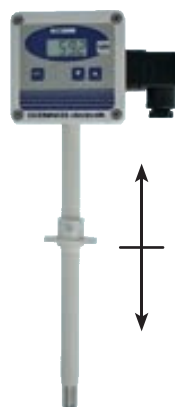
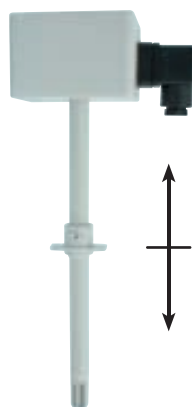


## HUMIDITY &amp; TEMPERATURE TRANSDUCER

INSTRUFIBER

Fibra Óptica Cabo Rede Instrumentação Energia Ferramenta

2-CHANNEL HUMIDITY/-  
TEMPERATURE  
TRANSDUCERGHTU-1R-MP  
Wall versionStandard version:  
Probe length: 50 mmGHTU-1K-MP  
Wall / channel versionStandard version:  
Probe length: 220 mmGHTU-2K-MP  
Channel versionStandard version:  
Probe length: 220 mmGHTU-SHUT-MP  
absorption hat /  
weather protectionGHTU-KABEL-MP  
wall version with  
cable and high  
humidity sensor

## GHTU-1R-MP

## GHTU-1K-MP

Product-ID: 602587

## GHTU-2K-MP

Product-ID: 602592

## GHTU-SHUT-MP

## 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:                     | 0.0 ... 100.0 % RH (temperature compensated)                                                                                                    |
| Humidity:                   | -40.0 ... +120.0 °C or -40.0 ... +248 °F                                                                                                        |
| Temperature:                | 20.0 ... 80.0 % RH (standard)                                                                                                                   |
| Recommended humidity range: | 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<br>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 VDC or 18 ... 30 VDC (for output: 0-10 V)

Reverse voltage protection: 50 V, permanently

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

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 (Ø14x68 mm) connected to device via 1 m teflon cable. Inclusive option high-humidity 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)                                                                                                                                                                                        |
| 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                                                                                                                                                           |

## Ordering code:

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

| Greisinger  |                                                                          |
|-------------|--------------------------------------------------------------------------|
| 1.          | Design                                                                   |
| type        | 1R- Surface design                                                       |
| MP 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 -220   | 50 mm (Standard for 1R)                                                  |
| -300 -400   | 220 mm (Standard for 1K / 2K)                                            |
| -500 Output | 300 mm                                                                   |
| signal ...  | 400 mm                                                                   |
| AV01        | 500 mm                                                                   |
| 3.          | AV01G -                                                                  |
| AV10        | 4-20 mA (Standard)                                                       |
| AV10G       | 0-1 V                                                                    |
|             | 0-1 V (galvanically isolated)                                            |
|             | 0-10 V                                                                   |
|             | 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      |