

# Temperature measuring instrument (1-channel)

testo 110 - NTC and Pt100 temperature measuring instrument with App connection

Simple, fast and particularly precise temperature measurement with NTC or Pt100 probes (optionally available)

Fast in-app configuration, graph history, second screen and measurement data memory in the testo Smart App

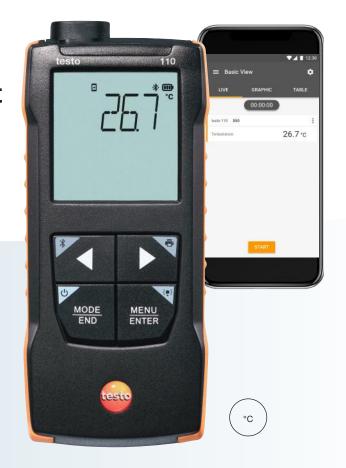
HACCP-compliant, certified according to EN 13485 for use in the food sector

High-precision measurement results and high system accuracy with digital Pt100 sensors (calibration without measuring instrument)

Audible alarm sounds if a limit value is exceeded









Easy to use and precise in measurement: This is how the compact temperature measuring instrument testo 110 convinces every day in use. The fast temperature all-rounder can show its strengths particularly in applications in laboratories or in the food environment: The optionally available NTC or Pt100 probes cover a comprehensive range of measuring tasks and ensure exact results with particularly high accuracy.

The digital Pt100 probes can also be calibrated without the measuring instrument - so you can easily continue working with a different probe without downtime.

Of course, the testo 110 is HACCP-compliant, certified to EN13485 and, with the optional TopSafe protective cover, dust-tight and protected against water jets (protection class IP65).

The temperature measuring instrument is rounded off by the testo Smart App for smartphones and tablets:

- Configuration of testo 110
- Second display
- Measurement data memory
- Display of the measured values (table, graphic progression)
- Documentation



## Ordering data / technical data / accessories

#### testo 110

testo 110, 1-channel temperature measuring instrument NTC / Pt100 with App connection, TUC probe socket and audible alarm, incl. transport bag, calibration protocol and 3 x AA batteries

Order no. 0563 0110



### **TopSafe**

TopSafe, protects against impact and dirt, with attachment magnets and stand-up bracket

Order no. 0516 0224



#### Sensor types

NTC					
Measuring range	-50 to +150°C				
Accuracy ±1 digit	±0.2 °C (-20 to +80 °C) ±0.3 °C (remaining meas. range)				
Resolution	0.1 °C				
Pt100					
Measuring range	-200 to +800 °C				
Accuracy ±1 digit	according to the probe accuracy				
Resolution	according to the probe accuracy				
General technical da	ta				
Operating temperature	-20 to +50 °C				
Storage temperature	-20 to +50 °C				
Battery type	3 x AA				
Battery life	100 h				
Dimensions	135 x 60 x 28 mm				
Weight	187 g				
Protection class	IP40 with TopSafe: IP65				
Housing material	ABS + PC / TPE				



#### The testo Smart App

- Simple and fast: Measurement menus for numerous applications provide optimum support in configuring and carrying out the measurement
- Clear graphical presentation of readings, e.g. as a table, for quick interpretation of results
- Create digital measurement reports including photos as PDF/CSV files on site and send via e-mail



Free download for Android and iOS







Accessories	Order no.	
TopSafe, protects against impact and dirt, with attachment magnets and stand-up bracket	0516 0224	
testo Bluetooth® printer, incl. 1 roll of thermal paper, rech. battery and mains unit	0554 0621	
Spare thermal paper for printer (6 rolls), measurement data documentation can be read for up to 10 years	0554 0568	
ISO temperature calibration certificate, for air/immersion probe, calibration points -18 °C; 0 °C; +60 °C	0520 0001	
ISO temperature calibration certificate, one-point calibration for surface thermometer, calibration point +60 °C	0520 0072	
ISO temperature calibration certificate, one-point calibration for surface thermometer, calibration point +120 °C	0520 0073	
DAkkS temperature calibration certificate, measuring instruments with air/immersion probe; calibration points -20 °C; 0 °C; +60 °C	0520 0211	



