HUMIDITY TRANSDUCER





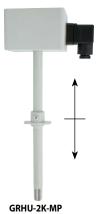
GRHU-1R-MP Probe length: 50 mm

Wall version Standard type:





Wall / channel version Standard type: Probe length: 220 mm



Channel version Standard type: Probe length: 220 mm



GRHU-SHUT-MP absorption hat / weather protection



GRHU-KABEL-MP wall version with cable and high humidity sensor

GRHU-1R-MP Art. no. 602938

GRHU-1K-MP Art. no. 602941

GRHU-2K-MP Art. no. 602943

GRHU-SHUT-MP

Art. no. 603953

GRHU-KABEL-MP

Art. no. 608043

General:

The humidity transducer offers even greater possibilities to compensate the special sensor characteristics due to the newest microprocessor technology. Regarding precision, temperature stability and functionality a new dimension is entered. The transducer can be used for almost all applications due to the different types (e.g. wall or channel mount, with separated probe or with heat absorption hat) and the wide temperature range (electronic: -25 °C ... +50 °C; sensor: -40 ... +120 °C).

Specifications:

Measuring ranges:

Humidity: $0.0 \dots 100.0 \%$ RH (temperature compensated) -40.0 ... +120.0 °C or -40.0 ... +248 °F Temperature:

Recommended humidity 20,0 ... 80,0 % RH (standard)

5.0 ... 95.0 % RH (with option high humidtiy) range:

with option UNI an alternative display unit can be shown **Display options:**

instead of the humidity measuring value. The unit selection

will be done via keyboard.

Wet bulb temperature: -27.0 ... +60.0 °C Dewpoint temperature: -40.0 ... +60.0 °C **Enthalpy:** -25.0 ... 999.9 kJ/kg Atmospheric humidity: 0.0 ... 640.0 g/kg Absolute humidity: 0.0 ... 200.0 g/m³ Accuracy: (at 25 °C and in recommended range)

Display: humidity: ±2.5 % RH

temperature: ±0.4 % of measuring value ±0.2 °C

Output signal: ±0.2 % FS Temperature compensation: automatically

12 ... 30 VDC or 18 ... 30 VDC (for output: 0 ... 10 V) Auxiliary energy:

Reverse voltage protection: 50 V, permanently

Perm. impedance (at 4 ... 20 mA): RA $[\Omega] \le (Uv[V] - 12V) / 0.02 A$

Permissible load (at 0 ... 1(10)V): RL $[\Omega] > 3000 \Omega$

Display: approx. 10 mm high, 4-digit LCD-display,

alternating humidity and temperature display

Working temperature: -25 ... +50°C (electronics)

Sensor head and tube: -40 ... +100 °C - for short time up to +120 °C

Storage temperature:

Relative humidity 0 ... 95 % RH (non-condensing); If there is a risk of condensation due to temperature changes, please use our encapsulated (electronic):

or lacquered types (optionally available).

ABS (IP65) Housing:

Sensor tube: tube 14 mm Ø, with screw-type protection cap

Design type KABEL: with separated sensor tube, sensor head (Ø14 x 68 mm)

connected to device via 1 m teflon cable. Inclusive option

high-humidty sensor

Design type SHUT: Heat protective shield / weather protective shield;

Application: for highly precise outdoor measurements,

strong solar radiation and rain;

Design: Weather protective shield made of plastic, Ø 110 mm, heights approx. 140 mm. Wall mounting panel made of stainless steel with 3 mounting holes for screws with maximal shaft diameter 5 mm. Largest overhang 160 mm.

elbow-type plug acc. to EN 175301-803/A (IP65) Electric connection:

4 housing holes for wall mounting or by means of plastic Mounting:

tube clamps for duct mounting

Functions: min-/max-value memory, offset and slope adjustable, output

signal scaleable

Accessories and spare parts:

Art. no. 610765

Mounting clip for VA-angle at SHUT



GRHU - 1 - 2 - 3 - 4 - 5 - 6

Greisinger		
1.	Version	
	1R-MP	Wall / room version
	1K-MP	Wall /channel version
	2K-MP	Channel version
	KABEL-MP	Wall version with cable, and high humidity sensor, Incl. HO
	SHUT-MP	Radiation cap / weather protection incl. "-HO" and "-LACK"
2.	Fitting length EL	
		No installation length, With KABEL / SHUT
	050	50 mm, Standard with 1R
	220	220 mm, Standard with 1K / 2K
	300	300 mm
	500	500 mm
3.	Output signal	
		4 20 mA
	AV01	Analogue output 0 1 V
	AV10	Analogue output 0 10 V, 3rd output not possible
4.	Sensor	
		Standard sensor
	НО	High humidity sensor
	НО	High humidity sensor, free of charge
5.	Option	
	UNI	Adjustable humidity display instead of the standard humidity values
	LACK	Coated PC Board
6.	Cable length	
		1 m (standard)
	2M	2 m