all the latest developments in the monitoring of foodstuffs. In this way, we are always in a position to offer up-to-date solutions optimised to suit your applications. It's no wonder that tens of thousands of Testo instruments are used regularly by supermarkets, food specialist stores, restaurants and catering services.

#### Measurement solutions for field use

The freshness of food products and the digestibility of food is difficult to judge. Measurements can help you make decisions. The procedures are usually time-consuming and often can only be carried out in the laboratory. Testo offers user-friendly measurement engineering solutions suitable for daily use. One good example are the new pH probes which work with a gel electrolyte as a reference medium for pH measurement and, unlike conventional sensors, are leak-proof, maintenance-free and

not affected by dust and dirt particles. A real highlight is the electronic cooking oil tester which provides you with reliable information within seconds about the state of the oil in a hot deep-fat fryer. The advantage for you is that you can determine the flavour of your deep-fried food and also use cooking oil sparingly. Analysis of the state of the oil based on polarisable substances is recognised internationally but has been mainly carried out in laboratories up to now or was determined via test sets for which replacements had to be purchased.

#### Fully reliable and efficient

Measuring instruments must be accurate at all times. We offer you well-engineered instruments which have not only been subjected to stringent tests during the development phase but have undergone comprehensive year long field tests prior to being released on the market. The instruments also have to be calibrated to ensure food safety. Calibration should be carried out annually to augment legal certainty. Our calibration laboratories are held in high esteem internationally and are also approved for calibrations on behalf of the Deutschen Kalibrierdienstes (DKD=German Calibration Service).



#### Documenting parameters systematically

You have to document your measurements so that they are verifiable. Many of Testo's instruments can be read out with a practical fast printer via infrared. Measurement data is documented practically automatically. The data in our dataloggers, with which you can record temperatures and air humidity in storerooms, freezers or display surfaces, for example, can also be collected by a "data collector" and then sent to a PC. A convenient method to collect data from different sites.

#### Better measurements with better equipment

Often, it is the right accessory which makes a measurement engineering solution complete. Testo offers a wide range of accessories for its instruments which, in turn, helps you to complete your measurement tasks efficiently. The range extends from numerous different probe types and designs, optional wireless or conventional probes via a fast printer and data collector to a dishwasher-safe TopSafe protection case with which you can protect your instrument from dirt, impact and moisture.

#### Learning changes

What was that again – who has to measure with calibrated measuring instruments? What exactly is the connection between germ multiplication and temperature?

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

## Top engineering for first class products

Horst Zahner, Managing Director and Company founder, Traiteur GmbH, Freiburg, Germany



Zahner Traiteur GmbH in Freiburg, Germany was founded in the year 1970 and over the years has developed into a modern production business in the food sector. The high levels of product warranty, reliability and quality have been consistently improved on over the past 30 years of the company's existence. The company is one of the most renowned in the delicatessen and catering segment. More than 90 employees work to supply top products on a daily basis. 36 small haulage contractors are responsible for delivering prepared goods every day.

We spoke to Managing Director and Company founder Horst Zahner:

"You cannot compromise on quality – we cannot just sign and that's it – we live it every day with our whole team; regardless of whether it is catering, delicatessen dishes, party service or our fresh pasta.

Closed quality assurance systems, which can be documented, are an indispensable requisite for our continued market success. We recognised at an early stage that Testo speaks our language exactly. No other supplier offers the range of products and this level of efficiency. As you can imagine, in our business not only is highest quality important, punctuality and speed are also top priorities and Testo's product line accomodates us with user-friendly operation, manageability and robustness. Now, that's what I call field-oriented measurement engineering.

By the way, the ever resourceful Testo developers really hit the mark with their logger systems. Now we can monitor transport of our highly sensitive products non-stop; nothing is left to chance and documentation of the measurement data just couldn't be easier.

Over the last few years, we have started sending our employees regularly to Testo for training. Not only do we gain important insights into the optimum use of Testo measurement engineering, but we also learn how we can quickly adapt to the latest legal requirements.

That's what I call all-inclusive – Keep up the good work Testo – after all, we quality fanatics have to stick together..."

## **Exactly the right instrument**













#### Temprature measurement - fast and easy

#### Mini thermometer

The quick-action immersion/penetration thermometer is ideal for measuring the temperature in air, soft or powdery substances and liquids.

The surface thermometer has a widened measurement tip especially for surface measurements.

- Easy to read thanks to large display
- Can be used anywhere

Technical data Meas. range Accuracy ±1 digit

Resolution

Oper. temp.

Mini thermometer

up to +150 °C, length 133 mm

Part no. 0560 1110

Mini thermometer

up to +250 °C, length 213 mm

Part no. 0560 1111

Mini surface thermometer

up to +300 °C, length 120 mm



Surface temperature probe with widened

Part no.	0560 1109	measurement tip Ø 15 mm, robust design
1	2	3
-50 to +150 °C	-50 to +250 °C	-50 to +300 °C
±1 °C (-10 to +99.9 °C) ±2 °C (-30 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)	±1 °C (-30 to +250 °C) ±2 °C (remaining range)
0.1 °C (-19.9 to +150 °C) 1 °C (remaining range)	0.1 °C (-19.9 to +199.9 °C) 1 °C (remaining range)	0.1 °C (-19.9 to +199.9 °C) 1 °C (remaining range)
-10 to +50 °C	-10 to +50 °C	-10 to +50 °C



#### Temperature measurement - accurate and super-fast



#### testo 905-T1

One of the fastest penetration thermometers, with a broad measurement range and high accuracy

#### testo 905-T2

The surface thermometer in professional quality with a sprung thermocouple measurement head, very fast reaction time and high accuracy.

#### testo 905-T1

testo 905-T1: penetration thermometer incl. attachment clip, battery

#### testo 905-T2

testo 905-T2: surface thermometer with cross-band probe, incl. attachment clip, battery

Part no.

Part no. 0560 9056

### Part no. 0560 9055

lechnical data	1		2
Meas. range			-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)
Resolution	0.1 °C	Battery life	1000 h
Oper. temp.	0 to +40 °C	Storage ter	mp20 to +70 °C

#### Accessories testo 905-T1

+180°C

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, meas. instr with surface probe; calibration points +60°C; +120°C; 0520 0071 testo 905-T2: sprung Ø 12 mm adapts to any

testo 905-T1:

probe.

thermocouple cross-band surface



Checking hotplates and griddles



#### Temperature measurement – fast and easy

#### Waterproof mini thermometer

Fast spot check temperature measurement with the watertight mini thermometer is an important topic in the the food sector.

Thanks to the large, easily legible diplay, temperature checks are possible even under bad light conditions.

- Easy to read thanks to large display
- Can be used anywhere



Spot checks at a food counter

#### Waterproof mini thermometer

up to +230 °C, length 133 mm, Protective sleeve for probe shaft

Part no. 0560 1112

Technical data	
Meas. range	-40 to +230 °C
Accuracy ±1 digit	±1 °C (-20 to +99.9 °C) ±2% of mv (+100 to +199.9 °C) ±3% of mv(+200 to +230 °C)
Resolution	0.1 °C (-19.9 to +199.9 °C) 1 °C (remaining range)
Oper. temp.	-10 to +50 °C

Accessories Ordering data	Part no.
Button cell batteries, Type LR 44, 1.5 Volt (4 off)	0515 0032

#### Ambient condition measurements - versatile and easy

#### testo 605-H1

The thermo-hygrometer you can bend. Small, compact and accurate. The long-term stable sensor guarantees correct measurement results even after years.

- Dewpoint calculation from -20 to +50 °Ctd
- Long-term stable Testo humidity sensor
- Ideal for measurements in ducts
- Display can be angled for easy readout ot measurement values

#### testo 605-H1

testo 605-H1: thermohygrometer with duct holder, incl. attachment clip and battery

Part no. 0560 6053



With flexible joint

Monitoring air humidity

Technical data			
Meas. range	+5 to +95 %RH 0 to +50 °C -20 to +50 °C td		
Accuracy ±1 digit	±3 %RH / ±0.5 °C		
Resolution	0.1 %RH / 0.1 °C	Battery life	Approx. 1000 h
Oper. temp.	0 to +50 °C	Storage temp.	-20 to +70 °C

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







every day?

#### Core thermometer - fast and robust









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 manage to get home by 5pm

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.





#### Core thermometer - fast and robust

#### testo 106

The core thermometer testo 106 with a thin, robust measuring tip, excellently suited for fast core temperature checks

 Automatic recognition of final value (Auto-Hold)



Only in combination with Topsafe

Accessories Ordering data	Part no.
TopSafe (indestructible protection case), waterproof and dishwasher-safe protection case (IP67)	0516 8265
Frozen food drill, loss-proof attachment to belt clip	0554 0826
Holding clip with probe protection cap	0554 0825
ISO calibration certificate/temperature, for air/immersion probes, calibration point +60°C	0520 0063
ISO calibration certificate/temperature, for air/immersion probes, calibration point -18°C	0520 0061
ISO calibration certificate/temperature, for air/immersion probes, calibration point 0°C	0520 0062
ISO calibration certificate/temperature, for air/immersion probes, calibration points -18°C; 0°C	0520 0041
ISO calibration certificate/temperature, for air/immersion probes, calibration points -8°C; 0°C; +40°C	0520 0181



Set testo 106, core thermometer incl. TopSafe (waterproof protective case, IP 67), belt clip, probe protecting cover and battery

Part no. 0563 1063



Technical data	Technical data				
Meas. range	-50 to +275 °C				
Accuracy ±1 digit	±1 % of mv (+100 to +275 ° ±0.5 °C (-30 to +99.9 °C)	°C) ±1 °C (-50	to -30.1 °C)		
Resolution	0.1 °C	Battery life	350 h		
Oper. temp.	-20 to +50 °C	Dimensions	215 x 34 x 19 mm		
Storage temp.	-40 to +70 °C	Weight	80 g		

testo 106

testo 106, core thermometer incl. probe protecting cap and battery

Part no. 0560 1063

#### Robust one-hand thermometer – With interchangeable measurement tips

#### testo 105

The robust food thermometer with interchangeable measurement tips for control measurements in abattoirs, refrigerated storerooms, lorries etc.

#### testo 105

One-hand thermometer with standard measurement tip, incl. battery

Part no. 0563 1051

Technical data	ı
Probe type	NTC
Meas. range	-50 to +275 °C
Accuracy ±1 digit	±0.5 °C (-20 to +100 °C) ±1 °C (-50 to -20.1 °C) ±1 % of mv (+100.1 to +275 °C)
Resolution	0.1 °C
Storage temp.	-40 to +70 °C
Oper. temp.	-20 to +50 °C
Battery type	4 x Button cell LR44
Auto Off	10 min
Protection class	IP65
Dimensions	145 x 38 x 195 mm
Weight	139 g

- 2 user-defined limit values, visual or audible alarm
- Built-in display illumination
- Audible key feedback
- 1 line display
- Waterproof (IP 65) and robust

#### Accessories Ordering data

Standard measurement tip, 100 mm long

Part no. 0613 1051

Frozen food tip, 90 mm long

Part no. 0613 1052

Long measurement tip, 200 mm long

Part no. 0613 1053

Aluminium case for the testo 105 onehand thermometer and accessories Part no. 0554 1051

Button cell batteries, Type LR 44,

Part no. 0515 0032

Part no. 0520 0041

ISO calibration certificate/temperature, for air/immersion probes, calibration points -18°C; 0°C

Part no. 0563 1054

Easy-to-change

measurement tips

## FN 13495 Ø 3.5 mm Ø 3.5 mm 2 Standard measurement tip 100 mm 2 Frozen food tip 90 mm 3 Long measurement tip 200 mm

Measuring core temperature on delivery of fresh meat

#### testo 105 with frozen food measurement tip

testo 105 with frozen food measurement tip, belt/wall holder and batteries

#### Complete case

One-hand thermometer with standard measurement tip, frozen food tip, long measurement tip and belt/wall holder in aluminium case

Part no. 0563 1052









#### Mini thermometer - With penetration probe



#### Mini thermometer

The affordable mini thermometer with Min/Max alarm. Small in size but big on quality! The penetration probe is attached to the instrument (80 cm cable) and is suitable for measuring the temperature in air, in soft powdery substances and in liquids.

- Securely attached probe
- Adjustable Min/Max alarm
- Integrated clip for attachment to clothing, wall, placing in position

#### Mini thermometer

Mini thermometer, battery included

Part no. 0900 0530

Ordering data/Quantity discount	Part no.
Mini thermometer, from 5 off	
Mini thermometer, from 10 off	
Mini thermometer, from 25 off	
Mini thermometer, from 50 off	
ISO calibration certificate/temperature, for air/immersion probes, calibration point -18°C	0520 0061
ISO calibration certificate/temperature, for air/immersion probes, calibration point 0°C	0520 0062



Routine checks on cheese counters

Fechnical data				
Meas. range	-50 to +150 °C	Oper. temp.	0 to +50 °C	
Accuracy	Ctor		-20 to +70 °C	
±1 digit	±2 °C (remaining range)	Storage temp.	-20 t0 +70 °C	
		Battery life	100 h	
Resolution	0.1 °C (-19.9 to +150 °C) 1 °C (-50 to -20 °C)	Battery type	2 AAA micro batteries	

#### Temperature clock indicators

#### testoterm clock indicators

testoterm clock indicators are self-adhesive, temperatureresistant foils with heat-sensitive elements to monitor temperature.

- Practical booklet with 10 clock indicators
- Clock indicators available on sheets from 5000 off (100 sheets of 50 off)

#### a data/Ouantity diagount

+40 to +54 °C
Part no. 0646 0071
+60 to +82 °C
Part no. 0646 0072
+88 to +110 °C
Part no. 0646 0073
+116 to +138 °C
Part no. 0646 0074
+143 to +166 °C
Part no. 0646 0075
+171 to +193 °C
Part no. 0646 0076
+199 to +224 °C
Part no. 0646 0077

+232 to +260 °C

Part no. 0646 0078

testoterm clock indicators

Ordering data/Quantity discount

1 to 4 booklets (with 10 each)

5 to 9 booklets (with 10 each)

10 to 19 booklets (with 10 each)

20 to 49 booklets (with 10 each)

50 to 99 booklets (with 10 each)

1000 on sheets of 50 (Minimum quantity 5000 off)



Monitoring temperature in cooking or smoking cabinets

#### Technical data

Actual size Irreversible change in colour within 2 seconds

Accuracy: from +43 °C to +154 °C:  $\pm 1.5$  °C; from +160 °C:  $\pm 1\%$   $\pm 1$  °C of respective temperature value

Maximum operating temperature: corresponding to respective measuring ranges Storage of clock indicators: up to  $+65\,^{\circ}\text{C}$ : max. 9 months;

remaining measuring ranges up to 2 years; max. storage temperature +25  $^{\circ}\text{C}.$  Storage in refrigerator recommended.



#### Thermometer strips - Convenient and reliable

#### testoterm strips

testoterm thermometer strips are self-adhesive foils with temperature sensitive elements for temperature control and regulation e.g. monitoring batches during cooking.

- +37 to +280 °C
- Thermometer strips available on rolls (e.g. for labelling machines) from a minimum order quantity of 5000 off.

Ordering options: 1 roll of 5000 off

5 rolls of 1000 off

#### testoterm strips

+37 to +65 °C Part no. 0646 0108

+71 to +110 °C

Part no. 0646 0916

+116 to +154 °C

Part no. 0646 1724 +161 to +204 °C

Part no. 0646 2532

+204 to +260 °C

Part no. 0646 3341

+249 to +280 °C

Part no. 0646 0005

#### Ordering data/Quantity discount

1 to 4 booklets (with 10 each)
5 to 9 booklets (with 10 each)
10 to 19 booklets (with 10 each)
20 to 49 booklets (with 10 each)
50 to 99 booklets (with 10 each)
1000 on a roll
(minimum quantity 5000 off)
5000 on a roll
Ordering option for 5000 off:
1 roll of 5000 off

5 rolls of 1000 off Further rolls of 1000 can be ordered



#### Technical data

Same as temperature single indicators, see below

Dimensions I x w: 50 x 18 mm or 39 x 18 mm

#### Temperature single indicators – Convenient and reliable

#### Single indicators

testoterm single indicators are self-adhesive temperature sensitive foils with elements to check a given maximum temperature.

- +43 to +199 °C
- Practical single indicator booklet
- Single indicators on rolls or sheets available from a minimum order quantity of 5000 off.

#### Ordering data/Quantity discount

1 to 4 booklets (with 50 each) 5 to 9 booklets (with 50 each) 10 to 19 booklets (with 50 each) 20 to 49 booklets (with 50 each) 50 to 99 booklets (with 50 each)

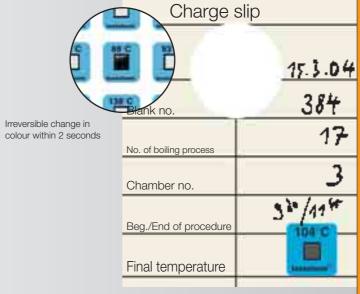
5000 on sheets on sheets or rolls Ordering options for rolls 1 roll of 5000 off 5 rolls of 1000 off

#### Single indicators 71

Measuring range: +46°C to +199°C Part no. 0646 1... (...=reading) Ordering examples:

Single indicator: +46°C: 0646 1046 Single indicator: +199°C: 0646 1199 In stock:

71 °C, 77 °C, 82 °C, 110 °C, 143 °C For all additional single indicators (46/49/54/60/65/88/93/99/104/116/1 21/127/132/138/149/154/166/177/18 2/188/193/199/204/210/216/224/232 /241/249/254/260 °C) the following applies: Delivery time of 6 weeks for minimum order of 10 booklets.



Temperature control, for example, during storage, transport, when analysing damage etc.

#### Technical data

Accuracy: From +46 °C to +154 °C: ±1.5 °C; from +160 °C: ±1% ± 1 °C of respective reading

Max. operating temperature corresponds to the respective measuring ranges

Dimensions I x w: 15 x 14 mm

Storage of single indicators: Up to +65 °C: max. 9 months;

other measuring ranges up to 2 years; max. storage temperature +25 °C. Storage in a refrigerator is recommended.



#### Temperature monitoring — Highly accurate













- testo 110
- The highly accurate, versatile testo 110 temperature measuring instrument is ideal for the food sector on account of its optional TopSafe protection case. The engineering used is specially designed for applications in refrigerated store rooms and cabinets and for outdoors.

In addition to the wide range of conventional probes available with cable, a wireless radio probe can be used simultaneously (if radio module is used in instrument).

