Committing to the future

testo 6631

Humidity transmitter for critical ambient conditions in greenhouses

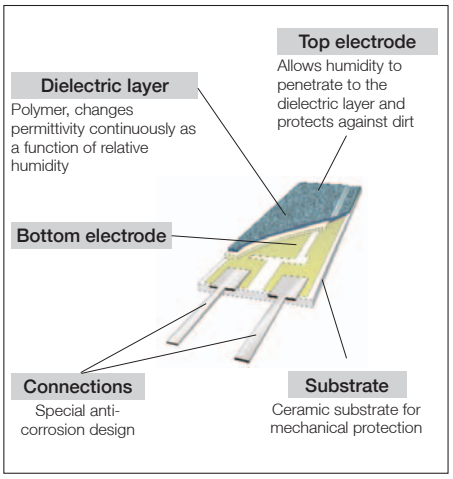
NEW!

Stable greenhouse conditions with testo 6631

The testo 6631 greenhouse humidity transmitter was developed specially for monitoring critical ambient conditions in greenhouses, e.g. for research purposes. Precise and reliable humidity measurement is indispensible in these applications, in order to avoid costs caused by failed experiments.

Process security and system availability, among the most important factors in experimental plants, are supported by a number of properties of the testo 6631 greenhouse humidity transmitter:

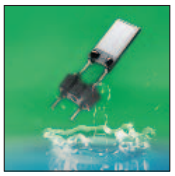
- Long-term stability and reliability thanks to precise Testo humidity sensor
- Integrated ventilator allows targeted flow impact onto sensor and helps determine mean conditions within the greenhouse cells.
- Time savings in commissioning and maintenance thanks to
  – parameterization, adjustment and analysis software (P2A)
  – Fast and easy ventilator replacement thanks to ventilator drawer assembly and plug-in cable
  – Exchange of the sensor filter thanks to easily accessible service opening.
- Optimum concept for fast implementation of adjustments and calibrations (1, 2-point as well as analog adjustment)
- Optional two-line display



The Testo humidity sensor: The heart of the high-quality humidity transmitter

For years, Testo has been the first choice when it comes to high-quality humidity transmitters for critical ambient conditions. The sensor and signal processing concept has been completely revised based on our years of experience

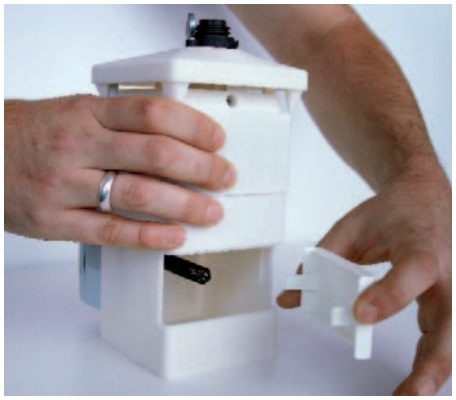
Plant operators, and also constructors, have recognized: Without long-term stability, not only undesired ambient conditions are the result. Operating costs have been proven to increase when humidity measurement is no longer under control.

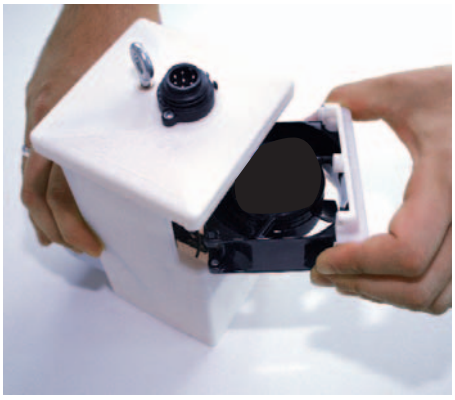


Long-term stable, condensation-proof and traceable according to international humidity standards (ILAC / PTB / NIST etc.): The Testo humidity sensor

The high level of long-term stability was examined in the course of a 5-year inter-laboratory test by different international calibration laboratories (PTB, CETITAT, NIST etc.) .

You are on the safe side thanks to the acuracy, stabilty and reliability of the Testo humidity transmitter!

