

HUMIDITY- AND TEMPERATURE TRANSDUCER



2-CHANNEL HUMIDITY/  
TEMPERATURE TRANSDUCER

**GHTU-1R-MP**  
Wall version  
Standard type:  
Probe length: 50 mm

**GHTU-1K-MP**  
Wall / channel version  
Standard type:  
Probe length: 220 mm

**GHTU-2K-MP**  
Channel version  
Standard type:  
Probe length: 220 mm

**GHTU-SHUT-MP**  
absorption hat /  
weather protection

**GHTU-KABEL-MP**  
wall version with  
cable and high  
humidity sensor

**GHTU-1R-MP**  
Art. no. 602585

**GHTU-1K-MP**  
Art. no. 602587

**GHTU-2K-MP**  
Art. no. 602592

**GHTU-SHUT-MP**  
Art. no. 603896

**GHTU-KABEL-MP**  
Art. no. 604436

**General:**

The humidity & temperature 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), 2 standard signal outputs.

**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/m<sup>3</sup>

**Accuracy: (at 25 °C and in recommended range)**

**Display:** humidity: ±2.5 % RH  
temperature: ±0.4 % of measuring value ±0.2 °C

**Output signal:** humidity ±0.2 % FS, temperature ±0.2 % FS

**Temperature compensation:** automatically

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

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

**Perm. impedance (at 4 ... 20 mA):** RA [Ω] ≤ (Uv [V] - 12 V) / 0.02 A

**Permissible load (at 0 ... 1(10)V):** RL [Ω] > 3000 Ω

**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

**Relative humidity (electronic):** 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).

**Housing:** ABS (IP65)

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

**Design type KABEL:** with separated sensor tube, sensor head (Ø 14 x 68 mm) connected to device via 1 m teflon cable. Inclusive option high-humidity 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.

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

**Mounting:** 4 housing holes for wall mounting or by means of plastic tube clamps for duct mounting

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

**Accessories and spare parts:**

**VAW**

Art. no. 610765

Mounting clip for VA-angle at SHUT



GHTU - 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
	400 400 mm
	500 500 mm
3.	Output signal
	2 x 4 ... 20 mA, galvanically isolated
	AV01 2 x 0 ... 1 V
	AV10 2 x 0 ... 10 V
	AV01G 2 x 0 ... 1 V, galvanically isolated, 2 angle connector
	AV10G 2 x 0 ... 10 V, galvanically isolated, 2 angle connector
4.	Sensor
	Standard sensor, Standard with 1R, 1K and 2K. Recommended measuring range: 20 ... 80%
	HO High humidity sensor, Recommended measuring range: 5 ... 95%
5.	Option
	UNI Adjustable humidity display instead of the standard humidity values
	LACK Coated PC Board
6.	Cable length
	1 m (standard)