

Data logger Temperature and humidity

testo 176 H1 / testo 176 H2

- High level of data security
- For two external temperature/humidity probes
- Parallel 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
- In metal housing for more robustness (testo 176 H2) or with a large display for a clearer overview (testo 176 H1)



When short-term measurements show no anomalies, but the ambient storage conditions still do not fulfil the desired requirements, the testo 176 H1 or testo 176 H2 is the right data logger. Both models have two connections for external temperature and humidity probes which can be positioned in a room according to individual requirements. The metal housing of the testo 176 H2 guarantees

robustness and protects from mechanical influences such as impact. This ensures a long lifetime even in rough surroundings. The clear display of the testo 176 H1, on the other hand, provides on-site information on measurement values and limit value violations. The free ComSoft Basic software allows fast programming of the data logger as well as easy data analysis.

Technical data

testo 176 H1

testo 176 H1, 4-channel temperature and humidity data logger with external sensor connections (NTC/capacitive humidity sensor) incl. wall holder, lock, battery and calibration protocol

Part no. 0572 1765



testo 176 H2

testo 176 H2, 4-channel temperature and humidity data logger in metal housing with external sensor connections (NTC/capacitive humidity sensor) incl. wall holder, lock, battery and calibration protocol

Part no. 0572 1766



Sensor type NTC

Measuring range	-20 to +70 °C
Accuracy ±1 digit	±0.2 °C (-20 to +70 °C) ±0.4 °C (remaining range)
Resolution	0.1 °C

Sensor type Testo humid. sensor, cap.

Measuring range	0 to 100 %RH*
Accuracy ±1 digit	dependent on selected probe
Resolution	0.1 %RH

* 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.

General technical data

Channels	2 probes, 4 external channels
Battery type	1 x Lithium (TL-5903)
Battery life	8 years (15 min. measuring cycle, +25 °C)
Operating temperature	-20 to +70 °C
Storage temperature	-40 to +85 °C
Dimensions	103 x 63 x 33 mm
Weight	220 g (testo 176 H1) approx. 430 g (testo 176 H2)
EC Directive	2014/30/EU
Protection class	IP65
Measuring rate	1 s to 24 h (freely selectable, for online measurement 2 s to 24 h)
Memory	2 mio. measurement values
Interface	Mini USB, SD card slot



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.
Mobile printer for data loggers testo 175/176/184	0572 0576
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 (free download at www.testo.com)	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 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 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

Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Part no.
Humidity/temperature probes				
Humidity/temperature probe 12 mm		-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
Plug-in humidity/temperature probe 12 mm		-30 to +50 °C 0 to 100 %RH	±0.3 °C ±2 %RH at +25 °C (2 to 98 %RH)	0572 2151
Wall surface temperature probe (connectable only to testo 176 H1)		-50 to +80 °C	±0.5 °C (-40 to -25 °C) ±0.2 °C (-25 to +80 °C)	0628 7507