- Wireless measurement with radio probes possible (optional)
- Audible alarm (adjustable alarm limits)
- Displays max/min readings in 2 line, backlit display



Inspects a refrigerated counter for sufficient refrigeration power



Only in combination with TopSafe

#### testo 110

testo 110, 1 channel temperature measuring instrument NTC, audible alarm, connection to an optional radio probe, with battery and calibration protocol

Part no. 0560 1108



TopSafe, the indestructible protective case (optional)



Checks incoming goods, no annoying cables thanks to radio probe

0516 0201

Printer and Accessories	Part no.
Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries	0554 0549
Spare thermal paper for printer (6 rolls), measurement data documentation legible for up to 10 years	0554 0568
Spare thermal paper for printer (6 rolls)	0554 0569
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610
Additional accessories	Part no.
9V rech. battery for instrument, instead of battery	0515 0025
Recharger for 9V rechargeable battery,	0554 0005

9V rech. battery for instrument, instead of battery	0515 0025
Recharger for 9V rechargeable battery, for external recharging of 0515 0025 battery	0554 0025
Lithium battery, button cell, type CR 2032 for wireless probes	0515 0028
Transport and Protection	Part no.
TopSafe, protects from impact and dirt	0516 0221
Case for measuring instrument and probes	0516 0210
Transport case for meas. instr. and probes (405 x 170 x 85 mm)	0516 0201
Transport case for measuring instrument, 3 probes and accessories (430 x 310 x 85 mm)	0516 0200
Calibration Certificates	Part no.
ISO calibration certificate/temperature, for air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
DKD calibration certificate/temperature, meas. instr. with air/immersion probe: calibration points -20°C: 0°C: +60°C	0520 0211

0520 0072

0520 0073

ISO calibration certificate/temperature, single point calibration for surface thermometer; calibration point +60°C

ISO calibration certificate/temperature, single point calibration for surface thermometer; calibration point +120°C

Recommended Set: testo 110 – Starter set	
testo 110, 1 channel temperature measuring instrument NTC, audible alarm, connection to an optional radio probe, with battery and calibration protocol	0560 1108
TopSafe, protects from impact and dirt	0516 0221
Waterproof NTC immersion/penetration probe	0613 1212

Transport case for meas. instr. and probes (405 x 170 x 85 mm)

Technical data	
Probe type	NTC
Meas. range	-50 to +150 °C
Accuracy ±1 digit	±0.2 °C (-20 to +80 °C) ±0.3 °C (remaining range)
Resolution	0.1 °C
Oper. temp.	-20 to +50 °C
Storage temp.	-40 to +70 °C
Battery type	9V block battery, 6F22
Battery life	200 h (connected probe, backlight off) 45 h (radio mode, backlight off) 68 h (connected probe, backlight always on) 33 h (radio mode, backlight always on)
Dimensions	182 x 64 x 40 mm
Weight	171 g

<sup>\*</sup> TopSafe: TPU casing; TPE lid; PC stand



#### Suitable probes at a glance / Option: Radio

nmers./penetr. probes	Illustration			Meas. range	Accuracy	t99	Part no.
Waterproof NTC immersion/penetration		115 mm	50 mm	-50 to +150 °C <sup>2)</sup>	±0.5% of mv (+100 to +150 °C)	10 s	0613 1212
probe		Ø 5 mm	Ø 4 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable, 1.2
Stainless steel NTC food probe (IP65) with		125 mm	15 mm	-50 to +150 °C <sup>2)</sup>	150 °C <sup>2)</sup> ±0.5% of mv (+100 to +150 °C)	8 s	0613 2211
PUR cable		Ø 4 mm	Ø 3 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable, 1.6
Robust NTC food penetration probe with	115 mm		30 mm	-25 to +150 °C <sup>2)</sup>	±0.5% of mv (+100 to	7 s	0613 2411
special handle, reinforced PUR cable	Ø 5 mm		Ø 3.5 mm		+150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable
Frozen food probe NTC, corkscrew design	110 mm		30 mm	-50 to +140 °C 1)	to +140 °C <sup>1)</sup> ±0.5% of mv (+100 to +140 °C)	20 s	0613 3211
(incl. plug-in wire)	Ø 8 mm		Ø 4 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Plug-in cable
Stainless steel NTC food probe (IP67) with		125 mm	15 mm	-50 to +150 °C <sup>2)</sup>	±0.5% of mv (+100 to +150 °C)	8 s	0613 3311
PTFE cable to +250°C	-	Ø 4 mm	Ø 3 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable
r probes	Illustration			Meas. range	Accuracy	t99	Part no.
		115 mm	50 mm	-50 to +125 °C <sup>2)</sup>	±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining range)	60 s	0613 1712
Efficient, robust NTC air probe	10	Ø 5 mm	Ø 4 mm		±0.4 O (remaining range)		Conn.: Fixed cable
urface probes	Illustration			Meas. range	Accuracy	t99	Part no.
- Waterproof NTC surface probe for flat surfaces		115 mm	50 mm	-50 to +150 °C <sup>2</sup>	±0.5% of mv (+100 to +150 °C)	35 s	0613 1912
		Ø 5 mm	Ø 6 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable
Discourse and a with Malaus fau size alicerate	300 mm			-50 to +70 °C	±0.2 °C (-25 to +70 °C)		0613 4611
Pipe wrap probe with Velcro for pipe diameter to max. 75 mm, Tmax. +75°C, NTC	for a				±0.4 °C (-50 to -25.1 °C)		Conn.: Fixed cable

The measuring instrument inside TopSafe is waterproof with this probe.

Radio module for upgrading measuring instrument with radio option						
Country versions	Radio freq.	Part no.				
Radio module for measuring instrument, 869.85 MHz, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0188				
Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL	915.00 MHz FSK	0554 0190				

Radio probes for immersion/penetration measurements							
Radio immersion/penetration probes	Meas. range	Accuracy	Resolution	t <sub>99</sub>			
Radio immersion/penetration probe, NTC	-50 to +275 °C	±0.5 °C (-20 to +80 °C) ±0.8 °C (-50 to -20.1 °C) ±0.8 °C (+80.1 to +200 °C) ±1.5 °C (remaining range)	0.1 °C	t <sub>99</sub> (in water) 12 s			
Country versions		Radio freq.	Part no.				
Radio immersion/penetration probe, NTC, approval for the countries: DE, FR, UK, BE, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	NL, ES, IT, SE, AT, DK	, FI, HU, 869.85 MHz FSK	0613 1001				
Radio immersion/penetration probe, NTC, approval for USA, CA, CL		915.00 MHz FSK	0613 1002				

Radio probes: General technical data							
Probe type	Radio immersion/penetration probe, NTC	Radio handle	Measuring rate	0.5 s or 10 s,	Radio transmission Unidirectional		
Battery type	2 x 3V button cell (CR 2032)	2 AAA micro batteries		adjustable on handle	Oper. temp20 to +50 °C		
Battery life	150 h (meas. rate 0.5 s)	215 h (meas. rate 0.5 s)			Storage temp40 to +70 °C		
	2 months (meas. rate 10 s)	6 months (meas. rate 10 s)	Radio coverage	Up to 20 m (without	Protection class IP54		
				obstructions)	Protection class IP54		

<sup>1)</sup> Long-term meas. range +125 °C, short-term +140 °C 2) Long-term meas. range +125 °C, short-term +150 °C



#### Calibratable Temperature Measuring Instrument













testo 112 combines two temperature measuring instruments in one. In addition to the complete NTC probe range, Pt100 probes can also be attached. In this way, the temperature range of -50 to +300 °C is covered to the highest accuracy level. testo 112 is therefore the ideal instrument for food measurements ranging from the deep-freeze sector to the oil temperature in deep-fat fryers.

The backlit display makes it easy to read in environments with poor lighting. Minimum and maximum readings can be called up at the touch of a button. It is possible to print readings on site, for documentation purposes, on a fast printer (accessory).

- Large, backlit display with 14 mm high characters
- Call up max/min values at the touch of a button



Monitors temperature in refrigerated counter

#### testo 112

testo 112, 1 channel temperature measuring instrument NTC/Pt100, calibratable, with battery



Spare thermal paper for printer (6 rolls)	0554 0569
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610
Additional accessories and spare parts	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
T 15 15 1 17	Deather
Transport and Protection	Part no.
TopSafe, protects from impact and dirt	0516 0220
TopSafe, protects from impact and dirt	0516 0220
TopSafe, protects from impact and dirt  Transport case for meas. instr. and probes (405 x 170 x 85 mm)  Transport case for measuring instrument, 3 probes and	0516 0220 0516 0201
TopSafe, protects from impact and dirt  Transport case for meas. instr. and probes (405 x 170 x 85 mm)  Transport case for measuring instrument, 3 probes and accessories (430 x 310 x 85 mm)	0516 0220 0516 0201 0516 0200

<sup>\*</sup> TopSafe: TPU housing; TPE lid; PC stand

	14.40
	92.03
TI	B Type approval

Technical data		
Probe type	NTC	Pt100
Meas. range	-50 to +120 °C	-50 to +300 °C
Accuracy ±1 digit	±0.2 °C (-25 to +40 °C) ±0.3 °C (+40.1 to +80 °C) ±0.5 °C (remaining range)	±0.2 °C (-50 to +200 °C) ±0.3 °C (remaining range)
Resolution	0.1 °C	0.1 °C
Oper. temp.	-20 to +50 °C	
Storage temp.	-30 to +70 °C	
Battery type	9V block battery, 6F22	
Battery life	100 h	
Dimensions	182 x 64 x 40 mm	
Weight	171 g	



#### Suitable probes at a glance

mers./penetr. probes (not calibratable)	Illustration			Meas. range	Accuracy	t99	Part no.
Waterproof NTC immersion/penetration		115 mm	50 mm	-50 to +150 °C <sup>2)</sup>	±0.5% of mv (+100 to +150 °C)	10 s	0613 1212
probe		Ø 5 mm	Ø 4 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable
Stainless steel NTC food probe (IP65) with		125 mm	15 mm	-50 to +150 °C <sup>2)</sup>	±0.5% of mv (+100 to +150 °C)	8 s	0613 2211
PUR cable	-	Ø 4 mm	Ø 3 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable
Robust NTC food penetration probe with	115 mm		30 mm	-25 to +150 °C <sup>2)</sup>	±0.5% of mv (+100 to	7 s	0613 2411
special handle, reinforced PUR cable	Ø 5 mm		Ø 3.5 mm		+150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable
Frozen food probe NTC, corkscrew design	110 mm		30 mm	-50 to +140 °C <sup>1)</sup> ±0.5% of mv (+100 to +140 °C)	20 s	0613 3211	
(incl. plug-in wire)	Ø 8 mm		Ø 4 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Plug-in cable
Stainless steel NTC food probe (IP67) with		125 mm	15 mm	-50 to +150 °C <sup>2)</sup>	0 to +150 °C <sup>2)</sup> ±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 3311
PTFE cable to +250°C	-	Ø 4 mm	Ø 3 mm				Conn.: Fixed cable
ir probes	Illustration			Meas. range	Accuracy	t99	Part no.
		115 mm	50 mm	-50 to +125 °C <sup>2)</sup>	±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining range)	60 s	0613 1712
Efficient, robust NTC air probe		Ø 5 mm	Ø 4 mm		±0.4 O (remaining range)		Conn.: Fixed cable
urface probes	Illustration			Meas. range	Accuracy	t99	Part no.
Waterproof NTC surface probe for flat surfaces		115 mm	50 mm	-50 to +150 °C <sup>2)</sup>	±0.5% of mv (+100 to +150 °C)	35 s	0613 1912
		Ø 5 mm	Ø 6 mm		±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable
Disa uman proba with Valera for nin-	300 mm			-50 to +70 °C	±0.2 °C (-25 to +70 °C)		0613 4611
Pipe wrap probe with Velcro for pipe diamete to max. 75 mm, Tmax. +75°C, NTC	fo. 4				±0.4 °C (-50 to -25.1 °C)		Conn.: Fixed cable

The measuring instrument inside TopSafe is waterproof with this probe.

<sup>1)</sup> Long-term meas. range +125 °C, short-term +140 °C 2) Long-term meas. range +125 °C, short-term +150 °C

Experts are our

#### testo 926 - Fast, accurate versatile thermometer





















favourite customers

Detlef Higgelke, Head of the Testo 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 interrelationships.

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.



#### testo 926

The fast-action, efficient temperature measuring instrument, testo 926, for the food sector. The optional TopSafe protection case renders it insensitive to dirt, therefore making it the ideal partner for large-scale kitchens, hotels, restaurants or the food industry. Besides measuring minimum and maximum values, readings can also be printed on site on the Testo fast printer. In addition to the wide range of standard probes with cable, a wireless radio probe can be used simultaneously, if required.

- Measurement parameters °C, °F. °R
- Fast-action probes for every application
- Wireless measurement with radio probes possible (optional)
- Audible alarm (adjustable alarm limits)
- Measurement data printout on site on the Testo fast printer
- TopSafe, the indestructible protection case (optional)

Part no.

0520 0001



Air temperature measurement in refrigerated display counters and freezers

Printer and Accessories	Part no.
Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries, for printing out measurements on site	0554 0549
Spare thermal paper for printer (6 rolls), measurement data documentation legible for up to 10 years	0554 0568
Spare thermal paper for printer (6 rolls)	0554 0569
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610
Additional accessories	Part no.
9V rech. battery for instrument, instead of battery	0515 0025

9V rech. battery for instrument, instead of battery	0515 0025
Recharger for 9V rechargeable battery, for external recharging of 0515 0025 battery	0554 0025
Lithium battery, button cell, type CR 2032 for wireless probes	0515 0028
Transport and Protection	Part no.
TopSafe, protects from impact and dirt	0516 0220
Case for measuring instrument and probes	0516 0210
Transport case for meas. instr. and probes (405 x 170 x 85 mm)	0516 0201

probes, calibration points - 16 C, C C, +60 C	
ISO calibration certificate/temperature, meas. instr. with surface probe; calibration points +60°C; +120°C; +180°C	0520 0071
ISO calibration certificate/temperature, single point calibration for surface thermometer; calibration point +60°C	0520 0072
ISO calibration certificate/temperature, single point calibration for surface thermometer; calibration point +120°C	0520 0073
ISO calibration certificate/temperature, for air/immersion probes, calibration point -18°C	0520 0061
ISO calibration certificate/temperature, for air/immersion probes, calibration point 0°C	0520 0062
ISO calibration certificate/temperature, for air/immersion probes, calibration point +60°C	0520 0063
ISO calibration certificate/temperature, for air/immersion probes, calibration points -8°C; 0°C; +40°C	0520 0181

**Calibration Certificates** 

ISO calibration certificate/temperature, for air/immersion probes, calibration points -18°C: 0°C: +60°C

Auto-hold automatically recognises full-scale value



Measurement of penetration temperature when smoking foods, wireless radio transmission of measurement data

#### testo 926

testo 926-1, 1 channel food temperature measuring instrument T/C Type T, audible alarm, connection to an optional radio probe, with battery and calibration protocol

Part no. 0560 9261

#### testo 926, Starter set

testo 926, Starter set, 1 channel food temperature measuring instrument T/C Type T, incl. TopSafe, standard immersion/penetration probes, battery and calibration protocol

Part no. 0563 9262

#### Time for the essentials

"To be honest with you, the telephone is usually quiet between 6 and 7pm but the few people who do call are delighted. That's why I'm happy to be here too. Testo's Sales and Customer Service in Germany can be reached between 7am and 7pm."

Regina Walz



#### Suitable probes at a glance / Technical data















mers./penetr. probes	Illustration			Meas. range	Accuracy	t99	Part no.
Naterproof standard immersion/penetration		112 mm	50 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining	7 s	0603 1293
probe, T/C Type T	-	Ø 5 mm	Ø 4 mm		range)		Conn.: Fixed cable
Waterproof precision immersion/penetration		70 mm	15 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C)		0603 2693
probe without visible penetration hole, T/C Type T	-	Ø 5 mm	Ø 1.5 mm		Class 1 (remaining range)		Conn.: Fixed cable
		125 mm	30 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C)	7 s	0603 2192
Stainless steel food probe (IP67) with PUR cable, T/C Type T	**************************************	Ø 4 mm	Ø 3.2 mm		Class 1 (remaining range)		Conn.: Fixed cable
				-50 to +350 °C	±0.2 °C (-20 to +70 °C)	7 e	0603 3392
Stainless steel food probe (IP67), with PTFE cable to +250 °C, TC Type T	-	125 mm	30 mm	00 10 1000 0	Class 1 (remaining	13	Conn.: Fixed cable
cable to +250°C, 10 Type 1		Ø 4 mm	Ø 3.2 mm		range)		
Waterproof, super-quick needle probe for		150 mm		-50 to +250 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining	2 s	0628 0027
measurements without visible penetration hole, T/C Type T	- diminis-	Ø 1.4 mm			range)		Conn.: Fixed cable
Robust food penetration probe with special nandle, reinforced cable (PVC), T/C Type T	115 mm		30 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C)	6 s	0603 2492
	Ø 5 mm		Ø 3.5 mm		Class 1 (remaining range)		Conn.: Fixed cable
	110 mm		30 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C)	8 s	0603 3292
Frozen food probe, corkscrew design, T/C Type T	Ø 8 mm		Ø 4 mm		Class 1 (remaining range)		Conn.: Plug-in cable
Quick needle probe to monitor cooking in	60 mm			-50 to +250 °C	±0.2 °C (-20 to +70 °C)	2 s	0628 0030
oven, T/C Type T	Ø 1.4 mm	1			Class 1 (remaining range)		Conn.: Fixed cable
Measurement tip with T/C adapter Type T,		500 mm		-50 to +350 °C	Class 1	5 s	0628 0023
ideal for fast-action measurement on incoming goods	-	Ø 1.5 mm					
0.0	III	2 1.0 11111		N4	A	+00	Deuter
r probes	Illustration			Meas. range	Accuracy	t99	Part no.
Debugt offerdeble six probe T/C Type T	-	112 mm	50 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining	25 s	0603 1793
Robust, affordable air probe, T/C Type T	-	Ø 5 mm	Ø 4 mm		range)		Conn.: Fixed cable
Flexible oven probe, Tmax +250 °C,	2000 mm			-50 to +250 °C	Class 1	5 s	0603 0646
PTFE cable	Ø 1.5 mm						
rface probes	Illustration			Meas. range	Accuracy	t99	Part no.
AA/-t		112 mm	50 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C)	30 s	0603 1993
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type T	-		_		Class 1 (remaining range)		Conn.: Fixed cable
measurement up for flat surfaces, 1/C Type T		Ø 5 mm	Ø 6 mm				

The measuring instrument inside TopSafe is waterproof with this probe.

