

Room humidity transmitter with display 4-20 mA

Article number: 801110 2022

Our room humidity transmitter with a current output of 4-20 mA and display can be easily installed using screws. This device measures the humidity and optionally the temperature. The room humidity transmitter with 4-20 mA display is ideal for the precise measurement of humidity and temperature in indoor areas such as offices, supermarkets and schools. The two-line display shows you either the humidity or the temperature in large format.



Supply and output	
Output	4 - 20 mA
Power consumption	< 1,1 VA / 24 V DC
Voltage supply	15 - 36 V DC
Connection type	See connection diagrams

General information	
Load	$R_a \text{ (Ohm)} = (U_b - 14 \text{ V}) / 0,02 \text{ A}$
Sensors	Digital humidity sensor, optionally with integrated temperature sensor

Humidity	
Measuring element humidity	Digital humidity sensor (low hysteresis, high long-term stability)
Measuring range humidity	0 % RH to 100 % RH
Output humidity	4-20 mA
Accuracy humidity	$\pm 2.0 \%$ (20 % RH to 80 % RH) at +25 °C, otherwise $\pm 3.0 \%$
Long-term stability	$\pm 1 \%$ / year

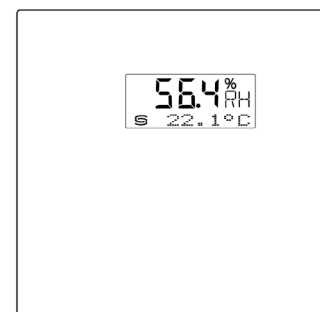
Temperature	
Measuring element Temperature	Pt1000, DIN EN 60751, Class B
Measuring range temperature	0 °C to +50 °C
Output temperature	4 - 20 mA
Accuracy temperature	typically $\pm 0.2 \text{ K}$ at +25 °C

Ambient conditions	
Storage temperature	-25 °C to +50 °C
Operating temperature	-5 °C to +55 °C
Permissible air humidity	0 % RH to 95 % RH (without condensation)

Certifications / Standards	
Protection class	III (according to EN 60 730)
Protection type	IP 30 according to EN 60 529
Standards	CE conformity electromagnetic compatibility according to EN 61326 according to EMC Directive 2014/ 30/ EU

Configurable options

M - Measured variable



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🌐 Please find our whole temperature probe and transmitter portfolio in our webshop at: www.testo-sensor.shop

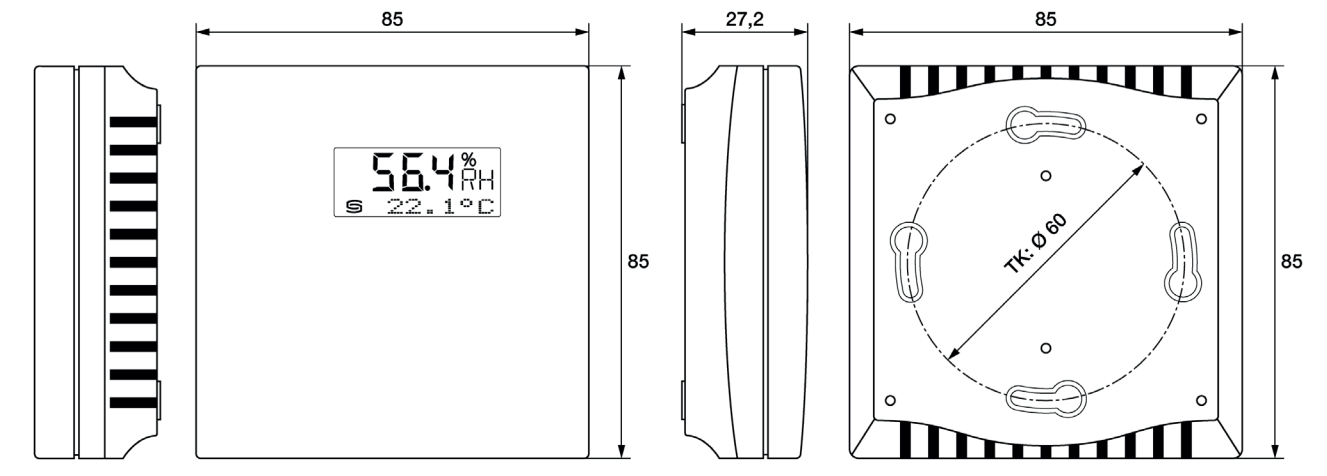
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Housing		Drilling template
Material	Plastic Material ABS	
Dimensions (L/W/H) (mm)	85 x 85 x 27	
Color	Pure white (similar to RAL 9010)	
Electrical connection	0.14 - 1.5 mm ² , via screw terminals on circuit board	
Display		
Two lines, lighted, For display of actual temperature and self-diagnostics		
Cut-out (B/H) (mm)	ca. 36 x 15	

Your order code		M - Measured variable		Delivery and Packing	
Article number	Measured variable	code	Measured variable		
801110 2022	---	M1	% RH (Relative humidity)	Packing	individually packed in cardboard box
		M2	°C + % RH (Temperature and relative humidity)	Delivery	Transmitter, Operating instructions

Technical drawing	
Configurable options M - Measured variable	All dimensions in mm



MW / KS / 05.09.2024

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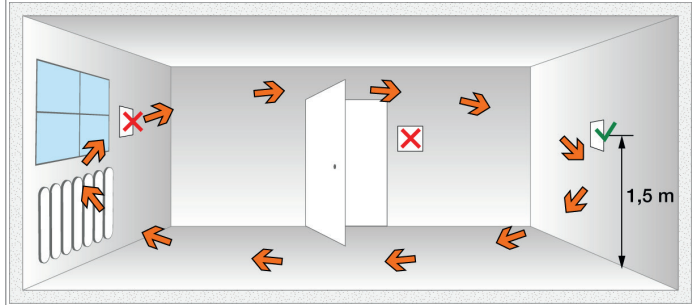
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Important assembly instructions

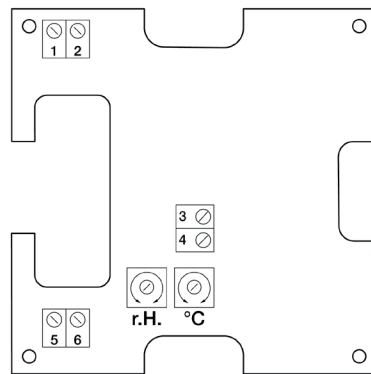
For precise measurement of room temperature and humidity, it is crucial to take into account both the temperature dynamics and the humidity dynamics in the room. Air circulation should only take place through the openings in the housing cover. Therefore, the transmitter should be installed away from objects or obstacles that could block air movement. Also avoid uncontrolled air currents (draughts) by installing the transmitter near doors or windows. The transmitter should also not be installed on the colder outside wall to prevent measurement inaccuracies.

The device should only be used in pollutant-free, non-condensing air (< 95 % RH).



Circuit diagrams and assignment (Please also read the operating instructions before connecting the transmitter)

Wiring diagram



Assignment % RH	
1	= +UB 24V DC
2	= Output Humidity 4-20mA
3	= free
4	= UB GND (for display lighting)
Assignment °C + % RH	
1	= +UB 24V DC
2	= Output Humidity 4-20mA
3	= Output temperature 4 -20mA
4	= UB GND (for display lighting)
5	= free
6	= free

The humidity path must be connected for the current version! Please refer to the operating instructions for the correct connection.

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