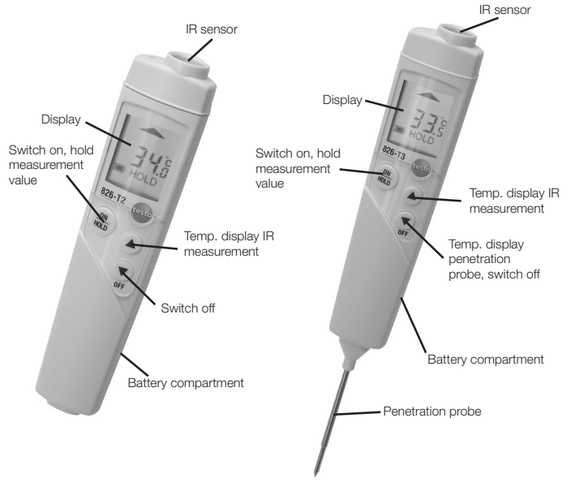
testo 826-T1 (0563 8281)
testo 826-T2 (0563 8282)
testo 826-T3 (0563 8283)
testo 826-T4 (0563 8284)

Instruction manual **en**



Measuring instrument complies with 2004/108/EC. The instruments were tested in the frequency range 27-1000 MHz. In the case of strong HF fields, the specific parameters cannot be guaranteed.

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Intended use

The testo 826 is a compact infrared thermometer for non-contact measurement of surface temperatures. With the testo 826-T3/T4, contact measurements (core temperature measurements) can also be carried out via the integrated penetration probe.

Not suitable for diagnostic measurements in the medical sector!

Technical data

Feature	testo 826-T1/T2	testo 826-T3/T4
Measurement parameter	°C / °F	
Measurement range IR	-50 to +300°C / -58°F to +572°F	
Resolution IR	0.1°C / 0.1°F	
Accuracy IR (at 23°C) ± 1 digit	±1.5°C (-20 to 100°C) / ±2.7°F (-4 to 212°F); ±2°C / ±3.5°F or 2% of meas. val (rest of range) [1]	
Emission factor	adjustable from 0.10 to 1.00	
Meas. rate IR	0.5 s	
Lens (90% value)	6:1 + opening diameter of sensor (12 mm)	
Laser type	single laser (T2/T4)	
Output/wavelength	< 1 mW / 645 to 660 nm	
Class/standard	2 / DIN EN 60825-1:2001-11	
Temperature sensor	-	NTC
Meas. range of temp. sensor	-	-50 to +230°C / -58 to +446°F
Resolution of temp. sensor	-	0.1°C / 0.1°F
Accuracy of temp. sensor (at 22°C) ±1 digit	-	±0.5°C (-20 to +99.9°C) / ±0.9°F (-4 to +212°F); ±1°C / ±1.8°F or ±1% of meas. val. (rest of range) [1]
Meas. rate of temp. sensor	-	1.25 s
Operating temperature	826-T1/T3: 0 to +50°C / 32 to +122°F 826-T2/T4: -20 to +50°C / -40 to +122°F	
Transportation/storage temperature	-30 to +50°C / -22 to +122°F	
Voltage supply	826-T1/T3: 2x Lithium 2032 826-T2/T4: 2x AAA batteries	
Battery life	approx. 100 h	approx. 15 h
Housing	ABS (white)	
Dimensions in mm (WxHxL)	33 x 162 x 19	
CE guideline	2004/108/EC	
Warranty	2 years	

[1] whichever value is the greater

General information

Please read this document through carefully and familiarise yourself with the operation of the product before using it. Keep this documentation to hand so that you can refer to it when necessary.

Safety information

Avoid electrical hazards:

- Contact measurement: Do not conduct measurements on or near live parts.
  Infrared measurement: observe the required safe distances when measuring live parts.

Preserving product safety/warranty claims:

- Operate the instrument properly and according to its intended purpose and within the parameters specified. Do not use force.
- Do not expose the product to electromagnetic radiation (e. g. microwaves, induction heating), static buildup, heat or strong temperature fluctuations.
- Do not store with solvents (e. g. acetone).
- Only open the instrument if this is expressly described in the documentation for maintenance purposes.

Laser radiation!

- Do not look into the laser beam.

Ensure correct disposal:

- Dispose of defective rechargeable batteries and spent batteries at the collection points provided.
- Send the instrument directly to us at the end of its life cycle. We will ensure that it is disposed of in an environmentally friendly manner.

The following product components are designed for continuous contact with foodstuffs in accordance with Regulation (EC) 1935/2004: from the tip of the measuring probe up to 1 cm before the probe handle or the plastic housing. If provided, the information about penetration depths in the instruction manual or the mark(s) on the measuring probe should be noted.

With TopSafe, the testo 826-T3/T4 complies with the guidelines in accordance with standard EN 13485.
Suitability: S, T (storage, transportation), environment: E (transportable thermometer), accuracy class: 0.5, measurement range: -50 to +230 °C
According to EN 13485, the measuring instrument should be checked and calibrated regularly under the terms of EN 13486 (recommended frequency: yearly). Contact us for more information.

Accessories

Description	Article no.
TopSafe, degree of protection (TopSafe closed, sealing edges lubricated): IP67	0516 8265
Wall bracket incl. protection cap for penetration probe	0554 0825
Frozen food drill	0554 0826

Initial operation

- Insert battery: see Chapter **Replacing the battery**.

