testo

Professional data logger for humidity and temp. with ext. probe socket

External probes

Display/Prints

Battery: 5 years

ABS casing

±2 % of reading

48,000 readings

IP54

designed for **21 CFR 11**

%RH

°C

°C td

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

Additional surface, immersion and air probes can be attached to the data logger e.g. for uninterrupted measurement of the dew point distance.

Efficient measurement of production and storage ambient conditions, to assure stable quality

- ● **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**

testo 177-H1

Intern. %RH, °C, °C td + extern. °C

testo 177-H1, humidity/temperature logger, 4 channels, with internal sensors and additional external temperature probe socket, wall holder and calibration protocol

Part no.   0563 1775

Collect data on-site with the testo 580 data collector, download and analyse on PC/Notebook.

Suitable probes at a glance

Description	Illustration	Meas. range	Accuracy	t99	Conn. Cable/Length	Part no.
Stub probe, IP 54	35 mm / Ø 3 mm	-20... +70 °C	±0.2 °C (-20... +40 °C)	15 s		0628 7510
Mounting probe with aluminium sleeve, IP 65	40 mm / Ø 6 mm	-30... +90 °C	±0.2 °C (0... +70 °C) ±0.5 °C (-20... -0.1 °C) ±0.5 °C (+70.1... +90 °C)	60 s	Fixed cable 2.4 m	0628 7503 *
Accurate imm./pen. probe, 6m cable, IP 67	40 mm / Ø 3 mm / Ø 3 mm	-35... +80 °C	±0.2 °C (-25... +74.9 °C) ±0.4 °C (-35... -25.1 °C) ±0.4 °C (+75... +80 °C)	5 s	Fixed cable 6 m	0610 1725 *
Screw-in probes for measurements at hard-to-access points, M6 thread, IP 54		-50... +80 °C	±0.5% of mv (+100... +150 °C)	70 s	Fixed cable 2 m	0628 7514 *
Probe for surface measurement	40 mm / 8 x 8 mm	-50... +80 °C	±0.2 °C (0... +70 °C)	150 s	Fixed cable 2 m	0628 7516 *
Wall surface temperature probe, e.g. to prove damage in building material		-50... +80 °C	±0.2 °C (0... +70 °C)	20 s	Fixed cable 3 m	0628 7507
Pipe probe with Velcro, for pipe diameter of max. 75 mm	300 mm / 30 mm	-50... +70 °C	±0.2 °C (-25... +70 °C) ±0.4 °C (-50... -25.1 °C)		Fixed cable 1.5 m	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 / 15 mm / Ø 3 mm	-50... +150 °C	±0.5% of mv (+100... +150 °C) ±0.2 °C (-25... +74.9 °C) ±0.4 °C (-50... -25.1 °C) ±0.4 °C (+75... +99.9 °C)	8 s	Fixed cable 1.5 m	0613 2211 *
Robust food penetration probe with special handle, IP 65, reinforced cable (PUR) and reinforced protection against buckling	115 mm / Ø 5 mm / 30 mm / Ø 3.5 mm	-50... +150 °C	±0.5% of mv (+100... +150 °C) ±0.2 °C (-25... +74.9 °C) ±0.4 °C (-50... -25.1 °C) ±0.4 °C (+75... +99.9 °C)	7 s	Fixed cable 1.4 m	0613 2411 *
Frozen food probe, corkscrew design	110 mm / Ø 8 mm / 30 mm / Ø 4 mm	-50... +140 °C	±0.5% of mv (+100... +140 °C) ±0.2 °C (-25... +74.9 °C) ±0.4 °C (-50... -25.1 °C) ±0.4 °C (+75... +99.9 °C)	20 s	Plug-in cable 1.5 m	0613 3211 *
Robust, affordable air probe to check storage temperatures	110 mm / Ø 4 mm	-50... +150 °C	±0.5% of mv (+100... +150 °C) ±0.2 °C (-25... +74.9 °C) ±0.4 °C (-50... -25.1 °C) ±0.4 °C (+75... +99.9 °C)	60 s	Fixed cable 1.2 m	0613 1711 *

