

Data Logger Temperature

testo 176 T1 / testo 176 T2

High data security

High accuracy Pt100 sensor

Internal storage for 2 million measurement values

Up to 8 years' battery life

Data transfer via USB cable or SD card

Impact protective steel housing (testo 176 T1) or standard housing with display (testo 176 T2)

testo 176 T1 - Internal pt100 sensor

testo 176 T2 - 2 ports for external Pt100 sensors



For scientific and industrial applications requiring the highest degree of accuracy recording over extended time periods, Testo's Pt100 temperature sensors are the best possible choice. In fact, the testo 176 T1 and T2 loggers' accuracy ratings are so high that they can be used as reference loggers for calibration of other loggers.

The testo 176 T1 is designed to protect loggers from destruction and damage with an internal sensor encased in a massive steel housing. The testo 176 T2 comes with a large display and two DIN-type ports for external Pt100 cable probes.

The testo 176 loggers can be programmed, analyzed, and have data retrieved with the ComSoft Basic 5 software (free download), as well as the more sophisticated ComSoft Pro and ComSoft CFR programs.

Testo Inc. also offers NIST calibration services for testo 176 T1, T2, and other testo loggers.

Technical data

testo 176 T1

testo 176 T1, 1-channel temperature logger in metal housing with highly accurate internal sensor (Pt100) incl. wall holder, lock, battery and factory calibration document.

Part no. 0572 1761



General technical data

Battery type	1 x Lithium (TL-5903)
Battery life	8 years (15 min. meas. rate, +25 °C)
Operating temperature	-35 to +70 °C
Storage temperature	-40 to +85 °C
Dimensions	103 x 63 x 33 mm
Protection class	IP68 (testo 176 T1) IP65 (testo 176 T2)
Measuring rate	1 s - 24 h
Memory	2 million measurement values

testo 176 T2

testo 176 T2, 2-channel temperature logger with connections for highly accurate external sensor (Pt100) incl. wall holder, lock, battery and factory calibration document.

Part no. 0572 1762



	testo 176 T1	testo 176 T2
Sensor type	Pt100	Pt100
Channels	1 x internal	2 x external
Measuring range	-35 to +70 °C	-100 to +400 °C
Accuracy ±1 digit	±0.2 °C (-35 to +70 °C)	±0.2 °C (-100 to +200 °C) ±0.3 °C (+200.1 to +400 °C)
Resolution	0.01 °C	0.01 °C



Lateral Mini USB cable and SD card



Probe connection at lower end of housing for two Pt100 probes (testo 176 T2 only)








Large, clear display for showing measurement values (testo 176 T2 only)

Accessories

Accessories for measuring instrument	Part no.
Mobile thermal printer (USB connection to testo 176 data loggers)	0572 0576
Wall holder (black) for testo 176	0554 1703
Cable for connecting the data loggers testo 175 and testo 176 to the PC, 5 Pin Mini USB (B) to USB (A)	0449 0047
SD card for collecting the measurement data from the data loggers testo 175 and testo 176; 2 GB; application range to -20 °C	0554 8803
Battery for testo 176 -1 x TL-5903 AA cell	0515 1760
ComSoft Basic 5 software for programming and readout of Testo data loggers; graphs, tables, and export function. Order as a CD, or go to testo.com for a free download.	0572 0580
ComSoft Professional, Pro software incl. data archiving	0554 1704
ComSoft CFR 21 Part 11, Software for requirements according to CFR 21 Part 11 for Testo data loggers	0554 1705
NIST calibration certificate temperature temperature probe; calibration points 10 °C, 25 °C, 40 °C or -20 °C, 25 °C, 40 °C per channel/instrument	400520 1901

Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no.
Pt100 probes					
Robust, waterproof Pt100 immersion/penetration probe, Fixed cable	 114 mm Ø 5 mm	50 mm Ø 3.7 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	12 s 0609 1273
Robust, Pt100 stainless steel food probe (IP65), Fixed cable	 125 mm Ø 4 mm	15 mm Ø 3 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	10 s 0609 2272
Penetration probe Pt100 with ribbon cable, cable length 2 m, IP 54, Fixed cable	 60 mm Ø 5 mm	30 mm Ø 3.6 mm	-85 to +150 °C	Class A	35 s 0572 7001
Laboratory probe Pt100, glass-coated, exchangeable glass pipe (Duran 50), resistant to corrosive substances, Fixed cable	 200 mm Ø 6 mm	30 mm Ø 5 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	45 s 12 s Without protective glass 0609 7072
Efficient, robust air probe, Pt100, Fixed cable	 114 mm Ø 5 mm	50 mm Ø 4 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	70 s 0609 1773

1) According to standard 60751, the accuracies of Class A and B refer to -200 to +600 °C (Pt100)

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