Technical data	
Probe type	Type T (Cu-CuNi) or NTC and Type K if radio immersion/penetration probes are used
Parameters	°C, °F, °R
Meas. range	-50 to +400 °C
Accuracy ±1 digit	$\pm 0.3$ °C (-20 to +70 °C) $\pm (0.7$ °C $\pm 0.5\%$ of mv) (remaining range)
Resolution	0.1 °C (-50 to +199.9 °C) 1 °C (remaining range)
Oper. temp.	-20 to +50 °C
Storage temp.	-40 to +70 °C
Battery type	9V block battery, 6F22
Battery life	200 h (connected probe, backlight off) 45 h (radio mode, backlight off) 68 h (connected probe, backlight always on) 33 h (radio mode, backlight always on)
Dimensions	182 x 64 x 40 mm
Weight	171 g



#### Option: Radio

Radio module for upgrading measuring instrument with radio option						
Country versions	Radio freq.	Part no.				
Radio module for measuring instrument, 869.85 MHz, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0188				
Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL	915.00 MHz FSK	0554 0190				

Radio immersion/penetration probes	Meas. range	Accuracy		Resolution	t <sub>99</sub>
Radio immersion/penetration probe, NTC	-50 to +275 °C	±0.5 °C (-20 to ±0.8 °C (-50 to ±0.8 °C (+80.1 t ±1.5 °C (remain	-20.1 °C) 	0.1 °C	t <sub>99</sub> (in water) 12 s
Country versions			Radio freq.	Part no.	
Radio immersion/penetration probe, NTC, approval for the countries: DE, FR, UK, BE CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	, NL, ES, IT, SE, AT, DK	K, FI, HU,	869.85 MHz FSK	0613 1001	
Radio immersion/penetration probe, NTC, approval for USA, CA, CL			915.00 MHz FSK	0613 1002	

Assembled for you: Radio handles with probe head				
Radio handles with probe head for air-/ immersion-penetration-meas.	Meas. range	Accuracy	Resolution	t <sub>99</sub>
Radio handle for attachable probe heads with T/C probe head for air and immersion/penetration measurement	-50 to +350 °C Short-term to +500 °C	Radio handle: $\pm (0.5 ^{\circ}\text{C} + 0.3\% \text{of mv}) (-40 \text{to} + 500 ^{\circ}\text{C}) \\ \pm (0.7 ^{\circ}\text{C} + 0.5\% \text{of mv}) (\text{remaining range}) \\ \text{T/C probe head: Class 2}$	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	t <sub>99</sub> (in water) 10 s
Country versions		Radio freq.	Part no.	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DI DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	E, FR, UK, BE, NL, ES,	IT, SE, AT, 869.85 MHz FSK	0554 0189	
T/C probe head for air/immersion/penetration measurement, attachable to radio hand	le, T/C Type K		0602 0293	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL		915.00 MHz FSK	0554 0191	
T/C probe head for air/immersion/penetration measurement, attachable to radio hand	le, T/C Type K		0602 0293	
Radio handles with probe head for surface measurement	Meas. range	Accuracy	Resolution	t <sub>99</sub>
Radio handle for attachable probe heads with T/C probe head for surface measurement 0 5 mm 0 120 mm 0 120 mm	-50 to +350 °C Short-term to +500 °C	Radio handle: $\pm (0.5 ^{\circ}\text{C} + 0.3\% \text{of mv}) (-40 \text{to} + 500 ^{\circ}\text{C}) \\ \pm (0.7 ^{\circ}\text{C} + 0.5\% \text{of mv}) (\text{remaining range}) \\ \text{T/C probe head: Class 2}$	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	5 s
Country versions		Radio freq.	Part no.	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DI DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	E, FR, UK, BE, NL, ES,	IT, SE, AT, 869.85 MHz FSK	0554 0189	
T/C probe head for surface measurement, attachable to radio handle, T/C Type K			0602 0394	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL		915.00 MHz FSK	0554 0191	
T/C probe head for surface measurement, attachable to radio handle, T/C Type K			0602 0394	

Radio handles, separate				
Radio handles for attachable T/C probes	Meas. range	Accuracy		Resolution
Radio handle for attachable probe heads incl. adapter for attaching T/C probes (Type K)	-50 to +1000 °C	±(0.7 °C +0.39 ±(0.9 °C +0.59	% of mv) (-40 to +900 °C) % of mv) (remaining range)	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)
Country versions			Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	DE, FR, UK, BE, NL, ES	S, IT, SE, AT,	869.85 MHz FSK	0554 0189
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL			915.00 MHz FSK	0554 0191

Radio probes: G	eneral technical data							
Probe type	Radio immersion/penetration probe, NTC	Radio handle	Measuring rate	0.5 s or 10 s,	Radio transmission	n Unidirectional		
Battery type	2 x 3V button cell (CR 2032)	2 AAA micro batteries		adjustable on handle	Oper. temp.	-20 to +50 °C		
Battery life	150 h (meas. rate 0.5 s) 2 months (meas. rate 10 s)	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)	5 "		D !!	11 1 00 / 11 1	Storage temp.	-40 to +70 °C
	2 months (mode. rate 10 s)	o months (mods. rate 10 s)	Radio coverage	Up to 20 m (without obstructions)	Protection class	IP54		

#### Spot check thermometer - Fast and efficient





















Fast-action spot check thermometer with special probes for hotels, industrial kitchens, catering industry, supermarkets

- Stable surface probe for checking cooking plate, heating and baking tin temperatures e.g. in fast food restaurants.
- Robust immersion/penetration probe to monitor cooking processes or cooking oil temperature.
- Super-fast needle probe for temperature checks on thin goods such as hamburgers.
- Air probe for a fast temperature check e.g. in freezers.

An additional temperature probe can be displayed in the testo 925 measuring instrument; data transmission is by radio, i.e. wireless.

- Special probes for industrial kitchen sector
- 1 channel measuring instrument with optional radio probe
- Continuous display of max/min values
- Display light
- An audible alarm sounds when limit values are exceeded

#### testo 925

testo 925, 1 channel temperature measuring instrument T/C Type K, audible alarm, connection of an optional radio probe, with battery and calibration protocol

Part no. 0560 9250





TopSafe, indestructible case, protects from dirt and impact (option)

Practical monitoring during cheese storage, wireless, measurement data transmission via radio

Printer and Accessories	Part no.
Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries	0554 0549
Spare thermal paper for printer (6 rolls), measurement data documentation legible for up to 10 years	0554 0568
Spare thermal paper for printer (6 rolls)	0554 0569
Lithium battery, button cell, type CR 2032 for wireless probes	0515 0028
Transport and Protection	Part no.
TopSafe, protects from impact and dirt	0516 0221
Case for measuring instrument and probes	0516 0210
Transport case for meas. instr. and probes (405 x 170 x 85 mm)	0516 0201
Transport case for measuring instrument, 3 probes and accessories (430 x 310 x 85 mm)	0516 0200
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, meas. instr. with surface probe; calibration points +60°C; +120°C; +180°C	0520 0071

Technical data	
Probe type	Type K (NiCr-Ni) or NTC if radio immersion/penetration probes are used
M	<u>'</u>
Meas. range	-50 to +1000 °C
Accuracy	±(0.5 °C +0.3% of mv) (-40 to +900 °C)
±1 digit	±(0.7 °C +0.5% of mv) (remaining range)
Resolution	0.1 °C (-50 to +199.9 °C)
	1 °C (remaining range)
Oper. temp.	-20 to +50 °C
Storage temp.	-40 to +70 °C
Battery type	9V block battery, 6F22
Battery life	200 h (connected probe, backlight off)
	45 h (radio mode, backlight off)
	68 h (connected probe, backlight always on)
	33 h (radio mode, backlight always on)
Dimensions	182 x 64 x 40 mm
Weight	171 g

Immers./penetr. probes	Illustration			Meas. range	Accuracy	t99	Part no.
Waterproof food probe made of stainless		125 mm	30 mm	-60 to +400 °C	Class 2	7 s	0602 2292
steel (IP65), TC Type K		Ø 4 mm	Ø 3.2 mm				Conn.: Fixed cable
· Robust food probe with special handle, IP	115 mm		30 mm	-60 to +400 °C	Class 1	6 s	0602 2492
65, reinforced cable (PUR), T/C Type K	Ø 5 mm		Ø 3.5 mm				Conn.: Fixed cable
Waterproof super-fast needle probe, highly accurate neasurements without visible penetration hole.		150 mm	15 mm	-60 to +250 °C	Class 1	1 s	0628 0026
Specially for food, ideal for hamburgers, steaks, pizza, eggs etc., T/C Type K	<b>&lt;</b> ₩₩₩₩	Ø 1.4 mm	Ø 1 mm				Conn.: Fixed cable
Waterproof robust immersion/penetration probe with metal protection hose Tmax		240 mm		-50 to +230 °C	Class 1	15 s	0628 1292
+230°C, e.g. for monitoring temp. in cooking oil, T/C Type K		Ø 4 mm					Conn.: Fixed cable



#### Suitable probes at a glance / Option: Radio

Surface probes	Illustration	Meas. range	Accuracy	t99	Part no.
Stable, robust surface probe with PTFE standing area and metal protection hose Tmax +230°C for cooking surfaces, heating and baking trays, T/C Type K	E 82 0 60 mm	-50 to +230 °C	Class 2	45 s	0628 9992 Conn.: Fixed cable
Air probes	Illustration	Meas. range	Accuracy	t99	Part no.
, Robust air probe, T/C Type K	115 mm Ø 4 mm	-60 to +400 °C	Class 2	25 s	0602 1793 Conn.: Fixed cable

The measuring instrument inside TopSafe is waterproof with this probe.

Radio module for upgrading measuring instrument with radio option					
Country versions	Radio freq.	Part no.			
Radio module for measuring instrument, 869.85 MHz, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0188			
Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL	915.00 MHz FSK	0554 0190			

Assembled for you: Radio handles with probe he	ead					
Radio handles with probe head for air-/ immersion-penetration-meas	) <b>.</b>	Meas. range	Accuracy		Resolution	t <sub>99</sub>
Radio handle for attachable probe heads with T/C probe head for air and immersion/penetration measurement	- 100 mm   30 - mm   30 - mm   330 - mm   33	-50 to +350 °C Short-term to +500 °C		mv) (-40 to +500 °C) mv) (remaining range) lass 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	t <sub>99</sub> (in water) 10 s
Country versions				Radio freq.	Part no.	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the cc DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO T/C probe head for air/immersion/penetration measurement, attachable to			IT, SE, AT,	369.85 MHz FSK	0554 0189 0602 0293	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, T/C probe head for air/immersion/penetration measurement, attachable to		e, T/C Type K	Ş	915.00 MHz FSK	0554 0191 0602 0293	
Radio handles with probe head for surface measurement		Meas. range	Accuracy		Resolution	t <sub>99</sub>
Radio handle for attachable probe heads with T/C probe head for surface measurement	120 mm 40 mm 3 5 mm Ø 12 mm	-50 to +350 °C Short-term to +500 °C		mv) (-40 to +500 °C) mv) (remaining range) lass 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	5 s
Country versions			1	Radio freq.	Part no.	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the cc DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO		FR, UK, BE, NL, ES,	IT, SE, AT,	369.85 MHz FSK	0554 0189	
T/C probe head for surface measurement, attachable to radio handle, T/C	Туре К				0602 0394	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, T/C probe head for surface measurement, attachable to radio handle, T/C $^{\prime}$			(	915.00 MHz FSK	0554 0191 0602 0394	

Radio handles, separate				
Radio handles for attachable T/C probes	Meas. range	Accuracy		Resolution
Radio handle for attachable probe heads incl. adapter for attaching T/C probes (Type K)	-50 to +1000 °C		of mv) (-40 to +900 °C) of mv) (remaining range)	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)
Country versions			Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	F, FR, UK, BE, NL, ES,	IT, SE, AT,	869.85 MHz FSK	0554 0189
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL			915.00 MHz FSK	0554 0191

Radio probes: General technical data						
Probe type	Radio immersion/penetration probe, NTC	Radio handle	Measuring rate	0.5 s or 10 s,	Radio transmission Unidirectional	
Battery type	2 x 3V button cell (CR 2032)	2 AAA micro batteries		adjustable on handle	Oper. temp20 to +50 °C	
Battery life	150 h (meas. rate 0.5 s)	215 h (meas. rate 0.5 s)	Radio coverage		Storage temp40 to +70 °C	
	2 months (meas. rate 10 s)	6 months (meas. rate 10 s)		Up to 20 m (without obstructions)	Protection class IP54	

#### Highly accurate alarm and logger thermometer – With site management







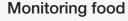












#### Risk factor: Bacteria

Consumers may be exposed to health risks caused by bacteriological contamination of food. This risk becomes dangerous when a specified quantity of germs is exceeded. Bacterial growth relies on temperature!

#### Measurements on non-frozen food

For fast and accurate measurements, the penetration probe must be inserted at least 5 times, better 10 times as deep as it is thick.

#### Measurements on frozen food

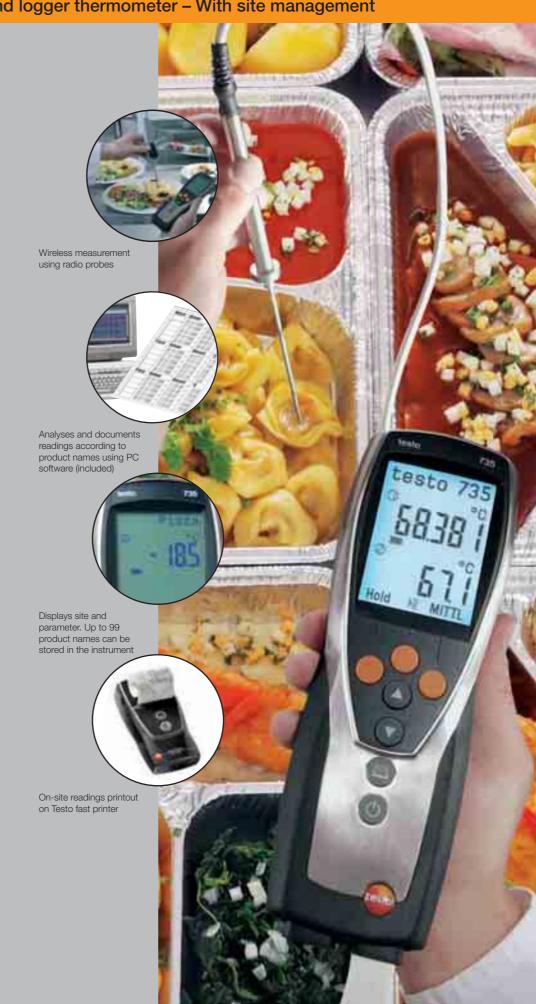
Use probes suitable for large pieces (e.g. screw-in frozen food probe) and insert sufficiently (min. 4 cm). In the case of flat products (e.g. pizza, fish), use probes with a thin or reinforced measurement

#### Measurements in freezers and cold storage rooms

The air temperature in freezers and cold storage rooms should be a constant -18 °C. If monitoring over longer time periods, data loggers with alarm, if limit values are exceeded, are recommended. Fast-response probes for measuring penetration temperature are recommended when dispensing food. A minimum temperature of +65 °C to +70 °C is recommended.

#### Non-contact temperature measurement (screening test)

At greater distances, the ideal distance between measuring instrument and the object being measured is dependent on the optics of the infrared measuring instrument. Always measure the temperature of the packaging on packaged food; in the case of plastic seal packaging, only measure at points where the packaging comes into direct contact with the product. Major measurement errors occur if ice crystals or shiny, reflective surfaces are measured.



#### testo 735-2

The robust and compact measuring instrument with a probe socket for highly accurate Pt100 probes and two sockets for fast-action thermocouple probes. Readings from up to three additional temperature probes can be displayed in the testo 735-2 measuring instrument's clear display; data transmission is by radio, i.e. wireless. The measurement values can be simultaneously transferred to a PC and stored there. In this way, a total of 6 channels is recorded by the measuring instrument. A system accuracy of 0.05 °C with a resolution of 0.001 °C is reached using the plug-in highly accurate Pt100 immersion/penetration probe. The measuring instrument is therefore ideally suited for use as a working standard.

Temperature characteristics are recorded in the instrument and then analysed in graphics and tables on your PC/Notebook. Data is printed on site on the Testo fast printer using infrared.

#### testo 735-2

testo 735-2, 3 channel temperature measuring instrument T/C Type T/J/K/S/Pt100, audible alarm, connection for max. 3 optional radio probes, with data memory, PC software and USB data transmission cable, with battery and calibration

Part no. 0563 7352

Selectable user profiles, i.e. allocation of specific function buttons to an application facilitate intuitive and fast operation. Individual protocols or measurement series can be stored according to site. Up to 99 sites can be stored in the instrument. The storage cycle is user-defined between 0.5 seconds and 24 hours.

- System accuracy up to 0.05 °C
- Instrument memory for up to 10,000 readings
- PC software for filing, analysing and documenting measurement data (included)
- Displays, saves and prints Delta T, min, max and mean values
- Audible alarm if limit values are exceeded
- Protection class IP65



Spot checks for frozen goods in refrigerated rooms



thanks to on-site data printout



Checks temperature when dispensing food; no annoying cables thanks to radio probes

Printer and Accessories	Part no.
Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries	0554 0549
Spare thermal paper for printer (6 rolls), measurement data documentation legible for up to 10 years	0554 0568
Spare thermal paper for printer (6 rolls)	0554 0569
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610
Additional accessories	Part no.
Plug-in mains adapter, 5 VDC 500 mA with European adapter, 100-250 VAC, 50-60 Hz	0554 0447
Lithium battery, button cell, type CR 2032 for wireless probes	0515 0028

Transport and Protection	Part no.
Service case for basic equipment of measuring instrument and probes, dimensions: $400 \times 310 \times 96 \text{ mm}$	0516 0035
Service case for measuring instrument, probes and accessories, dimensions 520 x 380 x 120 mm	0516 0735
Calibration Certificates	Part no.
ISO calibration certificate/temperature, single point calibration for surface thermometer; calibration point +60°C	0520 0072
ISO calibration certificate/temperature, single point calibration for surface thermometer; calibration point +120°C	0520 0073
ISO calibration certificate/temperature, for air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
ISO calibration certificate/temperature, for air/immersion probes, calibration points -8°C; 0°C; +40°C	0520 0181



#### Suitable probes at a glance / Technical data















nmers./penetr. probes	Illustration		Meas. range	Accuracy t	99	Part no.
Waterproof standard immersion/penetration	112 mm	50 mm	-50 to +350 °C		s	0603 1293
probe, T/C Type T	Ø 5 mm	Ø 4 mm		#0.2 °C (-20 to +70 °C) 7 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 7 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 7 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 7 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 2 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 6 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 8 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 2 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 5 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 6 s Class 1 (remaining range)  #0.2 °C (-20 to +70 °C) 6 s Class 1 (remaining range)  #0.05 °C (+0.01 to +100 60 s °C) (±0.05 °C +0.05% of mv) (remaining range)  #0.05 °C (+0.01 to +100 60 s °C) (±0.05 °C +0.05% of mv) (remaining range)		Conn.: Fixed cable
Waterproof precision immersion/penetration	70 mm	15 mm	-50 to +350 °C			0603 2693
probe without visible penetration hole, T/C Type T	Ø 5 mm	Ø 1.5 mm		, ,		Conn.: Fixed cable
Stainless steel food probe (IP67) with PUR	125 mm	30 mm	-50 to +350 °C		s	0603 2192
cable, T/C Type T	Ø 4 mm	Ø 3.2 mm		, ,		Conn.: Fixed cable
Stainless steel food probe (IP67), with PTFE	125 mm	30 mm	-50 to +350 °C		s	0603 3392
cable to +250 °C, TC Type T	Ø 4 mm	Ø 3.2 mm		, ,		Conn.: Fixed cable
Waterproof, super-quick needle probe for	150 mm		-50 to +250 °C		e s	0628 0027
measurements without visible penetration nole, T/C Type T	Ø 1.4 mm			, ,		Conn.: Fixed cable
Robust food penetration probe with special	115 mm	30 mm	-50 to +350 °C		s	0603 2492
handle, reinforced cable (PVC), T/C Type T	Ø 5 mm	Ø 3.5 mm				Conn.: Fixed cable
Frozen food probe, corkscrew design, T/C	110 mm	30 mm	-50 to +350 °C		s	0603 3292
Type T	Ø 8 mm	Ø 4 mm				Conn.: Plug-in cable
Quick needle probe to monitor cooking in	60 mm		-50 to +250 °C		e s	0628 0030
oven, T/C Type T	Ø 1.4 mm					Conn.: Fixed cable
Measurement tip with T/C adapter Type T,	500 mm		-50 to +350 °C	Class 1 5	s	0628 0023
ideal for fast-action measurement on incoming goods	Ø 1.5 mm					
_aboratory probe Pt100, glass-coated,	200 mm	30 mm	-50 to +400 °C		5 s	0609 7072
exchangeable glass pipe (Duran 50), resistant to corrosive substances	Ø 6 mm	Ø 5 mm				Conn.: Fixed cable
Highly accurate Pt100 immersion/penetration	295 mm		-40 to +300 °C		60 s	0614 0235
probe incl. factory certificate (test points 0 °C and +156 °C)	Ø 4 mm			±(0.05 °C +0.05% of mv)		Conn.: Fixed cable
probes	Illustration		Meas. range	Accuracy t	99	Part no.
Poblat offerdeble oir probe T/OTime T	112 mm	50 mm	-50 to +350 °C		.5 s	0603 1793
Robust, affordable air probe, T/C Type T	Ø 5 mm	Ø 4 mm		range)		Conn.: Fixed cable
rface probes	Illustration		Meas. range	Accuracy t	99	Part no.
Waterproof surface probe with widened	112 mm	50 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) 3 Class 1 (remaining	80 s	0603 1993
measurement tip for flat surfaces, T/C Type T	Ø 5 mm	Ø 6 mm		range)		Conn.: Fixed cable

The measuring instrument inside TopSafe is waterproof with this probe.