The specified seal class of the data loggers is achieved with these probes.   * Probe tested to EN 12830 for suitability in the transport and storage sectors

Practical accessories and recommended sets

Wall holder, for quick attachment of logger to wall

Included

Lock for wall holder
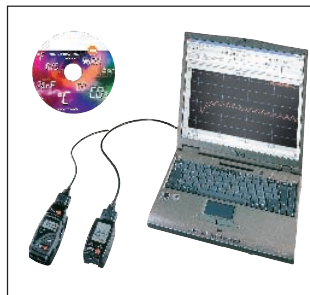Part no.   0554 1755

testo 575 fast printer, incl. 1 roll of thermal paper and batteries

Part no.   0554 1775

testo 580 data collector including readout holders

Part no.   0554 1778

ComSoft 3 - Basic Set for testo 177, Basic software

Part no.   0554 1774

testo 177-H1, Standard Set for logging ambient air conditions

testo 177-H1, humidity/temperature logger, 4 channels, wall holder and calibration protocol

Lock for wall holder

testo 575 fast printer

ComSoft 3 - Basic Set for testo 177, Basic software incl. interface, desk-top holder, PC connection cable

testo 177-H1, Professional Set for dew point difference measurement

testo 177-H1, humidity/temperature logger, 4 channels, wall holder and calibration protocol
Lock for wall holder
Wall surface temperature probe
testo 575 fast printer
ComSoft 3 - Professional with data management
Interface incl. desk-top holder, PC connection cable

%RH

°C

°C td

Ordering data for Accessories	Part no.
testo 575 fast printer, incl. 1 roll of thermal paper and batteries Infrared thermal line printer with graph 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
testo 580 data collector including readout holders for testo 175/177 data loggers	0554 1778
ComSoft 3 - Basic Set for testo 177, Basic software With diagram and table function, interface incl. desk-top holder, PC connection cable	0554 1774
ComSoft 3 - Professional with data management Incl. database, analysis and graphics function, data analysis, trend curve (without interface)	0554 0830
NEW ComSoft 3 - For requirements in accordance with CFR 21 Part 11 Incl. database, analysis and graphics function, data analysis, trend curve	0554 0821
Interface for testo 175/177 incl. desk-top holders, PC connection cable (please also order for ComSoft 3 - Professional)	0554 1757
Lock for wall holder for testo 175/177 data loggers	0554 1755
Battery, 3.6 V/1.9 Ah 1AA	0515 0177
Transport case for up to 5 testo 177 data loggers, testo 575 printer, testo 580 data collector and accessories	0516 1770
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	0554 0660
ISO calibration certificate/Humidity Humidity data logger; calibration points 11.3%RH and 75.3%RH at +25°C; per channel/instrument	0520 0076
DKD calibration certificate/Humidity Humidity data logger; cal. points 11.3%RH and 75.3%RH at +25°C; per channel/instrument	0520 0246
ISO calibration certificate/Temperature Temperature data logger; calibration points -18°C; 0°C; +60°C per chan./instr.	0520 0151

Technical data

Chann. intern	3
Meas. range	0... +100 %RH -20... +70 °C -40... +70 °C td
Accuracy ± 1 digit	±2 %RH (0... +100 %RH) ±0.5 °C (-20... +70 °C)
Resolution	0.1 %RH (0... +100 %RH) 0.1 °C (-20... +70 °C) 0.1% of mv (-40... +70 °C td)

Chann. external (var.)	1
Meas. range	-40... +120 °C
Accuracy ± 1 digit	±0.2 °C (-25... +70 °C) ±0.4 °C (-40... -25.1 °C) ±0.4 °C (+70.1... +120 °C)
Resolution	0.1 °C (-40... +120 °C)

Memory	48000
Oper. temp.	-20... +70 °C
Storage temp.	-40... +85 °C
Battery type	Lithium battery
Weight	130 g
Dimensions	103x64x33 mm
Warranty	2 years

Battery life: 5 years with a measuring cycle of 15 min (-10 to +50°C)

Measuring cycle: 2 s to 24 h

Software: Microsoft Windows 95b / 98 /ME / NT4-Sp4 / 2000 / XP