

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)



The Testo engineered logger for parallel measurement of two temperature / humidity points with external humidity probes. Some of many applications include humidity chambers, incubators, produce coolers and laboratory applications.

The testo 176 H1 comes with standard housing and a large, easy to read display. The testo 176 H2 is built for environments where the logger must be protected from damage. The H2 is housed in a heavy steel block to protect internal components.

Both versions of the logger connect to a computer or the optional testo thermal printer with USB cable. An optional SD card allows fast data collection using the copy function.

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

Testo Inc. offers NIST calibration services for the testo 176 and other testo loggers.

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 factory calibration document

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 factory calibration document

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 at 15 min. meas. rate
Operating temperature	-20 to +70 °C
Storage temperature	-40 to +85 °C
Dimensions	103 x 63 x 33 mm
Protection class	IP65
Measuring rate	1 s - 24 h
Memory	2 million measurement values



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 thermal 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, 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; graphic and tabular measurement value presentation as well as export function. Order as a CD, or go to testo.com for 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 humidity calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument	400520 2601
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	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

