

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/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: humidity ±0.2 % FS, temperature ±0.2 % FS
automatically

Temperature compensation:

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) |