Technical data							
Probe type*	Pt100	Pt100 with probe 0614 0235		Type K (I	NiCr-Ni)	Type	T (Cu-CuNi)
Meas. range	-200 to +800 °C	-40 to +300 °C		-200 to +	-1370 °C	-200 1	to +400 °C
Accuracy ±1 digit	±0.2 °C (-100 to +199.9 °C) ±0.2% of mv (remaining range)	See probe data		,	-60 to +60 °C) + 0.3% of mv) g range)	±(0.2	°C (-60 to +60 °C) °C + 0.3% of mv) ining range)
Resolution	0.05 °C	0.001 °C (-40 to +199.999 °C) 0.01 °C (remaining range)	)	0.1 °C		0.1 °C	
Probe type*	Type J (Fe-CuNi)	Type S (Pt10Rh-Pt)					
Meas. range	-200 to +1000 °C	0 to +1760 °C					
Accuracy ±1 digit	±0.3 °C (-60 to +60 °C) ±(0.2 °C + 0.3% of mv) (remaining range)	±1 °C					
Resolution	0.1 °C	1 °C					
Battery type	Alkali manganese, mignon, Type AA		Oper. 1	emp.	-20 to +50 °C		
Battery life	Approx. 300 h with TC probe		Storag	e temp.	-30 to +70 °C		
	Approx. 250 h with Pt100 Approx. 60 h with 0614 0235		Dimen		220 x 74 x 46 mm		
Protection class	IP65		Weigh		428 g		

<sup>\*</sup>Probe type NTC when using radio immersion/penetration probes



#### Option: Radio

Radio module for upgrading measuring instrument with radio option					
Country versions	Radio freq.	Part no.			
Radio module for measuring instrument, 869.85 MHz, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0188			
Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL	915.00 MHz FSK	0554 0190			

Radio immersion/penetration probes	Meas. range	Accuracy	Resolution	t <sub>99</sub>
Radio immersion/penetration probe, NTC	-50 to +275 °C	±0.5 °C (-20 to +80 °C) ±0.8 °C (-50 to -20.1 °C) ±0.8 °C (+80.1 to +200 °C) ±1.5 °C (remaining range)	0.1 °C	t <sub>99</sub> (in water) 12 s
Country versions		Radio freq.	Part no.	
Radio immersion/penetration probe, NTC, approval for the countries: DE, FR, UK, BE, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	NL, ES, IT, SE, AT, DK	, FI, HU, 869.85 MHz FSK	0613 1001	
Radio immersion/penetration probe, NTC, approval for USA, CA, CL		915.00 MHz FSK	0613 1002	

Assembled for you: Radio handles with probe head				
Radio handles with probe head for air-/ immersion-penetration-meas.	Meas. range	Accuracy	Resolution	t <sub>99</sub>
Radio handle for attachable probe heads with T/C probe head for air and immersion/penetration measurement 05 mm 03.4 mm/d 05 m	-50 to +350 °C Short-term to +500 °C	Radio handle: $\pm (0.5  ^{\circ}\text{C} + 0.3\% \text{ of mv}) (-40  \text{to} + 500  ^{\circ}\text{C})$ $\pm (0.7  ^{\circ}\text{C} + 0.5\% \text{ of mv}) (\text{remaining range})$ T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	t <sub>99</sub> (in water) 10 s
Country versions		Radio freq.	Part no.	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	F, FR, UK, BE, NL, ES,	IT, SE, AT, 869.85 MHz FSK	0554 0189	
T/C probe head for air/immersion/penetration measurement, attachable to radio handle	e, T/C Type K		0602 0293	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL T/C probe head for air/immersion/penetration measurement, attachable to radio handle	e, T/C Type K	915.00 MHz FSK	0554 0191 0602 0293	
Radio handles with probe head for surface measurement	Meas. range	Accuracy	Resolution	t <sub>99</sub>
Radio handle for attachable probe heads with T/C probe head for surface measurement 0 5 mm 012	-50 to +350 °C Short-term to +500 °C	Radio handle: $\pm (0.5 ^{\circ}\text{C} + 0.3\% \text{of mv}) (-40 \text{to} + 500 ^{\circ}\text{C})$ $\pm (0.7 ^{\circ}\text{C} + 0.5\% \text{of mv}) (\text{remaining range})$ T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	5 s
Country versions		Radio freq.	Part no.	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	FR, UK, BE, NL, ES,	IT, SE, AT, 869.85 MHz FSK	0554 0189	
T/C probe head for surface measurement, attachable to radio handle, T/C Type K			0602 0394	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL T/C probe head for surface measurement, attachable to radio handle, T/C Type K		915.00 MHz FSK	0554 0191 0602 0394	

Radio handles, separate				
Radio handles for attachable T/C probes	Meas. range	Accuracy		Resolution
Radio handle for attachable probe heads incl. adapter for attaching T/C probes (Type K)	-50 to +1000 °C	±(0.7 °C +0.3° ±(0.9 °C +0.5°	% of mv) (-40 to +900 °C) % of mv) (remaining range)	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)
Country versions			Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	s: DE, FR, UK, BE, NL, ES	, IT, SE, AT,	869.85 MHz FSK	0554 0189
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL			915.00 MHz FSK	0554 0191

Radio probes: General technical data						
Probe type	Radio immersion/penetration probe, NTC	Radio handle	Measuring rate	0.5 s or 10 s,	Radio transmission	n Unidirectional
Battery type	2 x 3V button cell (CR 2032)	2 AAA micro batteries		adjustable on handle	Oper. temp.	-20 to +50 °C
Battery life	150 h (meas. rate 0.5 s) 2 months (meas. rate 10 s)	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)		11 1 00 / 11 1	Storage temp.	-40 to +70 °C
	2 months (mode. rate 10 b)	o months (mode. rate 10 s)	Radio coverage	Up to 20 m (without obstructions)	Protection class	IP54



#### Reference measuring instrument – With highest precision

















#### testo 950

Assuring quality means adhering to temperatures. The testo 950 precision measuring instrument can be used for frozen food temperatures to high oven temperatures. The measuring instrument combines user-friendly menu-driven operation and has a system accuracy of up to 0.05°C.

A readings memory for max. 500,000 readings is available for long-term measurement. All important parameters such as start and end of measurement, measurement intervals, limits exceeded/fallen short of and date/time can be programmed.

The saved measurement data can be analysed using PC software or printed on the Testo fast printer on site.

- System accuracy up to 0.05 °C and up to a resolution of 0.001 °C with precision probe 0614 0240
- System adjustment integrated in measuring instrument fast thermocouple probes can be adjusted to a reference value using the 0614 0240 precision probe.

#### testo 950

Reference temperature measuring instrument, incl. battery, Li cell and calibration protocol

Part no. 0563 9501



Monitoring the cooking temperature

Accessories for measuring instrument/Probes	Part no.
Rech. batt. set for instr. (2 rech. 2.4V/1100mAh), selected for quick recharging in instrument	0554 0196
Mains 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
Coffee and Address	- ·
Software and Accessories	Part no.
ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend curve	0554 0830
ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend	
ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend curve  RS232 cable, connects instrument to PC (1.8 m) for data	0554 0830

Printer and Accessories	Part no.
Attachable printer (securely attached) including 1 roll of thermal paper and batteries	0554 0570
Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries	0554 0549
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 (540 x 440 x 130 mm)	0516 0400

escription	Illustration			Meas. range	Accuracy	t99	Part no.
Highly accurate immersion/penetration		295 mm	Stainless Steel	-40 to +300 °C	±0.05 °C (+0.01 to +100 °C) ±(0.05 °C ±0.05% of mv)	60 s	0614 0240
probe incl. certificate		Ø 4 mm			(-40 to 0 °C) ±(0.05 °C ±0.05% of mv) (+100.01 to +300 °C)		Conn.: Plug-in head. connection cable 0430 0143 or 0430 0145 required
Super quick-action immersion/penetration probe for		150 mm	20 mm	-200 to +600 °C	Class 1	1 s	0604 9794
measurements in gases and liquids with a low-mass tip		Ø 1.4 mm	Ø 0.5 mm				Conn.: Plug-in head. connection cable 0430 0143 or 0430 0145 required
Robust immersion/penetration probe		150 mm		-200 to +400 °C	Class A	30 s	0604 2573
with sharpened measuring tip, waterproof and oven-proof	-01	Ø 3.5 mm	Ø 3 mm				Conn.: Fixed cable
Robust food probe with special handle, IP	115 mm		30 mm	-60 to +400 °C	Class 1	6 s	0602 2492
65, reinforced cable (PUR), T/C Type K	Ø 5 mm		Ø 3.5 mm		Please also order the 060 1693 T/C adapter	00	Conn.: Fixed cable
Super quick-action surface probe, probe		50 mm		-200 to +300 °C	Class 2	3 s	0604 0994
tip at 90° angle, with sprung thermocouple strip		100 mm	Ø 10 mm				Conn.: Plug-in head. connection cable 0430 0143 or 0430 0145 required
Stable, robust surface probe with PTFE	20 mm			-50 to +230 °C	Class 2	45 s	0628 9992
standing area and metal protection hose Tmax +230°C for cooking surfaces, heating and baking trays, T/C Type K	Ø 60 mm				Please also order the 060 1693 T/C adapter	00	Conn.: Fixed cable
		150 mm		-100 to +400 °C	1/10 Class B (0 to	75 s	0628 0017
Precision air probe		Ø 3 mm	Ø 9 mm		100°C) 1/5 Class B (rem. range) to EN 60751		Conn.: Plug-in head. connectio cable 0430 0143 or 0430 0145 required

For further information and calibration certificates, please refer to our brochure "Portable Reference Measurement Engineering" and www.testo.com.



#### Monitor ambient storage conditions - Efficiently and Accurately

#### testo 608-H1 /-H2

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

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

- With dewpoint calculation to and Max/Min value display
- Humidity sensor unaffected by condensation

# Display easily legible at a distance testo 608-H2 with LED alarm

Reliable monitoring of storage conditions in the food sector

Accessories Ordering data	Part no.
ISO calibration certificate humidity, Calibration points 11.3 %RH and 75.3 %RH at +25°C	0520 0006

#### 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		e 18 s
Storage temp40 to	+70 °C	Dimensions	120 x 89 x 40 mm
Battery life 8736	h	Weight	168 g

#### Mini infrared thermometer - Pocket-size

#### testo 805

The infrared thermometer, which is only 80 mm in size, fits inside any pocket and is always ready at hand for fast measurements in Incoming Goods, for example. Also ideal for quick measurements when distributing food.

- High accuracy in a critical area for food
- Packaging remains undamaged
- TopSafe is dishwasher-proof
- Display of minimum and maximum values
- Scan mode for permanent measurement



Fast temperature measurement as you pass by

#### testo 805

Mini infrared thermometer and battery

Mini infrared thermometer, TopSafe and battery

Set for fast inspections

Part no. 0560 8051

Part no. 0563 8051

Accessories Ordering data	Part no.
TopSafe, robust, waterproof protection case (IP65)	0516 8051
ISO calibration certificate/Temperature, Infrared thermometers, calibration points 0°C, +60°C	0520 0452

Technical data					
Meas. range	-25 to +250 °C				
Accuracy ±1 digit	±3 °C (-25 to -21 °C) ±2 °C (-20 to -2.1 °C) ±1 °C (-2 to +40 °C)		±1.5 °C (+4 ±2% of mv (	0.1 to +150 °C) (+150.1 to +250	°C)
Resolution	0.1 °C (-9.9 to +199.9 °C) 1 °C (remaining range)				
Distance to mea	Distance to measurement spot 1:1				
Emissivity	0.95 (adjustable to	0.95 or 1.00)			
Reaction time	⟨1.0 s	Dimension	ns 8	30 x 31 x 19 m	ım
Oper. temp.	0 to +50 °C	Weight		28 g	
Storage temp	-20 to +65 °C				







#### Temperature measurement - Non-contact



#### testo 826-T1

Non-contact and fast temperature monitoring of food, convenient and without damaging the packaging.



The thermometer has an additional laser sighting.



Infrared thermometer without sighting, with TopSafe and wall/belt holder

Part no. 0563 8261

#### testo 826-T2 with laser

Infrared thermometer with laser sighting and audible alarm, incl. TopSafe and wall/belt holder

Part no. 0563 8262

- High accuracy
- Wall/belt holder included
- Visual alarm testo 826-T1
- Audible alarm testo 826-T2
- 6:1 opening ratio (distance/spot diameter)
- Fast measurement without destroying packaging



testo 826-T2 with laser sighting and audible alarm

Temperature screening test on food e.g. in freezers, refrigerated storerooms etc.

#### Accessories Ordering data **Technical data** Meas. range -50 to +300 °C ISO calibration certificate/temperature, Infrared thermometers, calibration points -18°C, 0°C, +60°C Part no. 0520 0401 Accuracy ±1.5 °C (-20 to +100 °C) ±2 °C or 2% of mv (remaining range) ±1 digit Resolution 0.5 °C Storage temp. -40 to +70 °C 0 to +50 °C (826-T1) -20 to +50 °C (826-T2) Oper. temp Approx. 20 h (cont. oper.) (826-T2)

#### Temperature measurement – Non-contact or direct

#### testo 826-T3/-T4

Fast, non-contact measurement and core temperature measurement in one instrument. The surface temperature is measured with the infrared side while the penetration side can be used to measure the core temperature.

826-T4 also has a laser sighting and a reliable audible alarm.

- High accuracy
- Wall/belt holder included
- TopSafe case protects from impact, dirt and water
- Optical alarm testo 826-T3
- Audible alarm testo 826-T4
- 6:1 opening ratio (distance/spot diameter)



Only in combination with TopSafe

testo 826-T4 with laser sighting and audible alarm





Thin, robust measurement tip

Temperature screening test and core temperature measurement

Technical data	Infrared thermometer	Contact thermometer
Meas. range	-50 to +300 °C	-50 to +230 °C
Accuracy ±1 digit	±1.5 °C (-20 to +100 °C) ±2 °C or 2% of mv (remaining range)	±0.5 °C (-20 to +99.9 °C) ±1 °C or 1% of mv (remaining range)
Resolution	0.5 °C	0.1 °C
Oper. temp.	0 to +50 °C (826-T3)	-20 to +50 °C (826-T4)

#### testo 826-T3

Infrared and contact thermometer with TopSafe, wall/belt holder, probe protection cap and drill for frozen food

Part no. 0563 8263

#### testo 826-T4 with laser

Infrared and contact thermometer with laser and alarm, TopSafe, wall/belt holder, protection cap, frozen food drill

Part no. 0563 8264

#### **Accessories Ordering data**

ISO calibration certificate/temperature, for air/immersion probes, calibration point -18°C Part no. 0520 0061

ISO calibration certificate/temperature, for air/immersion probes, calibration point 0°C

Part no. 0520 0062

ISO calibration certificate/temperature, for air/immersion probes, calibration points - 18°C; 0°C; +60°C Part no. 0520 0001

ISO calibration certificate/temperature, Infrared thermometers, calibration points - 18°C, 0°C, +60°C
Part no. 0520 0401

ISO calibration certificate/Temperature, Infrared thermometers, calibration points 0°C, +60°C
Part no. 0520 0452



#### Distance thermometer for infrared monitoring measurements

#### testo 831

Thanks to its 30:1 optics, the measuremet spot diameter is only 3.6 cm at a distance of 1 m. This means that even small objects such as yoghurt pots can be easily measured at a distance. Measurement errors are avoided due to a 2-point laser which indicates the exact measurement spot. At two measurements per second, the testo 831 is so fast that measurements on palettes or refrigerated shelves can be carrried out in seconds.

- Infrared thermometer with 30:1 optics
- Broad measurement range of -30 to +210 °C
- Backlit display
- Alarm limit values can be set and are optically and audibly indicated
- Including belt holder and factory calibration certificate
- Also available as a set with the core thermometer testo 106



Fast and easy checks on refrigerated displays

#### Set

In certain applications, it is necessary to carry out an additional core temperature measurement, or an additional core thermometer is required for measuring the temperature of food before serving. For this purpose, Testo offers an economical set consisting of testo 831 and the proven testo 106 core thermometer.



testo 831, infrared thermometer including belt holder, battery, instruction manual and factory calibration certificate with the measurement points -20 and +80 °C

Part no. 0560 8310

#### Set with testo 831 and testo 106

Set testo 831 and testo 106 - Infrared thermometer including belt holder, battery, instruction manual and factory calibration certificate with the measurement points -20 and +80 °C, and penetration thermometer testo 106 including TopSafe, belt holder, battery and instruction manual

Part no. 0563 8310



Set consisting of : testo 831 and the core thermometer testo 106

Accessories Ordering data	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
ISO calibration certificate/temperature, Infrared thermometers, calibration points -18°C, 0°C, +60°C	0520 0401
ISO calibration certificate/Temperature, Infrared thermometers, calibration points 0°C, +60°C	0520 0452

testo 831: 2			
Í	Ø 16 mm	Ø 36 mm Ø 24 mm Ø 18 mm O0 mm 700 mm 1000 mm	Ø 100 mm Ø 68 mm
		2000	) mm
	17		340.

Technical data	
Meas. range	-30 to +210 °C
Spectral range	8 to 14 µm
Accuracy ±1 digit	$\pm$ 1,5 °C or $\pm$ 1,5% of mv (-20 to +210 °C) $\pm$ 2 °C or $\pm$ 2% of mv (remaining range)
Resolution	0,5 °C
Meas. spot marking	2-point laser
Distance to measurement spot	30:1
Emissivity	Adjustable 0.2 to 1.0
Oper. temp.	-20 to +50 °C
Storage temp.	-40 to +70 °C
Display	Illuminated LCD
Protection class	IP30
Dimensions	190 x 75 x 38 mm
Weight	200 g
Tachnical data toota 106 aar	0

Technical data testo 106 see page 9

#### testo 845 - the infrared measurement technology for temperature with integrated humidity module









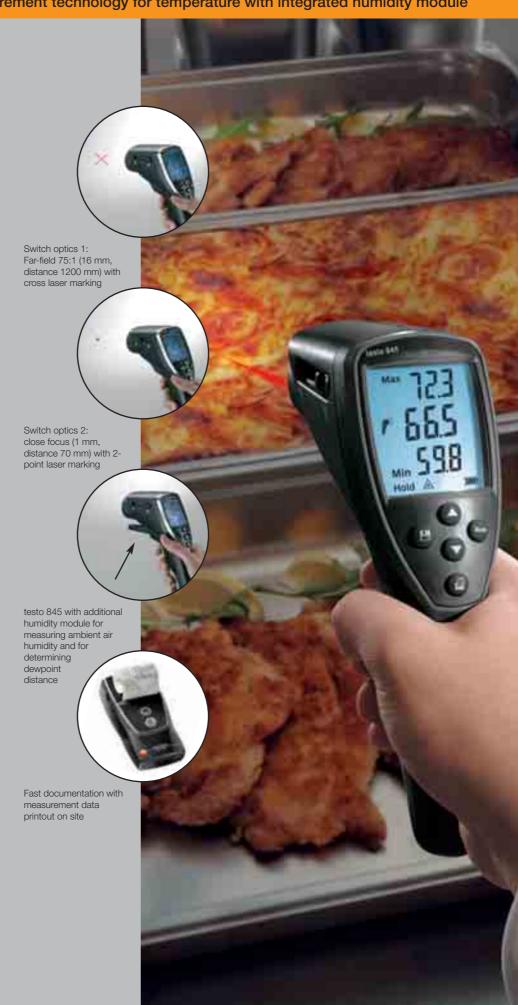


The testo 845 is a milestone in noncontact temperature measurement. For the first time, surface temperatures with smallest diameters can be measured accurately at short and long distances. The switchable optics for far-field and close focus measurement make this possible.

testo 845 is equipped with an optical resolution of 75:1 for far-field measurements. Surface temperatures can be measured accurately even at great distances from the object to be measured. At a distance of 1.2 metres from the object to be measured, the measuring spot diameter is only 16 mm. A cross laser marks the measuring spot exactly during measurement. Incorrect measurements are eliminated - you always know exactly where you are measuring.

