# Data logger Temperature

### testo 176 T1 / testo 176 T2

High data security

Highly accurate measurement with Pt100 sensor

Measurement data memory for 2 million measurement values

Up to 8 years' battery life

Data transfer via USB cable or SD card

In a metal housing and with an internal sensor for more robustness (testo 176 T1) or with a large display and two external sensor connections for a clearer overview (testo 176 T2)



When highly accurate temperature control under extreme conditions is required, the testo 176 T1 is the right choice. In the interior, a precise Pt100 sensor measures the temperature. The testo 176 T1 is excellently suited to the recording of temperatures over long periods. The metal housing is resistant to extreme mechanical influences and hard impacts, making the data logger suitable for use in industrial surroundings. The free ComSoft Basic software allows fast programming of the data logger and easy data analysis.

The testo 176 T2, with its two inputs for external Pt100 probes, is the right data logger for simultaneous measurement at two measurement sites. A reference class data logger which can also be used to calibrate other data loggers.

Like all Testo data loggers for use in the food sector, the testo 176 T1 and testo 176 T2 are tested by the ATP testing section of the TÜV Süd according to DIN EN 12830.

## **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 calibration protocol



Part no. 0572 1761

### testo 176 T2

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



Part no. 0572 1762

	testo 176 T1	testo 176 T2	
Sensor type	Pt100	Pt100	
Channels	1 x internal	2 x external	
Meas. 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 connection of 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)



General technical data				
Battery type	1 x Lithium (TL-5903)			
Battery life	8 years (15 min. meas. rate, +25 °C)			
Oper. temp.	-35 to +70 °C			
Storage temp.	-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 mio. measurement values			

## Accessories

Accessories for measuring instrument		
Nobile printer for data loggers testo 175/176/184	0572 0576	
Vall holder (black) for testo 176	0554 1703	
Cable for connecting the data loggers testo 175 and testo 176 to the PC, Mini-USB to USB		
SD card - for collecting the measurement data from the data loggers testo 175 and testo 176; 2 GB; application range to -20 $^\circ \! C$		
Sattery for testo 176 -1 x TL-5903 AA cell	0515 1760	
ComSoft Basic, Basic software for programming and readout of Testo data loggers; graphic and tabular measurement value presentation as well as export function (if free download with registration not desired)		
ComSoft Professional, Pro software incl. data archiving		
ComSoft CFR 21 Part 11, Software for requirements according to CFR 21 Part 11 for Testo data loggers	0554 1705	
SO calibration certificate temperature emperature probe; calibration points -18°C; 0°C; +40°C per channel/instrument	0520 0153	
DAkkS calibration certificate temperature temp. data logger; cal. points -20°C; 0°C; +60°C; per channel/instrument		

# Probes

Probe type	Dimensions Probe shaft/probe shaft tip		Measuring range	Accuracy	t <sub>99</sub>	Part no.						
Pt100 probes												
Robust, waterproof Pt100 immersion/penetration probe, Fixed cable	114 mn	n 50 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) 1)	12 s	0609 1273						
Cable	Ø 5 mm	n Ø 3.7 mm										
Robust, Pt100 stainless steel food probe (IP65), Fixed cable	125 mn	n 15 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) <sup>1)</sup>	10 s	0609 2272						
	Ø 4 mn	n Ø3mm										
Penetration probe Pt100 with ribbon cable, cable length 2 m, IP 54. Fixed cable	60 mm	30 mm	-85 to +150 °C	Class A	35 s	0572 7001						
IF 54, Tixed Cable	Ø 5 mm	n Ø 3.6 mm										
Laboratory probe Pt100, glass- coated, exchangeable glass pipe (Duran 50), resistant to corrosive	200 mn	n 30 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) <sup>1)</sup>	45 s 12 s Without protective glass	0609 7072						
substances, Fixed cable	Ø 6 mn	n Ø 5 mm										
Efficient, robust air probe, Pt100, Fixed cable	114 mn	n 50 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) <sup>1)</sup>	70 s	0609 1773						
	Ø 5 mn	n Ø4mm										

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



#### Authorized & Exclusive Distributor:



#### Enviro Engineering General Trading LLC Instrumentation, Automation & Networking

Office # 808, 8th Floor, International Business Tower, AI A'amal St., Business Bay, P.O. Box 41454, Dubai, United Arab Emirates Tel. #: +971 4 4201188 | Fax #: +971 4 4547789 www.enviroegt.com | info@enviroegt.com

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