

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

| | |
|----------------------|--|
| Meas. 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.

| | |
|----------------------|-----------------------------|
| Meas. 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 |
| Oper. temp. | -20 to +70 °C |
| Storage temp. | -40 to +85 °C |
| Dimensions | 103 x 63 x 33 mm |
| Protection class | IP65 |
| Measuring rate | 1 s - 24 h |
| Memory | 2 mio. 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. |
|---|-----------|
| 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 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 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 |