The close focus optics allow the measurement of temperatures on the smallest surfaces with a diameter of just 1 mm and a distance of 70 mm! Two lasers mark the measuring spot exactly.

- Switchable optics for far-field measurements (75:1) and close focus (1 mm, 70 mm distance)
- Especially bright cross laser sighting for indicating the actual measuring point
- Reference accuracy ± 0.75 °C with super-fast measurement technology (scanning 100 ms)
- Backlit display (3-line), shows °C, min./max. values, alarm limit values and emissivity; in addition display with humidity module: %RH, °Ctd
- Optical and audible alarm when limit values are exceeded
- Instrument memory for 90 measurement protocols
- PC software for archiving and documenting measurement data (included in delivery)
- Tripod fitting for online measurement via USB cable (included in delivery)





#### Infrared Thermometer with Switchable Optics (far-field/close focus)

#### testo 845

testo 845, infrared temperature measuring instrument with cross-laser sighting, switchable optics for far-field and close focus measurement, contact temperature probe attachable, optical/audible alarm, reading memory, PC software incl. USB data transfer cable, aluminium case, battery and calibration protocol

Part no. 0563 8450

#### testo 845 with integrated humidity module

testo 845, infrared temperature measuring instrument with cross laser sighting incl. humidity module, switchable optics for far-field and close focus measurement, contact temperature probe attachable, optical/audible alarm, reading memory, PC software incl. USB data transfer cable, aluminium case, battery and calibration protocol

Part no. 0563 8451



Reliable measurement in incoming goods, even of small products

1	Description	Meas. range	Part no.	
I	Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500°C, TC Type K	-60 to +300 °C	0602 0393	
ı	115 mm Ø 5 mm	=		
	Robust air probe, T/C Type K	-60 to +400 °C	0602 1793	
۱	115 mm Ø 4 mm			

Accessories Ordering data	Part no.
Humidity module, upgradeable for testo 845 (0563 8450)	0636 9784
Plug-in mains adapter, 5 VDC 500 mA with European adapter, 100-250 VAC, 50-60 Hz	0554 0447
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610
Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries, for printing out measurements on site	0554 0549
Spare thermal paper for printer (6 rolls), measurement data documentation legible for up to 10 years	0554 0568
testo saline pots for control and humidity adjustment of humidity probes, 11.3 %RH and 75.3 %RH with adapter for humidity probe	0554 0660
Adhesive tape, e.g. for bare surfaces (roll, L.: 10 m, W.: 25 mm), E = 0.95, temperature resistant to +250 °C	0554 0051
Silicone heat paste (14g), Tmax = +260°C, improves heat transfer in surface probes	0554 0004
ISO calibration certificate/temperature, infrared thermometer; calibration points +60°C; +120°C; +180°C	0520 0002
ISO calibration certificate/temperature, Infrared thermometers, calibration points -18°C, 0°C, +60°C	0520 0401

Far-field measurement
Ø 279 mm  Ø 130 mm  Ø 40 mm  Ø 16 mm
2000 mm 5000 mm

Technical data							
Meas. range		ared to +950 °C	Contact (type K) -35 to +950 °C	Humidity module 0 to +100 %RH 0 to +50 °C -20 to +50 °C td			
±1 digit ±1.5 ±0.7 ±0.7		°C (-35 to -20.1 °C) °C (-20 to +19.9 °C) 5 °C (+20 to +99.9 °C) 5% of mv (+100 to ) °C)	$\pm 0.75$ °C (-35 to +75 °C) $\pm 1\%$ of mv (+75.1 to +950 °C)	±2 %RH (2 to 98 %RH) ±0.5 °C (+10 to +40 °C) ±1 °C (remaining range)			
Resolution	0.1	°C	0.1 °C	0.1 °C td			
Emission factor	Emission factor		Adjustable 0.1 to 1.0				
Optical resolution	n		6 mm, 1200 mm distar m, 70 mm distance (90				
Measuring rate	Measuring rate		t95: 250 ms; Scanning Max/Min/Alarm: 100 ms				
Dimensions	Dimensions		155 x 58 x 195 mm				
Battery type	Battery type		2 AA batteries				
Battery life		25 h (without laser), 10 h (with laser without light), 5 h (with laser and 50% light)					
Material/Housing	g	ABS Black/gray, r	metal screen				
Oper. temp.		-20 to +50 °C					
Storage temp.		-40 to +70 °C					

#### Close focus measurement



Switch to far-field measurement at a measurement distance > 250 mm.











#### testo Saveris™ - Measurement data monitoring in the food industry















In restaurants, food retail and in large kitchens, the cold chain must be guaranteed at all times. In order to keep foodstuffs fresh and to adhere to hygiene requirements, the uninterrupted documentation of the cold chain is necessary. testo Saveris provides optimum support here.

testo Saveris automates the monitoring of the cooling chain and thus provides you with security and time savings.

Should a limit value be exceeded, testo Saveris immediately issues an alarm. Various alarm options can be set based on your wishes. You thus receive not only uninterrupted documentation, but also will be informed immediately if the temperatures are outside the prescribed range.

the prescribed range.

Conforms to important standards in the food industry (HACCP and EN 12830)

#### Note on the radio frequencies

868 MHz: EU countries and certain other countries (e.g. CH, NOR)

2.4 GHz: non-EU countries (country list can be called up under www.testo.com/saveris)





#### Saveris set 1

Set 1: 868 MHz, consisting of base 0572 0120, 3 NTC radio probes without display 0572 1110, mains unit for base 0554 1096 and SBE software 0572 0180 incl. USB cable

#### Set 1, 868 MHz

Part no. 0572 0110

Set 1: 2.4 GHz, consisting of base 0572 0160, 3 NTC radio probes without display 0572 1150, mains unit for base 0554 1096 and SBE software 0572 0180 incl. USB cable

#### Set 1, 2.4 GHz

Part no. 0572 0150

#### Saveris set 2

Set 2: 868 MHz, consisting of base 0572 0120, 5 NTC radio probes with display 0572 1120, router 0572 0119, 2 mains units for base and router 0554 1096 and SBE software 0572 0180 incl. USB cable

#### Set 2, 868 MHz

Part no. 0572 0111

Set 2: 2.4 GHz, consisting of base 0572 0160, 5 NTC radio probes with display 0572 1160, router 0572 0159, 2 mains units for base and router 0554 1096 and SBE software 0572 0180 incl. USB cable

#### Set 2, 2.4 GHz

Part no. 0572 0151

#### Saveris set 3

Set 3: 868 MHz, consisting of base 0572 0121 incl. GSM module for SMS alarm, aerial with magnetic base 0554 0525, 5 NTC radio probes with display 0572 1120, router 0572 0119, 2 mains units for base and router 0554 1096 and SBE software 0572 0180 incl. USB cable

#### Set 3, 868 MHz

Part no. 0572 0112

Set 3: 2.4 GHz, consisting of base 0572 0161 incl. GSM module for SMS alarm, aerial with magnetic base 0554 0525, 5 NTC radio probes with display 0572 1160, router 0572 0159, 2 mains units for base and router 0554 1096 and SBE software 0572 0180 incl. USB cable

#### Set 3, 2.4 GHz

Part no. 0572 0152













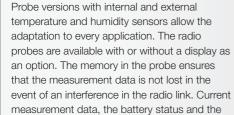




#### testo Saveris™ System overview



#### testo Saveris radio probe



quality of the radio link are shown in the display.

#### testo Saveris router

The radio link can be improved or lengthened with poor structural conditions by using a router. Naturally several routers are possible in the testo Saveris system, but several routers are not connected in series.

Through the connection of a converter to an Ethernet jack, the signal of a radio probe can be converted into an Ethernet signal. This combines the flexible connection of the radio probe with the use of the existing Ethernet even over long transmission paths.













testo Saveris



testo Saveris analog coupler (Wireless)

#### testo Saveris analog coupler

The analog coupler allows the inclusion of further measurement parameters into the testo Saveris monitoring system, by integrating all transmitters with standardized current/voltage interfaces, e. g. 4 to 20 mA or 0 to 10 V.



#### testo Saveris™ System overview

#### testo Saveris base

Ethernet

The base is the heart of testo Saveris and can save 40,000 readings per measurement channel independent of the PC. This corresponds to around one year of memory capacity at a measuring rate of 15 minutes. The system data and alarms are visible via the display of the Saveris base.

#### testo Saveris software

The testo Saveris software offers simple operation and an intuitive user interface. The Saveris software is available in two different versions: as the basic version SBE (Small Business Edition) or the PROF (Professional) software version with diverse additional options, or as a CFR version. The CFR software fulfils the requirements or 21 CFR Part 11 of the FDA, and is thus validatable.









Overview of software versions	SBE	PROF	CFR	
Simple installation and configuration	•	•	•	
Diagrams/tables/alarm overview/PDF reports	•	•	•	
Calendar management	•	•	•	
Representation of probe groups	•	•	•	
Transmission of alarms (e-mail, SMS, relay)	•	•	•	
Comprehensive alarm management		•	•	
Automatic refresh of measurement data ("Online mode")		•	•	
Measurement data on background photo of locations		•	•	
Integration into network (client server)		•	•	
Conform to 21CFR11 (validatable)			•	
Electronic signature			•	
Audit trail			•	
Allocation of access rights on 3 user levels			•	



















#### testo Saveris™ Components: Radio probes



Probe versions with internal and external temperature sensors and with humidity sensors allow the adaptation to every application. The radio probes are available with or without a display as an option. Current measurement data, the battery status and the quality of the radio link are shown in the display.















Radio

Dimensions (housing):

Weight

NTC

Radio probe with internal NTC

	'				
internal	81 mm	internal	E	external	
	<u> </u>		₩ 5		
(1000)	1	1990	adi-		
1		Ting.	t		
		1000	200		
	J	1			
Saveris T1		Saveris T2			
Javelio I I		Javello 12			٠,

NTC



NTC





externa

Saveris 12
Radio probe with external probe
connection and internal NTC, door
contact

2-channel radio probe with 2 external TC probe connections (Choice of TC characteristics)

Saveris Pt Radio probe with 1 external Pt100 probe

			CUITACL	characteristics)		
sensor	Probe type	NTC	NTC			
	Meas. range	-35 to +50 °C	-35 to +50 °C			
Internal	Accuracy	±0.4 °C (-25 to +50 °C) ±0.8 °C (remaining range)	$\pm 0.4$ °C (-25 to +50 °C) $\pm 0.8$ °C (remaining range)			
	Resolution	0.1 °C	0.1 °C			
	Probe type		NTC	TC type K	TC type J	Pt100
	Meas. range (Instrument)		-50 to +150 °C	-195 to +1350 °C	-100 to +750 °C	-200 to +600 °C
96				TC type T	TC type S	
probe				-200 to +400 °C	0 to +1760 °C	
External	Accuracy (Instrument)		±0.2 °C (-25 to +70 °C) ±0.4 °C (remaining range)	±0.5 °C or 0.5%	% of mv	at 25 °C ±0.1 °C (0 to +60 °C) ±0.2 °C (-100 to +200 °C) ±0.5 °C (remaining range)
	Resolution (Instrument)		0.1 °C	0.1 °C / <b>TC typ</b> e	e <b>S</b> 1 °C	0.01 °C
Co	nn.		NTC via mini-DIN socket, door contact connection cable included in delivery (1.80 m)	2 TCs via TC so difference in po		1 Pt100 via mini-DIN socket

80 x 85 x 38 mm

Approx. 240 g

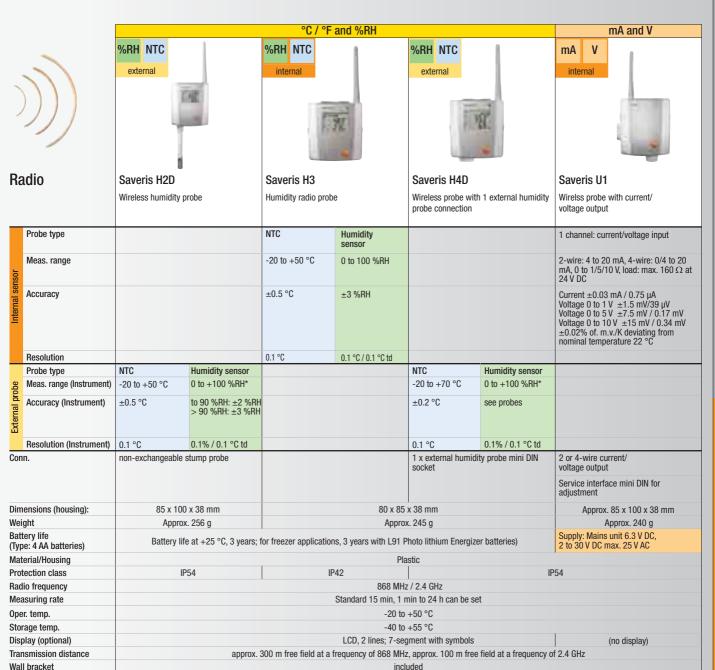
Battery life (Type: 4 AA batteries)	Battery life at +25 °C, 3 years; for freezer a	pplications, 3 years with L91 Photo lithium Energizer	batteries)
Material/Housing		Plastic	
Protection class	IP68	IP54	IP68
Radio frequency		868 MHz / 2.4 GHz	
Measuring rate	Standard 15	5 min, 1 min to 24 h can be set	
Conformity with standards	DIN EN 12830		
Oper. temp.	-35 to +50 °C	-20 to +	50 °C
Storage temp.		-40 to +55 °C	
Display (optional)	LCD, 2 lin	es; 7-segment with symbols	
Transmission distance	approx. 300 m free field at a frequency of 868 MHz, approx. 100 m free field at a frequency of 2.4 GHz		
Wall bracket		included	

Ordering data Wireless probes	Part no.	Part no.	Part no.	Part no.
	Version without display	Version without display		
	868 MHz	2.4 GHz	868 MHz	2.4 GHz
Saveris T1 Radio probe with internal NTC	0572 1110	0572 1150	0572 1120	0572 1160
Saveris T2 Radio probe with external probe connection and internal NTC, door contact	0572 1111	0572 1151	0572 1121	0572 1161
Saveris T3 2-channel radio probe with 2 external TC probe connections (Choice of TC characteristics)	0572 9112	0572 9152	0572 9122	0572 9162
Saveris Pt Radio probe with 1 external Pt100 probe connection	0572 7111	0572 7151	0572 7121	0572 7161

The alkali manganese batteries AA (0515 0414) are included in these ordering data (analog coupler excluded). Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.



# testo Saveris™ Components: Radio probes



\*not for continuous high-humidity applications

Ordering data Wireless probes	Part no.	Part no.	Part no.	Part no.	
	Version without display		Version with display		
	868 MHz	868 MHz 2.4 GHz 8		2.4 GHz	
Saveris H3Wireless probe with internal humidity sensor	0572 6110	0572 6150	0572 6120	0572 6160	
Saveris H2D Wireless probe with external humidity sensor 2%RH, radio frequency 868 MHz (with display)			0572 6122	0572 6162	
Saveris H4D Wireless humidity probe with external probe connection, radio frequency 868 MHz (with display)			0572 6124	0572 6164	
Saveris U1Analogkoppler with 1 current/voltage output (order mains unit separately)	0572 3110	0572 3150			

The alkali manganese batteries AA (0515 0414) are included in these ordering data (analog coupler excluded). Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately





















# testo Saveris™ Komponenten: Base, Router, Converter und Zubehör















Base	BestNr.
Saveris-Base, Funkfrequenz 868 MHz	0572 0120
Saveris-Base, Funkfrequenz 868 MHz, GSM Modul integriert (für SMS-Alarm)	0572 0121
Saveris-Base, Funkfrequenz 2,4 GHz	0572 0160
Saveris-Base, Funkfrequenz 2,4 GHz, GSM Modul integriert (für SMS-Alarm)	0572 0161

In diesen Bestelldaten sind keine Netzteile oder Magnetfuß-Antennen enthalten.

Stromversorgung	BestNr.
Batterie für Funkfühler (4 x Alkali Mangan Mignonzellen AA)	0515 0414
Batterie für Funkfühler für Betrieb unter -10 °C (4 x Energizer L91 Photo-Lithium)	0515 0572
Internationales Netzteil 100-240 V AC / 6,3 V DC für Netzbetrieb oder Akkuladung im Gerät	0554 1096
Netzteil (Hutschienenmontage) 90 264 VAC / 24 VDC (2,5 A)	0554 1749
Netzteil (Tischgerät) 110 240 VAC / 24 VDC (350 mA)	0554 1748

Sonstiges	BestNr.
Magnetfuß-Antenne (Dualband) mit 3 m Kabel, für Base mit GSM-Modul (nicht geeignet für USA, Kanada, Chile, Argentinien, Mexico)	0554 0524
Magnetfuß-Antenne (Quadband) für Base mit GSM- Modul	0554 0525
Alarm-Modul (optisch + akustisch), anschließbar an	0572 9999
Base-Alarmrelais, Ø 70 x 164 mm, 24 V AC/DC / 320 mA, Dauerlicht: rot, Dauerton: Summer ca. 2,4 kHz (Netzteil 0554 1749 erforderlich)	ID-Nr. 0699 6111/1
Programmier-Adapter (von Mini-DIN zu USB) für Ethernetfühler und Converter (notwendig falls kein DHCP-Server vorhanden)	0440 6723

Saveris-Router	BestNr.
Saveris-Router, 868 MHz, Übertragungsmedium Funk	0572 0119
Saveris-Router, 2,4 GHz, Übertragungsmedium Funk	0572 0159
Saveris-Converter	BestNr.
Saveris-Converter, 868 MHz, Wandler des Übertragungsmediums Funk zu Ethernet	0572 0118
Saveris-Converter, 2,4 GHz, Wandler des Übertragungsmediums Funk zu Ethernet	0572 0158
In diesen Bestelldaten sind keine Netzteile enthalten.	

