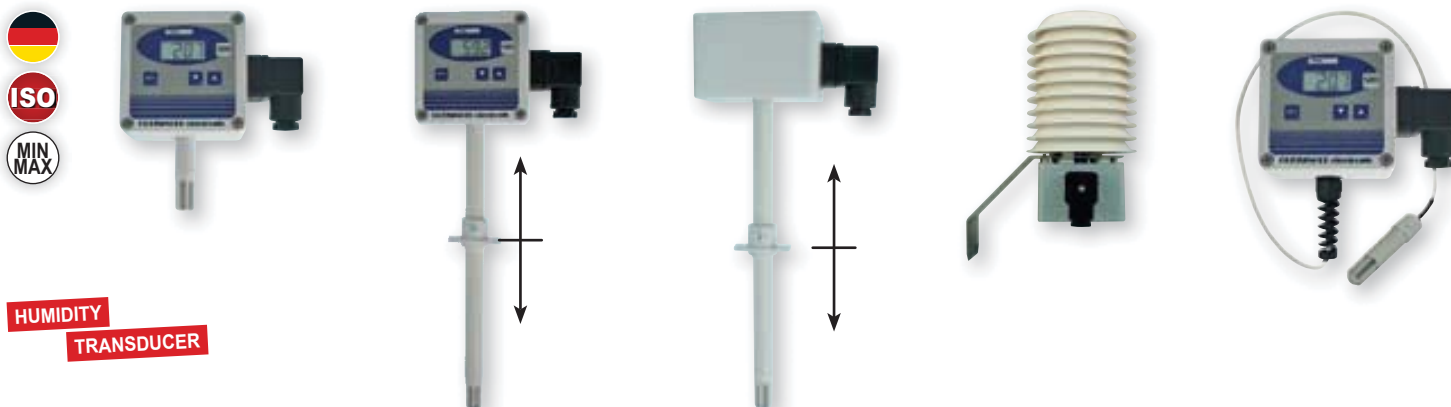


Humidity transducer



**HUMIDITY  
TRANSDUCER**

**GRHU-1R-MP**  
Wall version

Standard version:  
Probe length: 50 mm

**GRHU-1K-MP**  
Wall / channel version

Standard version:  
Probe length: 220 mm

**GRHU-2K-MP**  
Channel version

Standard version:  
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 ... 100.0 % RH (temperature compensated)  
**Temperature:** -40.0 ... 120.0 °C or -40,0 ... 248 °F

**Recommended humidity range:** 20.0 ... 80.0 % RH (standard)  
5.0 ... 95.0 % RH (with option high humidity)

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

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

**Reverse voltage protection:** 50 V, permanently

**Perm. impedance (at 4 ... 20 mA):**  $R_x [\Omega] \leq (U_v [V] - 12V) / 0.02 A$

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

**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:** -25 ... +70 °C

<b>Relative humidity (electronic):</b>	0 ... 95 % RH (non-condensing); If there is a risk of condensation due to temperature changes, please use our encapsulated or lacquered types (optionally available).
<b>Housing:</b>	ABS (IP65)
<b>Sensor tube:</b>	tube 14 mm Ø, with screw-type protection cap
<b>Design type KABEL:</b>	with separated sensor tube, sensor head (Ø14x 68 mm) connected to device via 1 m teflon cable. Inclusive option high-humidity sensor
<b>Design type SHUT:</b>	Heat protective shield / weather protective shield <b>Application:</b> for highly precise outdoor measurements, strong solar radiation and rain <b>Design:</b> 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.
<b>Electric connection:</b>	elbow-type plug acc. to EN 175301-803/A (IP65)
<b>Mounting:</b>	4 housing holes for wall mounting or by means of plastic tube clamps for duct mounting
<b>Functions:</b>	min-/max-value memory, offset and slope adjustable, output signal scaleable

GRHU - [1] - [2] - [3] - [4] - [5]

Greisinger		Grundpreis
1.	Design type	
	1R-MP	Surface design
	1K-MP	Surface / duct design
	2K-MP	Duct design
	KABEL-MP	Surface design with cable and high humidity sensor
	SHUT-MP	Weather protective shield / heat-protective hat
2.	Options Sensor	
	...	Standard sensor
	-HO	High humidity sensor
3.	Fitting length EL	
	...	No installation length
	-050	50 mm
	-220	220 mm
	-300	300 mm
	-400	400 mm
	-500	500 mm
4.	Output signal	
	...	4...20 mA
	-AV1	Analog output 0-10 V
	-AV01	Analog output 0-1 V
	-AV10G	0-10V (3 or. 4 pins)
5.	Option	
	-LACK	Encapsulated PC Board
	-UNI	Selectable humidity display instead of the standard humidity values