

testo 177-H1

Sensitive products require the right ambient conditions during production and storage. Efficient measurement and documentation of readings over months/years is possible with the professional testo 177-H1 datalogger.

Additional surface, immersion and air probes can be attached to the datalogger e.g. for uninterrupted measurement of the dewpoint difference.

Humidity/temperature logger, 4 channels, with internal sensors and additional external temperature probe socket, wall holder and calibration protocol

Part no.
0563 1775

Internal humidity/temperature sensor, 1 external temperature probe socket

- Long-term stable humidity sensor with fast response time
- Control and adjustment option with adjustment set
- Protective caps for dirt-ingressed air or corrosive gases
- Convenient documentation with infrared printer or PC/notebook
- Memory for up to 48,000 readings



Probes (NTC)	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
◆ Stub probe, IP 54	35 mm Ø 3 mm	-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (+40.1 to +70 °C)	15 s	0628 7510
◆ Mounting probe with aluminium sleeve, IP 65	40 mm Ø 6 mm Conn.: Fixed cable; Cable/Length: 2.4 m	-30 to +90 °C	±0.2 °C (0 to +70 °C) ±0.5 °C (remaining range)	190 s	0628 7503*
◆ Refrigeration storeroom probe with aluminium sleeve, IP 54, with silicone insulated ribbon cable	40 mm Ø 3 mm	-40 to +90 °C (Short-term to +105 °C)	±0.2 °C (0 to +70 °C) ±0.4 °C (-35 to 0 °C) ±0.5 °C (remaining range)	190 s	0628 0042*
◆ Accurate imm./pen. probe, 6m cable, IP 67	40 mm Ø 3 mm Conn.: Fixed cable; Cable/Length: 6 m	-35 to +80 °C	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	5 s	0610 1725*
◆ Accurate immersion/penetration probe, cable: 1.5 m long, IP 67	40 mm Ø 3 mm Conn.: Fixed cable; Cable/Length: 1.5 m	-35 to +80 °C	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	5 s	0628 0006*
◆ Screw-in probes for measurements at hard-to-access points, M6 thread, IP 54	40 mm Conn.: Fixed cable; Cable/Length: 2 m	-50 to +80 °C	±0.5% of mv	70 s	0628 7514*
Probe for surface measurement	40 mm 8 x 8 mm Conn.: Fixed cable; Cable/Length: 2 m	-50 to +80 °C	±0.2 °C (0 to +70 °C)	150 s	0628 7516*
Wall surface temperature probe, e.g. to prove damage in building material	40 mm 8 x 8 mm Conn.: Fixed cable; Cable/Length: 3 m	-50 to +80 °C	±0.2 °C (0 to +70 °C)	20 s	0628 7507
Pipe probe with Velcro, for pipe diameter of max. 80 mm	300 mm 30 mm Conn.: Fixed cable; Cable/Length: 1.5 m	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)		0613 4611
◆ Food probe (IP65) stainless steel, PUR cable can be used at up to +80°C, IP54 plug-in connection	125 mm Ø 4 mm Conn.: Fixed cable; Cable/Length: 1.5 m	-50 to +150 °C ²⁾	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 2211*
◆ Robust food penetration probe with special handle, IP 65, reinforced cable (PUR) and reinforced protection against buckling	115 mm Ø 5 mm Conn.: Fixed cable; Cable/Length: 1.4 m	-50 to +150 °C ²⁾	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	7 s	0613 2411*
◆ Frozen food probe, corkscrew design	110 mm Ø 8 mm Conn.: Plug-in cable	-50 to +140 °C ²⁾	±0.5% of mv (+100 to +140 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	20 s	0613 3211*
Robust, affordable air probe to check storage temperatures	110 mm Ø 4 mm Conn.: Fixed cable; Cable/Length: 1.2 m	-50 to +150 °C ²⁾	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	60 s	0613 1711*

◆ The specified seal class of the dataloggers is achieved with these probes.

* Probe tested to EN 12830 for suitability in the transport and storage sectors
2) Long-term measurement range +125°C, short-term +150°C or +140°C (2 minutes)