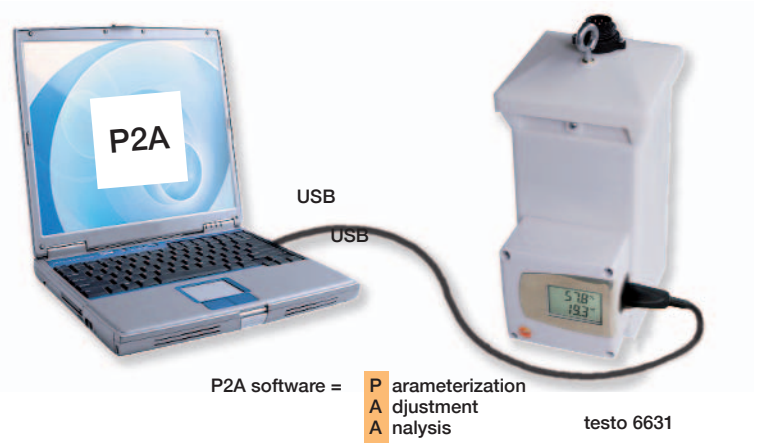


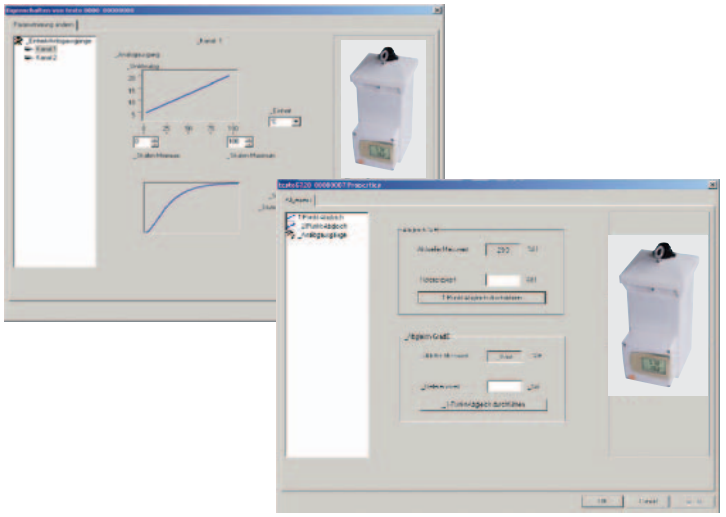


Designed to be practical

- Easily accessible service flap for exchanging and cleaning the filter cap
- Fast ventilator replacement thanks to ventilator drawer assembly
- Protection of electronics and sensor from humidity influences (such as sprinkler irrigation).

Your advantages with testo 6631: an overview





Parameterization, adjustment and analysis software (P2A software): Optimum procedures and time-savings in commissioning

testo 6631 is delivered ready to use. For professional application, the following functions are available via an easy-to-use software:

- Parameterization of unit and scale
- Adjustment (1-point, 2-point, analog adjustment), s. below
- Reset to factory settings
- Analog output test
- Min./max. value call-up
- Parameterization and adjustment history (all events in the P2A software are registered in the PC)
- Serial number and Firmware version

Whether at the measuring point, in the office or in the laboratory: Your notebook or your PC communicates with the testo 6631 via the external interface and the USB adapter (supplied with the P2A software: 0554 6020).

Complete parameter files can be stored in the PC. The parameterization of spare transmitters or similar measuring points is thus possible with minimal time expenditure.

World innovation: Adjustment of the entire signal chain

The adjustment of the entire signal chain is a world innovation in this price class. Using a precise multimeter, analog adjustment helps your measurement process remain continuously stable over the long-term – from the Testo humidity sensor to the analog output of the transmitter.

Adjustment on-site: Fast and precise via the external interface!

Of interest not only to the system's operators, but increasingly also to its constructors: Which follow-on costs arise as a result of this transmitter?

Good news from Testo: The testo 650 or testo 400 reference instruments can be connected using the adapter 0554 6022 via the external interface – without opening the transmitter. A few operating steps in the testo 400 or testo 650 menu suffice to adjust the testo 6631 transmitter. Conclusion: Saved time and lower operating costs!