Software	BestNr.
Software SBE, inkl. USB-Verbindungsleitung Base-PC	0572 0180
Software PROF, inkl. USB-Verbindungsleitung Base-PC	0572 0181
Software CFR, inkl. Ethernet-Verbindungsleitung PC-Base	0572 0182
Saveris Justage-Software inkl. Verbindungskabel zu Funk- und Ethernetfühlern	0572 0183

Kalibrier-Zertifikate	BestNr.
ISO-Kalibrier-Zertifikat Temperatur Temperaturfühler; Kalibrierpunkte -8 °C; 0 °C; +40 °C je Kanal/Gerät (geeignet für Saveris T1/T2)	0520 0171
ISO-Kalibrier-Zertifikat Temperatur Temperaturfühler; Kalibrierpunkte -18 °C; 0 °C; +60 °C; je Kanal/Gerät (nicht geeignet für Saveris T1/T2)	0520 0151
DKD-Kalibrier-Zertifikat Temperatur Temperaturfühler; Kalibrierpunkte -20 °C; 0 °C; +60 °C; je Kanal/Gerät (nicht geeignet für Saveris T1/T2)	0520 0261
ISO-Kalibrier-Zertifikat Feuchte Feuchtefühler; Kalibrierpunkte 11,3 %rF und 75,3 %rF bei +25 °C/+77 °F; je Kanal/Gerät	0520 0076
DKD-Kalibrier-Zertifikat Feuchte Feuchtefühler; Kalibrierpunkte 11,3 %rF und 75,3 %rF bei +25 °C; je Kanal/Gerät	0520 0246

# Alarm-Modul



Alarm-Modul (optisch + akustisch), anschließbar an Base-Alarmrelais, Ø 70 x 164 mm, 24 V AC/DC / 320 mA, Dauerlicht: rot, Dauerton: Summer ca. 2,4 kHz (Netzteil 0554 1749 erforderlich) ID-Nr. 0699 6111/1

Best.-Nr. 0572 9999

# Software-Varianten



Software SBE, inkl. USB-Verbindungsleitung Base-PC

Best.-Nr. 0572 0180

Software PROF, inkl. USB-Verbindungsleitung Base-PC

Best.-Nr. 0572 0181

Software CFR, inkl. Ethernet-Verbindungsleitung PC-Base

Best.-Nr. 0572 0182

Sinterkappen für Fühler Saveris H1 E, H2 E und H2 D	Abbildung	BestNr.
Schutzkappe aus Metall (offen), schnelle Ansprechzeit bei Strömungsgeschwindigkeiten ( 7 m/s (nicht geeignet bei staubigen Atmosphären), für die Messung bei Strömungsgeschwindigkeiten kleiner 10 m/s		0554 0755
Edelstahl-Sinterfilter, Porengröße 100 µm, Sensorschutz bei staubhaltigen Atmosphären oder höheren Strömungsgeschwindigkeiten, für die Messung bei hohen Strömungsgeschwindigkeiten oder verschmutzter Luft		0554 0647
Drahtgewebefilter, Sensorschutz vor groben Partikeln		0554 0757
PTFE-Sinterfilter, Ø 12 mm, für aggressive Medien, Hochfeuchte-Bereich (Dauermessungen), hohe Strömungsgeschwindigkeiten		0554 0756
testo-Salztöpfchen zur Kontrolle und Feuchteabgleich von Feuchtefühlern, 11,3 %rF und 75,3 %rF, inkl. Adapter für Feuchtefühler, schnelle Kontrolle oder Kalibrierung des Feuchtefühlers		0554 0660



# testo Saveris™ Technische Daten



Technische Daten	
	Saveris-Base
Speicher	40.000 Werte pro Kanal (gesamt max. 10.160.000 Werte)
Abmessung	225 x 150 x 49 mm
Gewicht	ca. 1510 g
Schutzklasse	IP42
Gehäusematerial	Zink Druckguss / Kunststoff
Funkfrequenz	868 MHz / 2,4 GHz
Stromversorgung (zwingend erforderlich)	Netzteil 6,3 V DC; alternativ über Steck- / Schraubklemmen 24 V AC/DC, Leistungsaufnahme <4 W
Akku	Li-lonen-Akku (zur Datensicherung und für Notfall-SMS bei Ausfall der Stromversorgung)
Betriebstemp.	-10 +50 °C
Lagertemp.	-40 +60 °C
Display	grafisches Display, 4 Bedientasten
Schnittstellen	USB, Funk, Ethernet
anschließbare Funkfühler	max. 15 Fühler über Funk-Schnittstelle direkt anschließbar, max. 150 insgesamt über Funk / Router / Converter / Ethernet, max. 254 Kanäle
Alarmrelais	max. 1 A, max. 30 W, max. 60/25 V DC/AC, Öffner oder Schließer
GSM-Modul	850 / 900 / 1800 / 1900 MHz nicht gültig für Japan und Südkorea
Aufstellung	Tischfuß und Wandhalterung inklusive



Technische Daten		
	Saveris-Router	Saveris-Converter
Abmessung	ca. 85 x 100 x 38 mm	ca. 85 x 100 x 35 mm
Gewicht	ca. 180 g	ca. 190 g
Stromversorgung	Netzteil 6,3 V DC; alternativ über Steck-/Schraubklemmen 24 V AC/DC, Leistungsaufnahme 〈 0,5 W	Netzteil 6,3 V DC; alternativ über Steck-/Schraubklemmen 24 V AC/DC, PoE, Leistungsaufnahme < 2 W
Betriebstemp.	-20 +50 °C	-20 +50 °C
Lagertemp.	-40 +60 °C	-40 +60 °C
Gehäusematerial	Kunststoff	Kunststoff
Schutzklasse	IP54	IP54
Schnittstellen	Funk	Funk, Ethernet
anschließbare Funkfühler	max. 5	max. 15
Wandhalterung	inklusive	inklusive



















# testo Saveris™ Accessories: External temperature probes

















Pt100	Plug-in probes	Illustration			Meas. range	Accuracy	t99	Part no.
Robust F	Pt100 stainless steel food probe (IP65)		125 mm	15 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range)	10 s	0609 2272
T lobdat, i	troo stairiless steer rood probe (ii oo)		Ø 4 mm	Ø 3 mm				Conn.: Fixed cable
Robust, v	waterproof Pt100 immersion/penetration		114 mm	50 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range)		0609 1273
probe			Ø 5 mm	Ø 3.7 mm		, , ,		Conn.: Fixed cable
Connection cable for unlimited Pt100 stationary probes with screw terminals (4-wire technology), max. cable length: 20 m						0554 0213		

Plug-in probes	Illustration	Meas. range	Accuracy	t99	Part no.
Stationary probe with stainless steel sleeve, TC Typ. K	9 40 mm Ø 6 mm	-50 to +205 °C	Class 2*	20 s	0628 7533 Conn.: Fixed cable 1.9 m
- Robust air probe, T/C Type K	115 mm	-60 to +400 °C	Class 2*	25 s	0602 1793 Conn.: Fixed cable 1.2 m
Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K	35 mm Ø 20 mm	-50 to +170 °C	Class 2*	150 s	0602 4792 Conn.: Fixed cable
Magnetic probe, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces, TC Type K	75 mm Ø 21 mm	-50 to +400 °C	Class 2*		0602 4892 Conn.: Fixed cable 1.6 m
Thermocouple with TC adapter, flexible, 800mm long, fibre glass, TC Type K	800 mm Ø 1.5 mm	-50 to +400 °C	Class 2*	5 s	0602 0644
Thermocouple with TC adapter, flexible, 1500mm long, fibre glass, TC Type K	1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2*	5 s	0602 0645
Thermocouple with TC adapter, flexible, 1500mm long, PTFE, TC Type K	1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2*	5 s	0602 0646
Immersion tip, flexible, TC Type K	500 mm 0 1.5 mm	-200 to +1000 °C	Class 1*	5 s	0602 5792
Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable fo measurements in smelters), TC Type K	03 mm	-200 to +1300 °C	Class 1*	4 s	0602 5693

\*According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K).

NTC Plug-in probes	Illustration	Meas. range	Accuracy	t99	Part no.
Stub probe, IP 54	35 mm	-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (+40.1 to +70 °C)	15 s	0628 7510
	Ø 3 mm	-30 to +90 °C	±0.2 °C (0 to +70 °C)	190 s	0628 7503*
Stationary probe with aluminium sleeve, IP 65	Ø 6 mm		±0.5 °C (remaining range)		Conn.: Fixed cable 2.4 m
Accurate imm./pen. probe, 6m cable, IP 67	40 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 6 m
, recorded with point probe, citi dable, ii or	Ø 3 mm	Ø 3 mm			Conn.: Fixed cable 6 m
Accurate immersion/penetration probe, cable: 1.5 m	40 mm	-35 to +80 °C	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (-35 to -25.1 °C) ±0.4 °C (+75 to +80 °C)	5 s	0628 0006* Conn.: Fixed cable 1.5 m
long, IP 67	Ø 3 mm	Ø 3 mm			
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 3 m
Stainless steel NTC food probe (IP65) with PUR	125 mm	15 mm -50 to +150 °C <sup>2)</sup>	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C)	8 s	0613 2211*
cable	Ø 4 mm	Ø 3 mm	±0.4 °C (remaining range)		Conn.: Fixed cable 1.6 m
Materials of NTC improved in /o an atration	115 mm	50 mm -50 to +150 °C	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C)	10 s	0613 1212
Waterproof NTC immersion/penetration probe	Ø 5 mm	Ø 4 mm	±0.4 °C (remaining range)		Conn.: Fixed cable 1.2 m

<sup>\*</sup> Probe tested to EN 12830 for suitability in the transport and storage sectors

2) Long-term meas. range +125°C, short-term +150°C (2 minutes)

%RH	Plug-in probes	Illustration		Meas. range	Accuracy	Part no.
Humidity /	Temperature Probe 12mm	-1	Ø 12 mm	-20 to +70 °C, 0 to +100 %RH		0572 6172
Humidity /	Temperature Probe 4 mm		Ø 4 mm	0 to +40 °C, 0 to +100 %RH	±0,3 °C, ±2 %RH (2 to 98 %RH)	0572 6174

The specified accuracy class of the Saveris radio and Ethernet probe is achieved using these external probes.



# testo Saveris™ Examples of applications



# Temperature monitoring in specialist retailers and large-scale kitchens

The measurement data is saved centrally and can thus be called up at any time. It goes without saying that the testo Saveris conforms to the food standard EN 12830. Using this uninterrupted documentation that testo Saveris offers, you always play it safe when it comes to monitoring of your temperatures.

















# Easiest operation of testo Saveris

Sabine Steinbrunner, proprietor of food product market 'Culinara'

"I was very pleasantly surprised at how easy the installation and operation were."





# Documentation and issuing alarms in bakeries and butcher shops

The uninterrupted monitoring of the cooling chain is required for food specialist retailers.

Fresh goods are required by the customer but are at the same time required by the legislation in the hygiene area.

testo Saveris automates the monitoring of the ambient and product temperatures in store rooms, cold rooms, freezer areas and cooled sales counters. Naturally an alarm is issued immediately whenever a limit value is exceeded, on site as well as remotely.



# Automatic monitoring of the cooling chain saves time

Werner Schmidt, proprietor of butcher's shop 'Metzgerei Haller'

"With testo Saveris the temperature monitoring of the food practically runs itself. Now I have more time for the customers!"



# Data loggers - Logging, saving, printing and analysing









Systems

What is the temperature really?

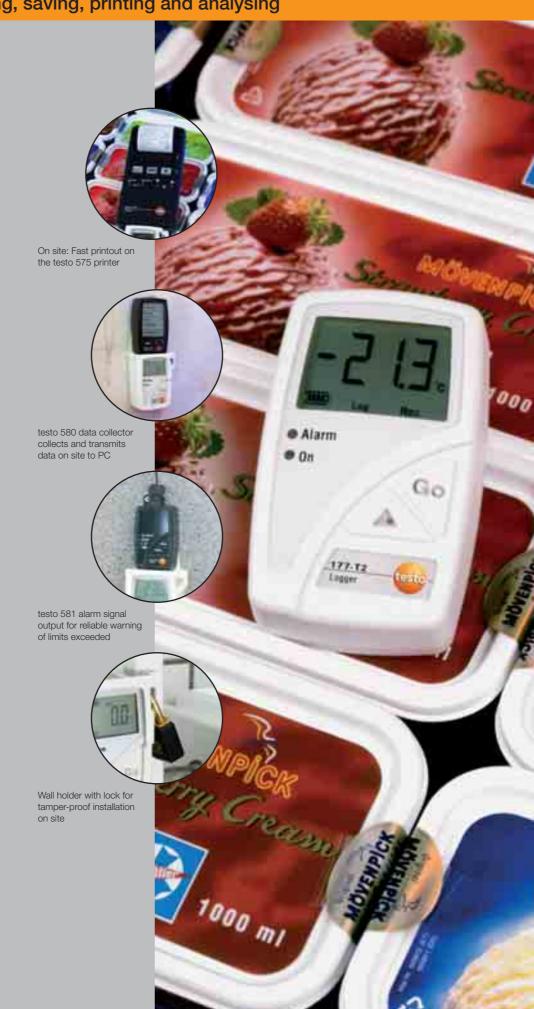


and give the values for all Testo measuring instruments - That's what true measurement efficiency is all about.

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.





# Monitor storage temperature - Small and practical

### testo 174

The testo 174 mini data logger is ideal for accompanying transports as it can unobtrusively monitor temperature fluctuations non-stop. The current reading is shown in the display.

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
Data loggers	3900 readings
Measuring rate	1 min to 4 h (selectable)
Battery life	500 days (typical)
Analysis software	MS Windows 95b / 98 / ME / 2000 / XP / Vista
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
- Secure data even if battery is spent

#### testo 174, Starter Set

Mini temperature data logger, 1 channel, ComSoft 4 Basic, wall holder, lock, interface incl. PC connection cable (RS232), battery

Part no. 0563 1742

## testo 174, USB Set

Mini temperature data logger, 1 channel, ComSoft 4 Basic, wall holder, USB interface with PC connection

Part no. 0563 1743



onal)	Checks food e.g. in refrigerated storeroo	ms, during
	transport, in containers etc.	

Accessories Ordering data	Part no.
Lithium battery, button cell, type CR 2032	0515 0028
ISO calibration certificate/temperature, temperature data logger, calibration points -18°C, +60°C	0520 0443
USB interface, suitable for testo 174 data logger, incl. PC connection cable	0554 1739

# Document storage temperature - Fast and easy

# testo 175-T1

The 175-T1 temperature data logger guarantees uninterrupted documentation with 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

• On site: Collect data with testo 580 and upload to PC for analysis

## testo 175-T1

## Internal °C

testo 175-T1, temperature data logger, 1 channel with internal sensor, incl. wall holder and calibration protocol; calbration certificates (ISO/DKD) must be ordered separately

Part no. 0563 1754

Technical data		
Chann. intern	1	
Probe type	NTC	
Meas. range	-35 to +70 °C	
Accuracy ±1 digit	±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 meas. rate of	of 15 min (-10 to +50 °C)
Analysis software	MS Windows 95b / 98 /	ME / 2000 / XP / Vista
Dimensions	82 x 52 x 30 mm	
Weight	90 g	Protection class IP68







Records temperature fluctuations e.g. during storage and transport of meat - in the context of quality assurance

#### Recommended Set: Starter Set

testo 175-T1, temperature data logger, 1 channel with internal sensor, incl. wall holder and calibration protocol; calbration certificates (ISO/DKD) must be ordered separately	0563 1754
Lock for wall holder for testo 175/177 data loggers	0554 1755
ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1766

Accessories Ordering data see page 49















# Log temperature - Simultaneously at two sites











With an additional external probe socket, the temperature data logger provides a further temperature measurement option.

## testo 175-T2

### Internal °C + external °C

testo 175-T2, temperature data logger, 2 channels, with internal sensor and external probe socket, wall holder and calibration protocol; calbration certiciates (ISO/DKD) must be ordered separately

Part no. 0563 1755

- 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



Tamper-proof with wall holder and lock (optional)

Simultaneous monitoring of product and air temperature e.g. in refrigerated storerooms, containers etc.

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)
Battery life	2.5 years at a meas. ra	ate of 15 min (-10 to +50 °C)
Analysis software	MS Windows 95b / 98 / M	ME / 2000 / XP / Vista
Memory	16000 Meas	suring rate 10 s to 24 h
Oper. temp.	-35 to +70 °C Stora	age temp40 to +85 °C
Protection class	IP68 Dime	ensions 82 x 52 x 30 mm
Weight	84 g	

### See Page 49 for Accessories Ordering Data

Recommended Set: testo 175-T2, Starter Set	
testo 175-T2, temperature data logger, 2 channels, with internal sensor and external probe socket, wall holder and calibration protocol; calbration certiciates (ISO/DKD) must be ordered separately	0563 1755
Lock for wall holder for testo 175/177 data loggers	0554 1755
Stationary probe with aluminium sleeve, IP 65	0628 7503
ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table	0554 1766

escription	Illustration			Meas. range	Accuracy	t99	Part no.
Stub probe, IP 54	-	mm		-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (+40.1 to +70 °C)	15 s	0628 7510
Stationary 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  Accurate immersion/penetration probe, cable: 1.5 m long, IP 67		40 mm Ø 3 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 0628 0006*
Probe for surface measurement		40 mm	x 8 mm	-50 to +80 °C	±0.2 °C (0 to +70 °C)	150 s	0628 7516*  Conn.: Fixed cable
Stainless steel NTC food probe (IP65) with PUR cable	C D	125 mm Ø 4 mm	15 mm Ø 3 mm	-50 to +150 °C Long-term meas. range +125°C, short-term +150°C (2 minutes)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 2211*  Conn.: Fixed cable
Robust NTC food penetration probe with special handle, reinforced PUR cable	115 mm Ø 5 mm		30 mm Ø 3.5 mm	-25 to +150 °C Long-term meas. range +125 °C, short-term +150 °C (2 minutes)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	7 s	0613 2411*  Conn.: Fixed cable
Frozen food probe NTC, corkscrew design (incl. plug-in wire)	110 mm Ø 8 mm		30 mm	-50 to +140 °C Long-term meas. range +125 °C, short-term +140 °C (2 minutes)	±0.5% of mv (+100 to +140 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	20 s	0613 3211*  Conn.: Plug-in cable
Efficient, robust NTC air probe	-	115 mm Ø 5 mm	50 mm	-50 to +125 °C Long-term meas. range +125 °C, short-term +150 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining range)	60 s	0613 1712 Conn.: Fixed cable

 $<sup>\</sup>hfill\square$  The specified seal class of the data loggers is achieved with these probes.

<sup>\*</sup> Probe tested to EN 12830 for suitability in the transport and storage sectors



# Monitor ambient storage conditions - Reliably and efficiently

#### testo 175-H1

The affordable humidity/temperature logger testo 175-H1 without display monitors fluctuations in storage humidity and temperature efficiently and unobtrusively.

Limit values can be entered, an alarm display is activated if the limits are exceeded. testo 575, the fast printer, supplies proof of fluctuations in ambient conditions.

## 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.

The testo 575 fast printer provides proof that the specified ambient storage conditions or production conditions have been adhered to. All of the values logged by the testo 580 data collector can then be uploaded to your PC for analysis.



testo 175-H2, transport and ambient storage conditions logging with immediate display of limits exceeded

## • Humidity sensor guaranteed long-term stable

- Memory for up to 3700 readings (testo 175-H1)
- Memory for up to 16000 readings (testo 175-H2)
- Data safe even when battery is spent
- Fast documentation on infrared printer, 6 lines/s
- Data transfer to PC or Notebook via interface or testo 580 data collector
- Large display (testo 175-H2)

## testo 175-H1 w/o display

#### Internal %RH. °C

testo 175-H1, humidity/temperature logger, 2 channels, with internal sensors, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately

## Part no. 0563 1757

## testo 175-H2 with display

#### Internal %RH. °C

testo 175-H2, humidity/temperature logger, 2 channels, with internal sensors, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately

Part no. 0563 1758

Technical data	testo 175-H1 w/o display	testo 175-H2 with display
Channels	2	2
Probe type	Testo humid. sensor, cap. NTC	Testo humid. sensor, cap. NTC
Meas. range	0 to +100 %RH* -10 to +50 °C	0 to +100 %RH* -20 to +70 °C
Accuracy ±1 digit	±3 %RH ±0.5 °C	±3 %RH ±0.5 °C
Resolution	0.1 %RH 0.1 °C	0.1 %RH 0.1 °C
Memory	3700	16000
Oper. temp.	-10 to +50 °C	-20 to +70 °C
Storage temp.	-40 to +70 °C	-40 to +85 °C
Weight	80 g	85 g
Dimensions	82 x 52 x 30 mm	82 x 52 x 30 mm
Battery life	2.5 years at a meas. rate of 1	15 min (-10 to +50 °C)
Measuring rate	10 s to 24 h	10 s to 24 h
Software	MS Windows 95b / 98 / ME	/ 2000 / XP / Vista

<sup>\*</sup> not affected by condensation

#### See Page 49 for Accessories Ordering Data

## Recommended Set: testo 175-H1, Starter set

testo 175-H1, humidity/temperature logger, 2 channels, with internal sensors, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately	0563 1757
Lock for wall holder for testo 175/177 data loggers	0554 1755
ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1766

## Recommended Set: testo 175-H2, Starter Set

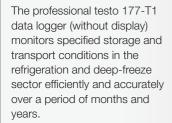
testo 175-H2, humidity/temperature logger, 2 channels, with internal sensors, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately	0563 1758
Lock for wall holder for testo 175/177 data loggers	0554 1755
ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1766



# Long-term temperature monitoring - Professional and non-stop



### testo 177-T1





### testo 177-T2

testo 177-T2, the professional data logger with display. It provides you with a quick overview of the current reading, the last value saved, max and min values and the number of times the limits were exceeded.