testo 177-H1
Accessories / Technical data

Accessories	Part no.
Transport and Protection	
Transport case for up to 5 testo 177 dataloggers, testo 575 printer, testo 580 data collector and accessories	0516 1770
Lock for wall holder for testo 175/177 dataloggers	0554 1755
Additional accessories and spare parts	
Battery, 3.6 V/1.9 Ah 1AA, for testo 175-T1/175-T2 and all testo 177 loggers	0515 0177
testo 580 data collector including readout holders, For testo 175/177 dataloggers	0554 1778
testo 581 alarm signal output, floating, for testo 175/177, Forwards information efficiently when limits are exceeded to e.g. horns, lamps, PLC etc.	0554 1769
Printer and accessories	
Fast testo 575 printer, incl. 1 roll of thermal paper and batteries, Infrared thermal line printer with graphics function	0554 1775
Spare thermal paper for printer (6 rolls)	0554 0569
Spare thermal paper for printer (6 rolls), Measurement data documentation legible for up to 10 years	0554 0568
Label thermal paper (Testo patent) for testo 575 printer (6 rolls), can be applied directly	0554 0561
Software and accessories	
ComSoft 3 Set - Basic with RS 232 interface, Basic software with diagram and table function, incl. desk-top holder, PC connection cable	0554 1774
ComSoft 3 - Basic Set with USB interface for testo 177, Basic software with diagram and table function, incl. desk-top holders, PC connection cable	0554 1767
ComSoft 3 - Professional with data management, Incl. database, analysis and graphics function, data analysis, trend curve (without interface)	0554 0830
ComSoft 3 - For requirements to CFR 21 Part 11, Incl. database, analysis and graphics function, data analysis, trend curve (without interface)	0554 0821
RS 232 interface for testo 175/177 incl. desk-top holders, PC connection cable, (please also order for ComSoft 3 - Professional)	0554 1757
USB interface, for testo 175/177 incl. desk-top holders, PC conn. cable, (Please order with ComSoft 3 - Professional)	0554 1768
Ethernet adapter, RS 232 - Ethernet incl. software driver, mains unit, Facilitates data communication in network	0554 1711
Accessories: Humidity probes	
Metal protection cage, Ø 12 mm for humidity probes, For velocities of less than 10 m/s	0554 0755
Cap with wire mesh filter, Ø 12 mm	0554 0757
Teflon sintered filter, Ø 12 mm, for corrosive substances, High humidity range (long-term measurements), high velocities	0554 0756
Stainless steel sintered cap, Ø 12 mm, is screwed onto humidity probe, For measurements at high velocity speeds or in dirt ingressed air	0554 0647
Control and humidity adjustment set 11.3%RH/75.3%RH incl. adapter for humidity probes, Quick checks or calibration of humidity probe	0554 0660

Accessories	Part no.
Calibration certificates	
ISO calibration certificate/Temperature, Temp. datalogger; calibration points -18°C; 0°C; +60°C	0520 0151
ISO cal. cert./Humidity, Humidity datalogger; calibration points 11.3%RH and 75.3%RH at +25°C	0520 0076
DKD calibration cert./Humidity, Humidity datalogger; cal. points 11.3%RH and 75.3%RH at +25°C	0520 0246

Recommended set
testo 177-H1, Standard Set for logging ambient air conditions
<ul style="list-style-type: none"> - Humidity/temperature logger, 4 channels, with internal sensors and additional external temperature probe socket, wall holder and calibration protocol (Part no. 0563 1775) - Lock for wall holder for testo 175/177 dataloggers (Part no. 0554 1755) - Fast testo 575 printer, incl. 1 roll of thermal paper and batteries (Part no. 0554 1775) - ComSoft 3 - Basic Set for testo 177, Basic software incl. interface, desk-top holder, PC connection cable (Part no. 0554 1774)

testo 177-H1, Professional Set for measuring dew point difference
<ul style="list-style-type: none"> - Humidity/temperature logger, 4 channels, with internal sensors and additional external temperature probe socket, wall holder and calibration protocol (Part no. 0563 1775) - Lock for wall holder for testo 175/177 dataloggers (Part no. 0554 1755) - Wall surface temperature probe, e.g. to prove damage in building material (Part no. 0628 7507) - Fast testo 575 printer, incl. 1 roll of thermal paper and batteries (Part no. 0554 1775) - ComSoft 3 - Professional with data management (Part no. 0554 0830) - RS 232 interface for testo 175/177 incl. desk-top holders, PC connection cable (Part no. 0554 1757)

Set for logging ambient conditions and additional temp. measurement
<ul style="list-style-type: none"> - Humidity/temperature logger, 4 channels, with internal sensors and additional external temperature probe socket, wall holder and calibration protocol (Part no. 0563 1775) - Lock for wall holder for testo 175/177 dataloggers (Part no. 0554 1755) - Accurate imm./pen. probe, 6m cable, IP 67 (Part no. 0610 1725) - testo 580 data collector including readout holders, For testo 175/177 dataloggers (Part no. 0554 1778) - ComSoft 3 - Basic Set for testo 177, Basic software incl. interface, desk-top holder, PC connection cable (Part no. 0554 1774)

Technical data				
Probe type	NTC (Internal)	NTC (External)	Testo humid. sensor, cap.	Dewpoint calculated
Meas. range	-20 to +70 °C	-40 to +120 °C	0 to +100 %RH	-40 to +70 °C td
Accuracy ±1 digit	±0.5 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (remaining range)	±2 %RH	
Resolution	0.1 °C	0.1 °C	0.1 %RH	0.1% of mv

Oper. temp.	-20 to +70 °C	Battery life: 5 years with a measuring rate of 15 min (-10 to +50°C) Measuring cycle: 2 s to 24 h Software: Microsoft Windows 95b / 98 / ME / NT4-Sp4 / 2000 / XP
Storage temp.	-40 to +85 °C	
Battery type	Lithium battery	
Protection class	IP54	
Memory	48000	
Weight	130 g	
Dimensions	103 x 64 x 33 mm	
Warranty	2 years	