Operation

Switching on/off

- Switch on the instrument: press ON/HOLD.
- All display segments light up briefly. The instrument switches to the infrared measurement view (lights up).
- Switch off the instrument: press and hold down ▼ until the display goes out.

The instrument switches off automatically after 1 min (IR measurement view) or 10 mins (contact measurement view, only testo 826-T3/T4) without the button being pressed.

Measurement options

! Observe information on infrared measurement/contact measurement (see chapter below).

! With IR measurement, the min./max. values are reset by pressing the measurement button, and with contact measurement, this is done when the instrument is switched off or when you switch to the IR measurement view.

- The instrument is switched on.

IR measurement

1 Start measurement: hold down ▲.
2 Aim at and lock in on the measuring object with the laser dot: laser marks the centre point of the measurement spot.
- The current measurement value is displayed.
3 End measurement: release the button.
- **HOLD** lights up. The last measurement value and min./max. value are saved until the next measurement.
- Switch between min.-, max.- and recorded value: press ON/HOLD.
- Restart measurement: hold down ▲.

Contact measurement (only testo 826-T3/T4)

1 Position the contact thermometer in the measuring object and initiate the measurement: press ▼.
- The instrument switches to the contact measurement view (lights up). The current measurement value is shown.
2 End measurement: press ON/HOLD.
- **HOLD** lights up. The last measurement value and min./max. value are saved until the next measurement.
- Switch between min.-, max.- and recorded value: press ON/HOLD.
- Restart measurement: press ▼.
- Back to infrared measurement view: press ▲.

Cleaning the instrument

Do not use aggressive cleaning agents or solvents!

- Wipe down the housing with a damp cloth (with detergent).
- Clean the lens carefully with a cotton bud dipped in water or medical alcohol.

Questions and answers

Question	Possible causes	Possible solution
Display light has stopped working	- Battery is low.	▶ Replace the battery.
lights up.	- Battery is dead.	▶ Replace the battery.
Instrument does not switch on	- Battery is dead.	▶ Replace the battery.
IR measurement view: - - - lights up.	- Measurement values outside the measurement range.	▶ Replace the battery.
Contact measurement view: (only testo 826-T3/T4) - - - lights up.	- Measurement values outside the measurement range.	▶ Keep to the permitted measuring range.

If we could not answer your question, please contact your dealer or Testo Customer Service.

Information on infrared (IR) measurement

Measuring method

IR measurement is a visual measurement

- Keep lenses clean.
- Do not carry out measurement with foggy lenses.
- Keep the measuring range (the range between the instrument and the measuring object) free of obstacles. There must be no particles of dust or dirt, no humidity (rain, steam) and no gases.

Setting the emissivity

- The instrument is in the infrared measurement view.

! If no button on the instrument is pressed for 3 s in emissivity mode, the instrument switches to the infrared measurement view.

1 Press ▲ and ▼ simultaneously.
2 Configuring the unit: press ▲ or ▼.
- The instrument switches to IR measurement view.

Settings

- The instrument is switched off.

! If no button is pressed for 3 s in settings mode, the instrument switches to the next view.

! The alarm function is only available for IR measurement. If the set alarm values are exceeded/not reached, a visual and acoustic alarm is output.

1 Press ▲ and ▼ simultaneously.
- The instrument switches to settings mode.
2 Set lower alarm value (**ALARM**): press ▲ or ▼. Hold the button down to go forward quickly.
3 Set lower alarm value (**ALARM**): press ▲ or ▼. Hold the button down to go forward quickly.
4 Set alarm function on - (**on**)/off (**oFF**): press ▲ or ▼.
5 Set measurement parameter (**°C** or **°F**): press ▲ or ▼.
- The instrument switches to IR measurement view.

Service and maintenance

Replacing the battery

1 Switch the instrument off.
2 Open the battery compartment: slide the top down.
3 Remove used battery and insert a new one. Observe the polarity!
4 Close the battery compartment.

IR measurement is a surface measurement

If there is dirt, dust, frost, etc. on the surface, only the outermost layer is measured, i.e. the dirt.

- For vacuum-packed food, do no measure at air pockets.
  Where the values are critical, always measure separately with a contact thermometer. Particularly in the food sector: measure core temperature with penetration/immersion thermometer.

Adjustment time

- If the ambient temperature changes (change of location, e.g. measurement indoors/outdoors), the instrument must be allowed to equalise for 15 minutes for infrared measurement.

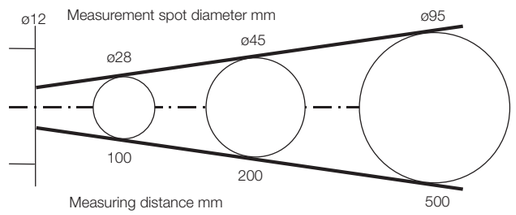
Emissivity

Materials have various emissivities, i.e. they emit various amounts of electromagnetic radiation. The emissivity of the instrument has a default setting of 0.95. This is optimal for the measurement of food, non-metals (paper, ceramic, gypsum, wood, paints and varnishes) and plastics.

Measurement spot, distance

Depending on the distance of the measuring instrument from the measuring object, a specific measurement spot is recorded.

Measuring lens (ratio of distance : measurement spot)



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