All of the values collected by the testo 580 data collector during long-term monitoring over months/years can be sent to your notebook/PC. Convenient analysis possible using software based on Windows®.





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



- Specially for use in low temperatures (up to -40 °C)
- On-site: Fast documentation on the infrared printer, 6 lines/s
- Collect data on-site with testo 580 and download to your PC for analysis

## testo 177-T1 without display

testo 177-T1, temperature data logger, 1 channel, with internal sensor, wall holder and calibration; calibration certificates (ISO/DKD) must be ordered separately

Part no. 0563 1771

#### testo 177-T2 with display

testo 177-T2, temperature data logger, 1 channel, with internal sensor, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately

Part no. 0563 1772

## Recommended Set: testo 177-T1, Starter Set

testo 177-T1, temperature data logger, 1 channel, with internal sensor, wall holder and calibration; calibration certificates (ISO/DKD) must be ordered separately	0563 1771
Lock for wall holder for testo 175/177 data loggers	0554 1755
ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1767

## Recommended Set: testo 177-T2, Starter Set

testo 177-T2, temperature data logger, 1 channel, with internal sensor, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately	0563 1772
Lock for wall holder for testo 175/177 data loggers	0554 1755
ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table	0554 1767

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 (-4	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	111 g (testo 177-T1)	122 g (testo 177	-T2)
Battery life	5 years at meas. cycle of	of 15 min (-10 to +	-50 °C)
Analysis software	MS Windows 95b / 98 /	ME / 2000 / XP /	Vista

Accessories Ordering data see page 49

#### 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 Wittemer Head of Customer Service



# The truck data logger with 2 probe sockets and event logging

## testo 177-T3

testo 177-T3 documents 3 temperatures and an event simultaneously providing proof of an uninterrupted cooling chain during transport.

For example, complete monitoring of ambient air, intake and outgoing temperature with simultaneous monitoring of the door or the compressor is possible when monitoring transport. The measuring rate of the event can be set completely independently of the measuring rate of the temperature channels.

- Temperature logging of up to 48000 readings
- Data is read out without interrupting the measurement series
- Data analysis as table or graph, with Email function

#### testo 177-T3

Internal °C + 2 x external °C + event contact

testo 177-T3, temperature data logger, 3 channels, with internal sensor, 2 probe sockets, door contact connection cable, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately

Part no. 0563 1773



Temperature monitoring at different sites e.g. during transport, in warehouses, in containers etc.

## See page 49 for Accessories Ordering Data

analyse

# Recommended Set: Temperature monitoring with printout on-

testo 177-T3, temperature data logger, 3 channels, with internal sensor, 2 probe sockets, door contact connection cable, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately 0563 1773 0554 1755 Lock for wall holder for testo 175/177 data loggers 0628 7503 Stationary probe with aluminium sleeve, IP 65 0628 7503 Stationary probe with aluminium sleeve, IP 65 0554 1775 Fast testo 575 printer, incl. 1 roll of thermal paper and batteries ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable 0554 1767

Technical data	a		
Chann. intern	1	Chann. externa	al (var.) 2
Meas. range	-40 to +70 °C	Meas. range	-40 to +120 °C
Accuracy ±1 digit	±0.4 °C (-25 to +70 °C) ±0.8 °C (-40 to -25.1 °C)	Accuracy ±1 digit	±0.2 °C (-25 to +70 °C) ±0.4 °C (remaining range)
Resolution	0.1 °C	Resolution	0.1 °C
Memory	48000	Battery type	Lithium battery
Oper. temp.	-40 to +70 °C	Weight	127 g
Storage temp.	-40 to +85 °C	Dimensions	103 x 64 x 33 mm

External: Event logging e.g. door contact

Battery life: 5 years with meas. rate of 15 min (-10 to +50°C)

Measuring rate: 2 s to 24 h

Software: Microsoft Windows 95b / 98 /ME / NT4-Sp4 / 2000 / XP / Vista

escription	Illustration			Meas. range	Accuracy	t99	Part no.
Stub probe, IP 54		5 mm		-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (+40.1 to +70 °C)	15 s	0628 7510
Stationary probe with aluminium sleeve, IP 65		40 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  Accurate immersion/penetration probe, cable: 1.5 m long, IP 67		40 mm Ø 3 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  0628 0006*
Probe for surface measurement		40 mm	8 mm	-50 to +80 °C	±0.2 °C (0 to +70 °C)	150 s	0628 7516*  Conn.: Fixed cable
Stainless steel NTC food probe (IP65) with PUR cable	C S	125 mm	15 mm Ø 3 mm	-50 to +150 °C	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 2211*  Conn.: Fixed cable
Robust NTC food penetration probe with special handle, reinforced PUR cable	115 mm Ø 5 mm		30 mm Ø 3.5 mm	-25 to +150 °C	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	7 s	0613 2411*  Conn.: Fixed cable
Frozen food probe NTC, corkscrew design (incl. plug-in wire)	110 mm Ø 8 mm		30 mm ###################################	-50 to +140 °C	±0.5% of mv (+100 to +140 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	20 s	0613 3211* <b>Conn.:</b> Plug-in cable
Efficient, robust NTC air probe	-	115 mm Ø 5 mm	50 mm Ø 4 mm	-50 to +125 °C Long-term meas. range +125 °C, short-term +150 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining range)	60 s	0613 1712 Conn.: Fixed cable

 $<sup>\</sup>hfill\square$  The specified seal class of the data loggers is achieved with these probes









<sup>\*</sup> Probe tested to EN 12830 for suitability in the transport and storage sectors



# 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 data logger.

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

- Long-term stable humidity sensor with fast response time
- Memory for 48,000 readings
- Control and adjustment option with adjustment set
- Protection caps for dirtingressed or corrosive gases

### testo 177-H1

Intern. %RH, °C, °C td + extern. °C testo 177-H1, humidity/temperature logger, 4 channels, with internal sensors and additional external temp. probe socket, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately

Part no. 0563 1775



Efficient measurement of ambient conditions

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 °C td	
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 meas. rate of	of 15 min (-10 to +5	50 °C)	
Analysis software	MS Windows 95b / 98 / ME / 2000 / XP / Vista			
Oper. temp.	-20 to +70 °C	Storage temp.	-40 to +85 °C	
Dimensions	103 x 64 x 33 mm	Weight	130 g	

## Recommended Set: Set for logging storage conditions and additional temperature measurement

·	
testo 177-H1, humidity/temperature logger, 4 channels, with internal sensors and additional external temp. probe socket, wall holder and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately	0563 1775
Lock for wall holder for testo 175/177 data loggers	0554 1755
Accurate imm./pen. probe, 6m cable, IP 67	0610 1725
testo 580 data collector set with RS232, readout holders included, for testo 175/177 data loggers	0554 1778
ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1767

## See page 49 for Accessories Ordering data

escription	Illustration		Meas. range	Accuracy	t99	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
Stationary probe with aluminium sleeve, IP 65	40 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*
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 <b>Conn.:</b> Fixed cable
Stainless steel NTC food probe (IP65) with PUR cable	125 mm 0 4 mm	15 mm Ø 3 mm	-50 to +150 °C Long-term meas. range +125°C, short-term +150°C (2 minutes)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 2211*  Conn.: Fixed cable
Efficient, robust NTC air probe	115 mm Ø 5 mm	50 mm Ø 4 mm	-50 to +125 °C Long-term meas. range +125 °C, short-term +150 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining range)	60 s	0613 1712 Conn.: Fixed cable

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

<sup>\*</sup> 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

Part no. 0554 1775

Part no. 0554 1769



Fast printout and logger rebooting with testo 575

### testo 580 data collector

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

testo 580 with RS232 interface Part no. 0554 1778 testo 580 with USB interface Part no. 0554 1764



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

## testo 581 alarm signal output

- Transmission of alarm messages - e.g. when programmed limit values in the data logger 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

0554 0647

# Ethernet adapter

- Fast transfer of readings
- Use of an existing network without additional cabling
- Long transmission paths

Part no. 0554 1711

- 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

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 set with RS232, readout holders included, for testo 175/177 data loggers	0554 1778
testo 580 data collector set with USB, readout holders included, for testo 175/177 data loggers	0554 1764
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 data loggers	0554 1755
Transport case for up to 6 testo 177 data loggers, testo 575 printer, testo 580 data collector and accessories	0516 1770
Accessories for humidity probes	Part no.
testo saline pots for control and humidity adjustment of humidity probes, 11.3 %RH and 75.3 %RH with adapter for humidity probe	0554 0660
Metal protection cage, Ø 12 mm for humidity probes, for measurement in flow velocities of less than 10 m/s	0554 0755
Cap with wire mesh filter, Ø 12 mm	0554 0757
Sintered PTFE filter, Ø 12 mm, for corrosive media, High humidity range (long-term measurements), high flow velocities.	0554 0756

Stainless steel sintered cap, Ø 12 mm, is screwed onto humidity probe, for measurements at higher flow velocities or in

contaminated air

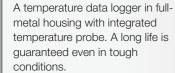
Software and Accessories	Part no.
For testo 175: ComSoft 4 Set - Basic with RS 232 interface, Basic software with diagram and table function, incl. desk-top holder, PC connection cable	0554 1759
For testo 175: ComSoft 4 Set - Basic with USB interface, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1766
For testo 177: ComSoft 4 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 4 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 (w/o interface)	0554 0821
RS232 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, RS232 - Ethernet incl. software driver, mains unit, facilitates data communication in network	0554 1711
Calibration Certificates	Part no.
ISO calibration certificate/temperature, temperature probe; calibration points -18°C; 0°C; +60°C per channel/instrument	0520 0151
ISO calibration certificate/temperature, temp. data logger; calibration points -8°C; 0°C; +40°C per channel/instrument	0520 0171
ISO calibration certificate humidity , calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument	0520 0076
DKD calibration certificate/temperature, Temperature probe; cal. points -20°C; 0°C; +60°C (-4 °F, 92 °F, 140 °F); per channel/instrument	0520 0261
DKD calibration cert./humidity, humidity data logger; cal. points 11.3%RH and 75.3%RH at +25°C; per channel/instrument	0520 0246



# The "old reliable" - In full-metal housing



# testostor 171-0



The data is read out to a PC via the attachable interface.

- Logs up to 55000 readings
- Tamperproof readings
- Theft-proof mounting
- Waterproof, robust metal housing, IP 68
- On site application: Testo Software for Palm OS® replaces laptop/PC



testostor 171-0 monitors fluctuations in temperature constantly

# testostor 171-0

### Internal °C

testostor 171-0, temperature data logger, incl. starting magnet, battery and calibration protocol; calbration certificates (ISO/DKD) must be ordered separately

Part no. 0577 1719

Additional Accessories and Spare Parts	Part no.
Spare battery for testostor 171, quick and easy battery replacement	0515 0018
Transport and Protection	Part no.
Holder with lock for data logger, theft-proof	0554 1782
Transport case (plastic) for measurement data storage instruments (max. 6 off) and accessories, for safe transport	0516 0117
PC Software and Accessories	Part no.
ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend curve	0554 0830
ComSoft 3 - For requirements to CFR 21 Part 11, incl. database, analysis and graphics function, data analysis, trend curve (w/o interface)	0554 0821
Interface, attachable to data logger	0554 1781
Ethernet adapter, RS232 - Ethernet incl. software driver, mains unit, facilitates data communication in network	0554 1711
Calibration Certificates	Part no.
ISO calibration certificate/temperature, temperature probe; calibration points -18°C; 0°C; +60°C per channel/instrument	0520 0151
DKD calibration certificate/temperature, Temperature probe; cal. points -20°C; 0°C; +60°C (-4 °F, 92 °F, 140 °F); per channel/instrument	0520 0261
ISO calibration certificate/temperature, temp. data logger; calibration points -8°C; 0°C; +40°C per channel/instrument	0520 0171

Technical data		
Meas. range	-35 to +70 °C	
Accuracy ±1 digit	±0.5 °C (-35 to +39.9 °C) ±0.6 °C (+40 to +70 °C)	
Resolution	0.1 °C	
Material/Housing	Aluminium, anodized	
Protection class	IP68	
Memory	55000	
Oper. temp.	-35 to +70 °C	
Storage temp.	-40 to +85 °C	
Dimensions	131 x 68 x 26 mm	
Weight	305 g	
Battery life: lithium battery up to 5 years Software: menu-driven from Microsoft Windows 95 / ME / 2000 / XP / Vista		



# The "old reliable" — With external probes

## testostor 171-1

You can place the testostor 171-1 data logger beside the goods, for example, and attach the external probe to doors or refrigeration appliances located up to 12m away. Air moisture can also be monitored, if required.

- Logs up to 55000 readings
- Probe can be positioned quickly and easily
- Tamperproof measurement results
- On site application: Testo Software for Palm OS® replaces laptop/PC



Data analysis on your PC/Notebook with easyto-use Windows® Software

Monitor several refrigerated storerooms using testostor 171-4

### testostor 171-4

testostor 171-4 with up to 4 external temperature probe sockets is used for simultaneous temperature measurement at different locations.

# testostor 171-1

#### Int.: °C + Ext.: °C or %RH/°C

testostor 171-1, temperature data logger with °C/%RH probe connection, incl. starting magnet, battery and calibration protocol; calbration certificates (ISO/DKD) must be ordered separately

Part no. 0577 1715

#### testostor 171-4

#### 4 x external °C

testostor 171-4, temperature data logger, 4 channels, with starting magnet, battery and calibration protocol; calbration certicates (ISO/DKD) must be ordered separately

Part no. 0577 1714

escription	Illustration	Meas. range	Accuracy	Reaction time	Part no.
Robust immersion/air probe, quick-action, 6r cable, IP68 probe tip	40 mm 0 3 mm	-50 to +80 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (-50 to -25.1 °C)	5 s t <sub>99</sub> (in water)	0610 1720 <b>Conn.:</b> Fixed cable
Air probe, highly accurate, can be attached directly	30 mm Ø 3 mm	-35 to +70 °C	±0.2 °C (-35 to +70 °C)	180 s <sub>t</sub> 90	0610 1722
Robust, accurate, waterproof food probe (IP65), made of stainless steel	125 mm	-50 to +120 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (-50 to -25.1 °C) ±0.5 °C (+80.1 to +120 °C)	10 s t <sub>99</sub> (in water)	0610 2217 Conn.: Fixed cable
Humidity/temperature probe with standard plastic protection cap		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 <sub>t</sub> 90	0636 9717*

\*Humidity/temperature probes only for testostor 171-1

Common Technical Data			
Chann. externa	Chann. external (var.)		
Probe type	NTC		
Meas. range	-50 to +120 °C		
Accuracy ±1 digit	±0.2 °C (-34.9 to +39.9 °C) ±0.4 °C (+40 to +120 °C) ±0.6 °C (-50 to -35 °C)		
Resolution	0.1 °C		
Oper. temp.	-35 to +70 °C		
Storage temp.	-40 to +85 °C		
Battery type	Lithium battery		
Memory	55000		
Dimensions	131 x 68 x 26 mm		
Weight	305 g		
Meas. rate: 2 s to 24 h, selectable Battery life: up to 5 years with lithium battery			

Software: menu-driven from Microsoft Windows 95 / ME / 2000 / XP / Vista

testostor 171-1		
Chann. intern		
Probe type	NTC	
Meas. range	-35 to +70 °C	
Accuracy ±1 digit	±0.2 °C (-35 to +39.9 °C) ±0.4 °C (+40 to +70 °C)	
Resolution	0.1 °C	
Chann. external	I (var.)	
Probe type	Testo humid. sensor, cap.	
Meas. range	0 to +100 %RH	
Accuracy ±1 digit	±2 %RH (+2 to +98 %RH)	
Resolution	0.1 %RH	

See opposite page for Accessories Ordering data

# Electronic thermohygrograph in full-metal housing















testostor 171-3, a compact data logger with built-in humidity/temperature probe.

The saved data can be documented on site on the Testo printer or can be analysed on your PC via interface and software.

- Suitable for outdoor use
- Control and adjustment option using adjustment set
- Logs up to 20000 readings
- Measuring rate: 2 s to 24 h, selectable
- Sintered cap protection for dusty environments (see Accessories)
- On site application: Testo Software for Palm OS® replaces laptop/PC



Monitors humidity and temperature in storage rooms

#### testostor 171-3

#### Internal %RH/°C

testostor 171-3, humidity data logger for %RH, °C with starting magnet, battery and calibration protocol; calibration certificates (ISO/DKD) must be ordered separately

Part no. 0577 1713

#### Set 1: Without display

Set testostor 171-3, incl. humidity data logger for %RH, °C with starting magnet, battery, calibration protocol and software with interface; calibration certificates (ISO/DKD) must be ordered separately

Part no. 0563 1713

#### Further accessories and spare parts Spare battery for testostor 171, quick and easy battery 0515 0018 replacement testo saline pots for control and humidity adjustment of humidity probes, 11.3 %RH and 75.3 %RH with adapter for 0554 0660 humidity probe

Stainless steel sintered cap,  $\varnothing$  21 mm, can be screwed onto 0554 0640 humidity probe

Transport and protection Part no. Holder with lock for data logger, theft-proof 0554 1782

Transport case (plastic) for measurement data storage 0516 0117 instruments (max. 6 off) and accessories, for safe transport

Part no. PC software and accessories ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend 0554 0830

ComSoft 3 - For requirements to CFR 21 Part 11, incl. database, analysis and graphics function, data analysis, trend 0554 0821 curve (w/o interface)

Interface, attachable to data logger 0554 1781

Ethernet adapter, RS232 - Ethernet incl. software driver, mains 0554 1711 unit, facilitates data communication in network

**Calibration Certificates** Part no. DKD calibration cert./humidity, humidity data logger; cal. points 11.3%RH and 75.3%RH at +25°C; per channel/instrument 0520 0246

ISO calibration certificate humidity , calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument 0520 0076

ISO calibration certificate/temperature, temp. data logger; calibration points -8°C; 0°C; +40°C per channel/instrument 0520 0171

## Assurance when purchasing

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

Head of Customer Center, Southwest Germany

# Recommended Set: The practical set in the case

Set testostor 171-3, incl. humidity data logger for %RH, °C with starting magnet, battery, calibration protocol and software with interface; calibration certificates (ISO/DKD) must be 0563 1713 ordered separately Transport case (plastic) for measurement data storage instruments (max. 6 off) and 0516 0117 sories, for safe transport

Technical data		
Meas. range	-10 to +50 °C	
Accuracy ±1 digit	±0.5 °C (-10 to +39.9 °C) ±0.6 °C (+40 to +50 °C)	
Resolution	0.1 °C	
Material/Housing	Aluminium, anodized	
Protection class	IP65	
Memory	20000	
Oper. temp.	-20 to +70 °C	
Storage temp.	-40 to +85 °C	
Dimensions	131 x 68 x 84 mm	
Weight	320 g	
Measuring rate: 2 s to 24 h, selectable Battery life: up to 5 years Software: menu-driven from Microsoft Windows 95 / ME / 2000 / XP / Vista		



# Measuring cooking oil quality - quickly and accurately

### testo 270

The cooking oil has been frequently used. Longer use is bad for the quality of the product and can lead to complaints from the customer.