Technical data / Order codes

Technical data testo 6631

Sensor	Testo humidity sensor, plugged. Exchangeable by customer, requires subsequent 2-point adjustment	**Storage temperature**	-20 to 70 °C
		Housing/Weight	Plastic, white, UV safe, high chemical resistance; 00g
Meas. range			
Humidity	0 to 100 %RH (Not for high humidity processes)	**Display**	2-line LCD with plain text line, optional
Temperature	-10 to 60 °C (Observe operating temperature)	**Protection class**	IP65
Accuracy		**Standards**	EMC DIN EN 61000-6-2 (Immunity) and DIN EN 61000-6-3 (Emission)
Humidity	±2,5 %RH (0 to 90%); 4,0 %RH (90–100%)		
Temperature	0,5 °C	**Operation**	via P2A software (cf. page 3)
Reaction time	with sintered cap and ventilator running	Ventilator	
Humidity	max. 5 s (63% time)	Max. volume flow	46,80 m³/h / 13 l/s
Temperature	max. 20 s (63% time)	Unobstructed blowing noise	30 dB(A)
Analog output	2	Life expectancy	37,500 h (40 °C)
Temperature	4 to 20 mA (2- or 4-wire)	Ventilator housing / vane	Metal / metal
Humidity	4 to 20 mA (2- or 4-wire)	Bearing system	Slide bearing
Measuring rate	1/s	Service	Ventilator plug-mounted in base, in order to allow replacement in case of service.
Power supply	20 to 30 V		
Application temperature	0 to 50 °C		

Ordering data Accessories

Ordering data Accessories	Part no.	
P2A software (parameterization, adjustment and analysis software for PC), incl. USB cable (PC side) to the Mini-DIN interface (instrument)	0554 6020	
Sintered stainless steel filter, pore size 100 µm, sensor protection for dusty atmospheres or higher flow velocities	0554 0647	
Sintered Teflon filter, Ø 12 mm, for corrosive media	0554 0756	
Adjustment adapter (for 1-point adjustment with testo 400 or testo 650)	0554 6022	
Mains unit (top-hat rail mounting) 90 to 264 VAC/24 VDC (2.5 A)	0554 1749	
Process display testo 54-2 AC, two relay outputs (to 250 VAC / 300 VDC, 3 A), mains supply 90 to 230 VAC	5400 7553	
Process display testo 54-7 AC, two relay outputs (to 250 VAC / 300 VDC, 3 A), mains supply 90 to 260 VAC, with RS485 output for online monitoring and with totalizer display	5400 7555	
ISO calibration certificate humidity , Humidity data logger; calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument	0520 0076	

Order code testo 6631

0555 6631 Bxx Cxx Fxx Gxx Mxx Kxx

B01 4 to 20 mA (2-wire) with separate ventilator supply
B06 4 to 20 mA (4-wire) with integrated ventilator supply

C00 without display
C01 with display

F01 Relative humidity (%RH)

G02 Temperature (°C)
G03 Temperature (°F)

M01 Sintered stainless steel filter
M03 Sintered Teflon

K01 IM German-English
K02 IM French-English
K03 IM Spanish-English
K04 IM Italian-English
K05 IM Dutch-English
K06 IM Japanese-English
K07 IM Chinese-English

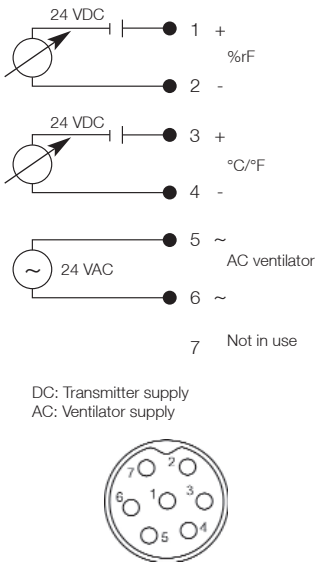
Ordering example testo 6631
4 to 20 mA (2-wire)
with display
%RH / °C
Sintered Teflon filter
Instruction manual in German + English

→ **0555 6631 B01 / C01 / F01 / G02 / M03 / K04**

Electrical connections

B01
2-wire transmitter
Plug manufacturer Euchner

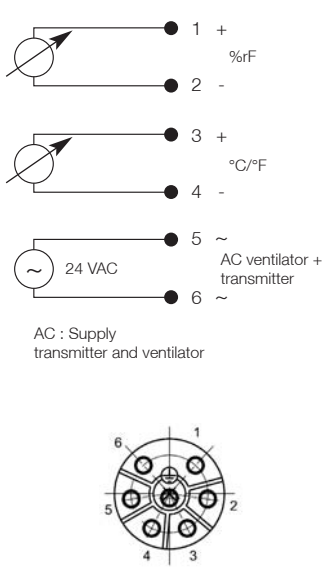
	Pin socket	Socket plug
Type	SD 7K	BS 7K



DC: Transmitter supply
AC: Ventilator supply

B06
4-wire transmitter
Plug manufacturer Tuchel-Amphenol

Pin socket	Socket plug
Eco mate Instrument plug	Eco mate Cable socket



AC : Supply
transmitter and ventilator

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