## HUMIDITY & TEMPERATURE TRANSDUCER



# 2-CHANNEL HUMIDITY/-**TEMPERATURE** TRANSDUCER

GHTU-1R-MP Wall version

Standard version: Probe length: 50 mm



GHTU-1K-MP Wall / channel version

Standard version: Probe length: 220 mm



GHTU-2K-MP **Channel version** 

Standard version: 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

Product-ID: 602585

GHTU-1K-MP

Product-ID: 602587

**GHTU-2K-MP** Product-ID: 602592

GHTU-SHUT-MP Product-ID: 603896

## GHTU-KABEL-MP

Product-ID: 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.

# Housing: Sensor tube: Design type Kabel:

ABS (IP65)

tube 14 mm Ø, with screw-type protection cap with separated sensor tube, sensor head (Ø14x 68 mm) connected to device via 1 m teflon cable.

Inclusive option high-humidty sensor

Design type Shut: heat absorption hat / weather protection shield

**Application:** The heat absorption hat is especially designed for measurements in the open air. The measuring results that can be achieved will not be influenced by either sun or rain. Design: Heat absorption hat made of plastic. Ø 110 mm. approx. 140 mm high. Additionally equipped with a stainless steel base for wall mounting, with 3 fixing holes for screws with a max. shaft Ø of 5 mm. Large projection approx. 160 mm.

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

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

clamps for duct mounting

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

output signal scaleable

### Ordering code:

GHTU - 1 - 2 - 3 - 4 - 5 - 6 -GE

| Gre | isinger           |  |   |
|-----|-------------------|--|---|
|     |                   |  |   |
| 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 incl. Option LACK and HO |   |
| 2.  | Fitting length EL |  |   |
|     | -050              | 50 mm (Standard for 1R)  |   |
|     | -220              | 220 mm (Standard for 1K/2K)  |   |
|     | -300              | 300 mm   |   |
|     | -400              | 400 mm   |   |
|     | -500              | 500 mm   |   |
| 3.  | Output signal     |  |   |
|     |                   | 4-20 mA (Standard)   |   |
|     | -AV01             | 0-1 V  |   |
|     | -AV01G            | 0-1 V (galvanically isolated)  |   |
|     | -AV10             | 0-10 V   |   |
|     | -AV10G            | 0-10 V (galvanically isolated)   |   |
| 4.  | Options Sensor    |  |   |
|     | -00               | Standard sensor  |   |
|     | -HO               | High humidity sensor   |   |
| 5.  | Option            |  |   |
|     | -LACK             | Encapsulated PC Board  |   |
| 6.  | Option            |  |   |
|     | -UNI              | Selectable humidity display instead of the standard humidity values      |   |

# **Specifications:**

Measuring ranges:

Humidity 0.0 ... 100.0 % RH (temperature compensated)

Temperature: -40.0 ... +120.0 °C or -40,0 ... +248 °F

Recommended 20.0 ... 80.0 % RH (standard)

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

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 -40.0 ... +60.0 °C Dewpoint temperature 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  $\pm 0.2$  % FS, temperature  $\pm 0.2$  % FS

Temperature automatically compensation:

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

Reverse voltage 50 V, permanently

protection: **Perm. impedance (at 4-20 mA):**  $R_A [\Omega] \le (U_V [V] - 12V) / 0.02 A$ 

Permissible load (at 0-1(10)V):  $R_1[\Omega] > 3000 \Omega$ 

approx. 10 mm high, 4-digit LCD-display, Display: alternating humidity and temperature display

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

Sensor head and tube:  $-40 \dots +100 \,^{\circ}\text{C}$  - for short time up to  $120 \,^{\circ}\text{C}$ 

Storage temperature: -25 ... +70 °C

Relative humidity 0 ... 95 % RH (non-condensing); If there is a risk of condensa-(electronic): tion due to temperature changes, please use our encapsulated or lacquered types (optionally available).