# Digital Pt100 and NTC temperature probes

Probe type		Measuring range	Accuracy	Resolution	Order no.
Digital Pt100 temperature probe					
High-precision digital Pt100 penetration probe for measurements in liquids and pastes with an accuracy of up to ±0.05°C		-80 to +300 °C	±0.3 °C (-80 to -40.001 °C) ±(0.1 °C + 0.05 % of m.v.) (-40 to -0.001 °C) ±0.05 °C (0 to +100 °C) ±(0.05 °C + 0.05 % of m.v.) (+100.001 to +300 °C)	0.001 °C	0618 0275
<b>Digital Pt100 penetration probe</b> for measurements in liquids and pastes	200 mm — Ø 3 mm	-100 to +400 °C	$ \begin{array}{l} \pm (0.15\ ^{\circ}\text{C} + 0.2\ \%\ \text{of m.v.}) \\ (-100\ \text{to} -0.01\ ^{\circ}\text{C}) \\ \pm (0.15\ ^{\circ}\text{C} + 0.05\ \%\ \text{of m.v.}) \\ (0\ \text{to} +100\ ^{\circ}\text{C}) \\ \pm (0.15\ ^{\circ}\text{C} + 0.2\ \%\ \text{of m.v.}) \\ (+100.01\ \text{to} +350\ ^{\circ}\text{C}) \\ \pm (0.5\ ^{\circ}\text{C} + 0.5\ ^{\circ}\text{C}) \\ \text{of m.v.}) \\ (+350.01\ \text{to} +400\ ^{\circ}\text{C}) \end{array} $	0.01 °C	0618 0073
Glass-coated digital Pt100 laboratory probe for measurements in corrosive media	200 mm Ø		±(0.3 °C + 0.3% of m.v.) (-50 to +300 °C) ±(0.4 °C + 0.6 % of m.v.) (+300.01 to +400 °C)	0.01 °C	0618 7072
Robust, fast-reaction, digital Pt100 air probe	200 mm Ø		$ \begin{array}{l} \pm (0.15\ ^{\circ}\text{C} + 0.2\ \%\ \text{of m.v.}) \\ (-100\ \text{to} -0.01\ ^{\circ}\text{C}) \\ \pm (0.15\ ^{\circ}\text{C} + 0.05\ \%\ \text{of m.v.}) \\ (0\ \text{to} +100\ ^{\circ}\text{C}) \\ \pm (0.15\ ^{\circ}\text{C} + 0.2\ \%\ \text{of m.v.}) \\ (+100.01\ \text{to} +350\ ^{\circ}\text{C}) \\ \pm (0.5\ ^{\circ}\text{C} + 0.5\ ^{\circ}\text{C}) \\ \text{of m.v.}) \\ (+350.01\ \text{to} +400\ ^{\circ}\text{C}) \end{array} $	0.01 °C	0618 0072
Flexible digital Pt100 temperature probe for measurements in locations that are difficult to access and in liquids	Ø 4 mm Length 1000 mm	-100 to +260 °C	$\pm (0.3~^{\circ}\text{C} + 0.3\%~\text{of m.v.})$	0.01 °C	0618 0071
<b>Digital Pt100 cable temperature</b> <b>probe</b> Cable length 1.3 m	Length 90 mm Ø 4 mm	-85 to +150 °C (probe and cable only)	±(0.25 °C + 0.3% of reading) at -49.9 to +99.9 °C ±0.55 °C remaining measuring range	0.01 °C	0572 2163
Digital NTC temperature probe					
Digital NTC stub temperature probe	140 mm — Ø 15 mm	-30 to +50 °C	±0.4 °C	0.1 °C	0572 2162



## Analog NTC temperature probe

Probe type	Probe shaft/probe shaft ti dimensions	р	Measuring range	Accuracy	Response time	Order no.
Pipe wrap probe (NTC) for pipe diameters of 5 to 65 mm, fixed cable 1.2 m		)	-50 to +120 °C	±0.2 °C (-25 to +80 °C)		0615 5605
Temperature probe with Velcro (NTC), fixed cable 1.4 m	300 mm	30 mm	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)	60 s	0615 4611
Waterproof NTC immersion/ penetration probe, fixed cable 1.2 m	115 mm Ø 5 mm	50 mm Ø 4 mm	-50 to +150 °C	±0.5% of m.v. (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining meas. range)	10 s	0615 1212
Robust air probe NTC, fixed cable 1.2 m	115 mm Ø 5 mm	50 mm Ø 4 mm	-50 to +125 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining meas. range)	60 s	0615 1712
Clamp probe for measurements on pipes from 6 to 35 mm diameter, NTC, fixed cable 1.5 m	00		-40 to +125 °C	±1 °C (-20 to +85 °C)	60 s	0615 5505