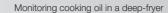
The most important part of the testo 270 cooking oil tester is Testo's new capacitive oil sensor. Using this sensor, measurements are carried out directly in the hot cooking oil which means that control measurements can be quickly carried out while work in the kitchen is in progress. Several deep-fat fryers can be tested back-to-back without the sensor having to cool down.

Maximum use of the cooking oil is made possible. The oil is only changed if the limit value is reached.

- Measurement directly in the deep-fryer
- Sensor is embedded in metal and breakage-proof, can be easily wiped clean thanks to sensor protection layer
- Fast measurement value display in % TPM
- Automatic recognition of measurement end (Auto-Hold %TPM)
- With 2 freely selectable limit values
- Alarm function aubible and visual:
- Lettering "ALARM"
- 3-colour LED bar (green, yellow, red)
- Configuration menu and limit values can be locked to protect them from external manipulation
- Removable protective case and optional hand strap (dishwasher-proof)
- Conforms to: VO (EG) 1935/2004, EC guideline 2004/108/EC

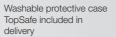
	2004/108/EC	
Technical data		
Measurement parameters	Total Polar Materials (%TPM) Temperature (°C/°F)	
Measurement value sensor	Capacitive Testo sensor (%TPM) PTC (°C/°F)	
Meas. range	0,5 to 40,0 %TPM +40 to +200 °C	
Accuracy	$\pm 2$ %TPM (+40 to +190 °C) (at ambient temperature of +25 °C) $\pm 1,5$ °C	
Resolution	0,5 %TPM 0,5 °C/°F	
Cooking oil temperature	+40 to +200 °C	
Storage temp.	-20 to +70 °C	
Oper. temp.	0 to +50 °C	
Dimensions	Approx. 354 x 50 x 30 mm (incl. TopSafe)	
Weight	Approx. 164 g (incl. batteries, TopSafe, hand strap)	
Display	LCD, 2-line, display illumination	
Battery type	2 x AA	
Battery life	approx. 25 h continuous use approx. 500 measurements	
Material/Housing	ABS (white) TopSafe as accessory (included)	
Alarm function (can be switched off)	2 limit values freely adjustable, 3-clour LED (green, yellow, red), audible alarm when temperature and limit values are violated or at end of measurement (Auto-Hold)	
Further displays	Maximum measuring temperature exceeded Minimum measuring temperature exceeded	
Miscellaneous	Response time TPM 〈 30 sec. (Prerequisite: measurement value is within accuracy limits) Protection class (with TopSafe) IP 65 Warranty 24 months	







sensor proteection layer







testo 270, set in aluminium case incl. reference oil for monitoring accuracy

## testo 270, set in a case

Cooking oil tester testo 270 incl. aluminium case, TopSafe, hand strap, reference oil, batteries, adjustment protocol, instruction manual and short instruction manual

Accessories Ordering data	Part no.
ISO calibration certificate/analysis, calibration points 3 % TPM and 24 %TPM at 50 °C	0520 0028
Reference oil for calibrating and adjusting the cooking oil tester testo 265 (1 x 100 ml)	0554 2650
Reference oil for calibrating and adjusting the cooking oil tester testo 265 (3 x 100ml)	0554 2651







# Compact pH tester - For liquids













The pH measuring instrument for fast checks on liquids. The combination of pH immersion tip and temperature probe for fast and efficient temperature compensation is unique.

The Testo pH probe is leak-proof, maintenance-free, robust and not affected by dirt thanks to the large volume of gel electrolyte and the dual wall diaphragm.

- Maintenance-free gel electrolyte
- Built-in temperature probe
- 1, 2 or 3 point calibration possible



Fast pH check on fruit juices, for example

#### testo 206-pH1 instrument set

One-hand pH/°C measuring instrument, pH1 probe head for liquids, storage cap with gel, TopSafe and belt/wall holder

Part no. 0563 2061

## testo 206-pH1 Starter Set

One-hand pH/°C measuring instrument, pH1 probe head for liquids, storage cap with gel, calibration dosing bottles 250 ml pH 4+7, TopSafe, belt/wall holder and aluminium case

Part no. 0563 2065

Ordering data as for testo 206-pH2, see below

Technical data			
Sensor	pH electrode	NTC	
Meas. range	0 to 14 pH	0 to 60 °C (Sho max. 5 min)	ort-term to +80 °C
Accuracy ±1 digit	±0.02 pH	±0.4 °C	
Resolution	0.01 pH	0.1 °C	
Storage temp.	-20 to +70 °C	Oper. temp.	0 to +60 °C
Compensation	Automatic temperature compensation		
Measuring rate	2 measurements per second		
Battery life	80 h (Auto Off 10 min)	Dimensions	197 x 33 x 20 mm

# Compact pH tester - For semi-solid food









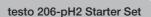


# testo 206-pH2

The pH measuring instrument for spot checks on semi-solid food, e.g. jelly, cream, cheese, fruit...

The protection case included "TopSafe" (IP 68) is waterproof, hygienic and dishwasher-safe.

- Can be used for food containing protein
- Combination: pH penetration tip with temperature measurement probe
- · Automatic full scale value



One-hand pH/°C measuring instrument, pH2 probe head for semisolid substances, storage cap with gel, TopSafe and belt/wall holder

testo 206-pH2 instrument set

Part no. 0563 2062

One-hand pH/°C measuring instrument, pH2 probe head for semi-solid substances storage cap with gel, calibration dosing bottles 250 ml pH 4+7, TopSafe, belt/wall holder and aluminium cas

Accessories Ordering data	Part no.
Spare pH probe for testo 206 incl. gel storage cap	0650 2061
Spare pH probe pH2 for testo 206 incl. gel storage cap	0650 2062
Storage cap for testo 206 with KCl gel filling	0554 2067
Storage cap for testo 206 with KCl gel filling (pack of 3)	0554 2068
pH buffer solution 4.01 in dosing bottle (250 ml), with DKD calibration certificate	0554 2061
pH buffer solution 4.01 in dosing bottle (3 x 250 ml per pack), with DKD calibration certificate	0554 2062



Spot pH checks on milk products

Accessories Ordering data	Part no.	
pH buffer solution 7.00 in dosing bottle (250 ml), with DKD calibration certificate	0554 2063	
pH buffer solution 7.00 in dosing bottle (3 x 250 ml per pack), with DKD calibration certificate	0554 2064	
pH buffer solution 10.01 in dosing bottle (250 ml), with DKD calibration certificate	0554 2065	
pH buffer solution 10.01 in dosing bottle (3 x 250 ml per pack), with DKD calibration certificate	0554 2066	
Technical data as for testo 206-pH1, see above		



# Accessories: Buffer solutions for testo 205/206/230

# Testo buffer solutions with pH 4.01/7.00/10.01

pH buffer solution 4.01 in dosing bottle (250 ml), with DKD calibration certificate

Part no. 0554 2061

pH buffer solution 7.00 in dosing bottle (250 ml), with DKD calibration certificate

Part no. 0554 2063

pH buffer solution 10.01 in dosing bottle (250 ml), with DKD calibration certificate

Part no. 0554 2065



# 1 Filling the dosing chamber

• To attain the right buffer quantity



# 2 Adjusting

• Instrument adjustment in fresh pH buffer solution, no measurement errors caused by used buffer solution



# 3 Emptying the dosing chamber

• Empty dosing chamber following adjustment, i.e. no contamination caused by left over buffer solution

pH tip embedded in

unbreakable plastic



# One-hand pH/°C measuring instrument - Robust and maintenance-free

## testo 205

A robust food penetration pH/°C measuring instrument with automatic temperature compensation. The robust penetration measuring tip is interchangeable and not affected by dirt and dust thanks to the hole diaphragm.

Instruments Set

One-hand pH/°C measuring

storage cap, belt/wall holder

Part no. 0563 2051

instrument with penetration probe,

- Combined penetration tip with temperature probe
- Measuring tip can be changed by user
- Maintenance-free gel electrolyte
- Backlit display
- Audible key feedback
- 2 line display
- Automatic full-scale value recognition
- 1, 2 or 3 point calibration possible

# Starter Set

One-hand pH/°C meas. instr. with penetration probe, storage cap, gel and cal. bottles 250 ml pH 4+7, belt/wall holder and aluminium case

Accessories Ordering data	Part no.
Spare pH probe for testo 205 with gel storage cap	0650 2051
Storage cap for testo 205 with KCL gel filling	0554 2051
Aluminium case for pH measuring instruments testo 205/206 and accessories	0554 2069



Constant quality control when storing food

Technical dat	a	
Sensor	pH electrode	NTC
Meas. range	0 to 14 pH	0 to 60 °C (Short-term to +80 °C max. 5 min)
Accuracy ±1 digit	±0.02 pH	±0.4 °C
Resolution	0.01 pH	0.1 °C
Battery type	4 x Button cell LR44	Oper. temp. 0 to +50 °C
Auto Off	10 min	Storage temp20 to +70 °C







# Compact pH/°C measuring instrument - With selection of probes







# testo 230

A complete pH measuring instrument and a high standard thermometer in a compact, water-proof (IP54) housing.

- Probes for liquid, semisolid and solid food
- Display of calibration data and error messages







Checks pH value and penetration temperature in meat prior to further processing

# testo 230

Analysis instrument, incl. 2 electrode clips and battery

Part no. 0560 2304

#### The set for solid/semisolid food

Analysis instrument, incl. 2 electrode clips, battery, Testo buffer set pH 4/7 (50 ml each), robust penetration electrode type 13 pH, storage solution (50 ml), robust food penetration probe, transport case (plastic)

Part no. 0563 2308

#### testo 230, Food Set

testo 230, Food set: testo 230 analysis instrument with 2 electrode clips and battery, Testo buffer set pH 4 and 7, 50ml each, penetration electrode Type 03 pH, storage solution (50ml), connection cable (1m), food probe made of stainless steel (IP 65) and plastic set case

Accessories Ordering data	Part no.
Set case (plastic) for measuring instrument, probes and accessories, user-friendly arrangement of measuring instrument and accessories	0516 0230
Connection cable for electrodes with plug-in head, 1m long, S7-BNC plug-in connection	0554 2317
Testo buffer set pH 4, 7; 50 ml each, for calibration in acidic range	0554 2321
Testo buffer set pH 4, 7, 10; 50ml each, for calibration in acidic and alkaline range	0554 2320
Storage solution (refill solution for electrode type 02 pH), 50 ml, for electrodes type 01 pH, 02 pH, 04 pH, 06 mV	0554 2332
Storage solution; 50ml, for electrode type 03 pH and type 13 pH	0554 2318
Storage and refill solution; 50ml, for electrode type 05 pH	0554 2319
Redox standard 358 mV, 50ml	0554 2333
Gel storage cap for standard electrodes	0554 2053
ISO calibration certificate/water analysis, for pH buffer solutions; calibration points 4 pH; 7 pH; 10 pH	0520 0007
ISO calibration certificate/water analysis, at 3 pH values over the measuring range	0520 0037

Technical da	ta				
Probe type	pH electrode	NTC		Redox	electrode
Meas. range	0 to +14 pH	-50 to +15	0 °C	-1999 to	+1999 mV
Accuracy ±1 digit	±0.01 pH (0 to +14 pH)	±0.5% of mv +150 °C) ±0.2 °C (-25 °C) ±0.4 °C (-50 ±0.4 °C (+75 °C)	to +74.9 to -25.1 °C)	±1 mV ( ±2 mV (	-999 to 0 mV) 0 to +999 mV) -1999 to -1000 mV) +1000 to +1999 mV)
Resolution	0.01 pH	0.1 °C		1 mV	
Oper. temp.	0 to +40 °C		Battery life	е	100 h
Storage temp	20 to +70 °C	2	Dimensio	ns	168 x 72 x 27 mm
Display	LCD, 2 lines		Weight		170 g
Battery type	9V block bat	tery	Material/H	Housing	ABS
Temperature of	compensation: m	an10 to +	150°C; auto	o -50 to +	-150°C

Description	Illustration	Meas.	range	Oper. temp. Accuracy	Part no.
Universal electrode type 01 pH: affordable, indestructible plastic electrode with gel	120 mm	0 to +1	14 pH	0 to +60 °C	0650 0623
electrolyte, thus practically maintenance-free, with gel storage cap	Ø 12 mm			Short-term to +80°C	Conn.: Fixed cable with BNC
Type 14: indestructible plastic electrode with temperature sensor, gel electrolyte, therefore	135 mm	0 to +1	14 pH	0 to +60 °C	0650 2064
practically maintenance-free, with gel storage cap	Ø 12 mm	0 to +6	0°C		Conn.: Fixed cable with BNC
Penetration electrode type 03 pH: highly accurate glass electrode with solidified electrolyte suitable for use in food. Not affected by dirt due to hole diaphragm. Incl.	100 mm	35 mm +2 to -	+14 pH	0 to +40 °C Short-term to	0650 0225
ground sleeve adapter and immersion cap.	Conn.: Plug-in head. connection cable 0554 2317 or 0554 2314 required			+60°C	
Robust penetration electrode type 13 pH: for solid or semi-solid foodstuff with break-proof plastic coating	Arm	+2 to -	+14 pH	0 to +40 °C	0650 0245
around the glass electrode and food-safe electrolyte. Not affected by dirt thanks to hole diaphragm. Incl. immersion cap	95 mm				Conn.: Fixed cable with BNC
Pobust NTC food population proba with	115 mm	30 mm -25 to	+150 °C	±0.5% of mv (+100 to +150 °C)	0613 2411
Robust NTC food penetration probe with special handle, reinforced PUR cable	The state of the s	Long-terr	m meas. range short-term +150 jutes)	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	Conn.: Fixed cable



# Compact conductivity/°C measuring instrument – With range of probes

### testo 240

testo 240 is a complete conductivity measuring instrument and a high standard thermometer combined in one compact, waterproof housing.

Measurement errors caused by high conductivities and deposits on the electrodes are avoided thanks to the 4 electrode engineering used. The salt level (NaCl) in an aqueous solution can be measured directly.

- Long life of measurement cell thanks to 4 electrode engineering
- Extremely wide measurement ranges with only one measurement cell

## Versatile Set 1, Better value in set

testo 240 conductivity and temperature measuring instrument, battery, 2 electrode clips, versatile conductivity measurement cell, case (plastic)

Part no. 0563 2405



Measuring salt level (NaCl) in pickling brine

# testo 240

Conductivity and temperature measuring instrument incl. battery and 2 electrode clips

Part no. 0560 2404

#### Precision Set 2, Better value in set

testo 240 conductivity and temperature measuring instrument, battery, 2 electrode clips, precision conductivity measurement cell, case (plastic)

Part no. 0563 2406

Technical data	a		
Probe type	Conductivity measuring cell	NTC	Calc. parameter
Meas. range	0 to +2000 mS/cm	-50 to +150 °C	1 mg/l to 200 g/l NaCl
Accuracy ±1 digit	±1% of mv (0 to +2000 mS/cm)	±0.5% of mv (+100 to +150 °C ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remainin range)	,
Resolution		0.1 °C	0.1 mg/l NaCl
Oper. temp.	0 to +40 °C	Dimensions	168 x 72 x 27 mm
Storage temp.	-20 to +70 °C	Weight	170 g
Battery life	60 h	Protection class	IP54

Resolution max. 0.1  $\mu$ S/cm; temperature compensation automatic; temperature coefficient: 0 to 5 %/°C linear; compensation in accordance with non-linear function of natural water to DIN 38404 from 0...+50°C; autom. measurement range switchover (conductivity); Auto OFF function; switch between °C/°F

Accessories Ordering data	Part no.
Conductivity standard (1413 µS/cm), 0.01 mol/1 KCL, to calibrate conductivity measuring cells	0554 2334
Set case (plastic) for measuring instrument, probes and accessories, user-friendly arrangement of measuring instrument and accessories	0516 0230
ISO calibration certificate/analysis, for conductivity solutions; calibration point 1.413 mS/cm	0520 0019
ISO calibration certificate/temperature, for air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
ISO calibration certificate/analysis, at 3 conductivity values over the measuring range	0520 0049

Description	Illustration	Meas. range	Other features	Part no.
Universal conductivity measuring cell, type 07 mS, highest accuracy up to 200 mS/cm, stainless steel	130 mm	+0.001 to +200 mS/cm	4 electrode engineering with built-in temperature sensor	0650 3023
	Ø 20 mm	0 to +60 °C		Conn.: Fixed cable
Precision conductivity measuring cell, type 10 mS, long-term stable, highest accuracy up to 300 mS/cm, graphite	130 mm	+0.001 to +300	4 electrode	0650 3024
		mS/cm	engineering with built-in temperature	Conn.: Fixed cable
	Ø 20 mm	0 to +60 °C	sensor	

Description	Illustration			Meas. range	Accuracy	t99	Part no.
Waterproof NTC immersion/penetration probe		115 mm	50 mm	-50 to +150 °C Long-term meas. range +125 °C, short-term +150 °C (2 minutes)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	10 s	0613 1212
		Ø 5 mm	Ø 4 mm				Conn.: Fixed cable
Laboratory probe, glass-coated, resistant to corrosive substances, glass stem can be replaced		200 mm	30 mm	-50 to +150 °C	±0.5% of mv (+100 to +150 °C)	40 s	0613 7011
		Ø 6 mm	Ø 5 mm	Long-term meas. range +125 °C, short-term +150 °C (2 minutes)	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	10 s*	Conn.: Fixed cable
Stainless steel NTC food probe (IP65) with PUR cable		125 mm	15 mm	-50 to +150 °C Long-term meas. range +125°C, short-term +150°C (2 minutes)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 2211
		Ø 4 mm	Ø 3 mm				Conn.: Fixed cable
Waterproof NTC surface probe for flat surfaces		115 mm	50 mm	-50 to +150 °C	±0.5% of mv (+100 to +150 °C)		0613 1912
	Ø 5 mm		Ø 6 mm	Long-term meas. range +125 °C, short-term +150 °C (2 minutes)	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		Conn.: Fixed cable

See testo 110 for more temperature probes (except wireless probes)

\* without protective glass



# Notes



# Notes



# Testo: At Your Service

# Please send for more information:

Monitoring Instruments for Food Production, Transport and Storage Measurement Engineering for Restaurants, Catering and

Supermarkets

Measurement Engineering for Air Conditioning and Ventilation

Measurement Engineering for Heating and Installation

Measurement Solutions for Emissions, Service and Thermal

Measurement Solutions for Refrigeration Technology

Stationary Measurement Solutions for Air Conditioning, Drying, Cleanrooms and Compressed Air

Measurement Solutions for Production, Quality Control and Maintenance

Measurement Solutions for Climate Applications in Industry

Reference Measurement Technology for Industry

Measuring Instruments For Temperature

Measuring Instruments for Humidity

Measuring Instruments For Velocity

Measuring Instruments for Pressure and Refrigeration

Multi-Function Measuring Instruments

Measuring Instruments for Flue Gas and Emissions

Measuring Instruments for RPM, Analysis, Current/Voltage

Measuring Instruments For Indoor Air Quality, Light And Sound Stationary Measurement Technology Humidity / Differential

Pressure / Temperature / Process Displays

Stationary Measurement Technology Compressed Air Humidity /

Compressed Air Consumption



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# **Icons**



Backlit display



User-friendly operation based on menu-driven operations



Radio probes for wireless applications



SoftCase or TopSafe to protect instrument or protect instrument from water ingress



Shock-proof



Infrared printer

Efficient paper documentation of measured results on site



RS 232/USB interface

For easy connection to analysis software



Battery and rechargeable battery operation possible



Battery can be recharged in instrument



Testo is a member of Eurotoques, the Association for top chefs with the aim of retaining, promoting and spreading the culture of cooking, eating, drinking, culinary diversity, quality awareness and healthy nutrition using natural ingredients.