Data logger
Pressure, temperature and humidity

testo 176 P1

High level of data security

Internal absolute pressure sensor and connection possibility for two external temperature/humidity probes

Parallel temperature/humidity measurement at two sites

Measurement data memory 2 million measurement values

Up to 8 years' battery life

Data transfer via USB cable or SD card

hPa

°C

%RH

td

g/m³

inch H₂O

When ambient conditions need to be documented extremely accurately and securely, for example in a laboratory, the testo 176 P1 is the right data logger. It has an internal absolute pressure sensor and connection possibilities for two external temperature/humidity probes.

An integrated dewpoint calculation makes it universally applicable. The free ComSoft Basic software allows fast programming and easy data analysis.

Technical data / Accessories

testo 176 P1

testo 176 P1, 5-channel pressure, temperature and humidity data logger with internal sensor (absolute pressure) and external sensor connections (NTC/capacitive humidity sensor) incl. wall holder, lock, battery and calibration protocol

Part no. 0572 1767

General technical data

Channels	1 x internal, 2 probes external, 4 external channels (temperature/humidity)
Battery type	1 x Lithium (TL-5903)
Battery life	8 years at 15 min. meas. rate
Oper. temp.	-20 to +70 °C
Storage temp.	-40 to +85 °C
Dimensions	103 x 63 x 33 mm
Protection class	IP54
Measuring rate	1 s - 24 h
Memory	2 mio. measurement values

Sensor types

	NTC	Testo humid. sensor, cap.	Absolute pressure sensor
Meas. range	-20 to +70 °C	0 to 100 %RH*	600 to 1100 mbar
Accuracy ±1 digit	±0.2 °C (-20 to +70 °C) ±0.4 °C (remaining range)	dependent on probe selected	±3 mbar (0 to +50 °C)
Resolution	0.1 °C	0.1 %RH	1 mbar

* Not for condensing atmospheres. For continuous applications in high humidity (>80 %RH at ≤30 °C for >12 h, >60 %RH at >30 °C for >12 h), please contact us via our website.

Lateral connection of Mini USB cable and SD card

Probe connection at lower end of housing for two temperature/humidity probes

Large, clear display for showing measurement values

Accessories

Accessories for measuring instrument	Part no.	
Wall 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	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, 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)	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	
ISO calibration certificate temperature temperature 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	0520 0261	
ISO calibration certificate humidity calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument	0520 0076	
DAkkS calibration certificate humidity humidity probe; cal. points 11.3%RH and 75.3%RH at +25°C; per channel/instrument	0520 0246	
ISO calibration certificate pressure differential pressure, accuracy 0.1 to 0.6 (% of fsv)	0520 0025	
DAkkS calibration certificate/pressure diff. and pos. pressure; 11 measuring points distributed over the instr. meas. range	0520 0215	

Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Part no.
Humidity/temperature probes				
Humidity/Temperature Probe 12mm		-20 to +70 °C 0 to 100 %RH	±0,3 °C ±2 %RH at +25 °C (2 to 98 %RH) ±0,03 %RH/K ± 1 digit	0572 6172
Humidity/Temperature Probe 4 mm		0 to +40 °C 0 to 100 %RH	±0,3 °C ±2 %RH at +25 °C (2 to 98 %RH) ±0,08 %RH/K ± 1 digit	0572 6174
Thin humidity probe with built-in electronics, incl. 4 attachable PTFE protection caps for material moisture equilibrium measurement	60 mm Ø 4 mm	0 to +40 °C 0 to +100 %RH	±0.2 °C ±2 %RH (+2 to +98 %RH)	0636 2135
Humidity/temperature probe	Ø 12 mm	-20 to +70 °C 0 to +100 %RH	±0.3 °C ±2 %RH (+2 to +98 %RH)	0636 9735

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Subject to change without notice.

www.testo.com