

## CLIMATE MEASURING DEVICE – PRECISION HYGRO- / THERMO- / BAROMETER



## HIGHLIGHTS:

- alarm function with integrated buzzer
- PC interface
- additional display for further parameters, e.g. dew point temperature and absolute humidity
- precisely detects all environmental conditions in laboratories

**GFTB 200**

Art. no. 600161

Hygro-/Thermo-/Barometer

**General:**

The GFTB 200 is designed for measuring air pressure, air humidity and temperature within seconds. It reaches remarkable accuracy because of its high precision sensors. The dew point temperature monitoring with GFTB 200 provides efficient protection from moisture damage potentially caused by condensation water and therefore helps preventing mold infestation. The integrated alarm function can be used to acoustically remind the user to ventilate in order to optimally and efficiently use heating energy. The integrated interface together with the software EBS 20M (optional) allow the use as mobile weather station with additional long-term recording. The GFTB 200 can precisely and clearly display the air condition with parameters like wet bulb temperature, absolute humidity and moisture content of the air.

**Application:**

mobile weather station, housing space, indoor swimming pools, offices and production rooms, laboratories, storage rooms, museums, gallery, churches, cooling and climate technology, construction, building physics, loss assessment

**Specifications:****Measuring ranges**

<b>Temperature:</b>	-25.0 °C ... +70.0 °C
<b>Air humidity:</b>	0.0 ... 100.0 % RH (recommended range: 11 ... 90 % RH)
<b>Air pressure:</b>	10.0 ... 1100.0 mbar

**Calculated parameters**

<b>Dew point temperature Td:</b>	-40.0 ... +70.0 °C
<b>Wet bulb temperature Twb:</b>	-27.0 ... +70.0 °C
<b>Mixing ratio x:</b>	0.0 ... 280.0 g/kg
<b>Absolute humidity d:</b>	0.0 ... 200.0 g/m <sup>3</sup>

**Resolution:** 0.1 % RH; 0.1 °C or 0.1 °F, 0.1 mbar

**Accuracy: (±1 digit) (at nominal temperature = 25 °C)**

<b>Temperature:</b>	±0.5 % of m.v ±0.1 °C (Pt1000 DIN cl. AA)
<b>Air humidity:</b>	±2.5 % RH (at range 11 ... 90 %)
<b>Air pressure:</b>	±1.5 mbar (750 ... 1100 mbar)

**Messfühler**

<b>Temperature:</b>	Pt1000
<b>Air humidity:</b>	capacitive polymer humidity sensor
<b>Air pressure:</b>	piezo-resistive sensor hybrid

**Response time:** T<sub>90</sub> = 10 s

**Display:** 4½ -digit, approx. 11 mm high LCD-display with additional displays

**Pushbuttons:** 3 keys for ON/OFF, min/max value display, hold

**Nominal temperature:** 25 °C

**Working conditions**

<b>Electronics:</b>	-25 ... +70 °C; 0 ... 80 % RH (non-condensing)
<b>Sensors:</b>	-25 ... +70 °C; 0 ... 100 % RH

**Power supply:** 9 V battery

**Battery life:** approx. 400 d at 1 measuring / 60 s (mode SLOW)  
approx. 180 d at 1 measuring / s (mode FAST)

**Interface:**

Serial interface, via electrical isolated interface converter USB 3100 N (accessories) directly connectable to PC.

**Configurable display:**

choice between automatically displaying all values rotationally (cycle of 2 or 4 s) or manual selection, units not needed can be excluded

**Offset and Scale:**

digital offset- and scale adjustment of measurements

**Tendency indicator:**

Air pressure rising/falling (for barometer)

**Sea level correction:**

Barometric values can be converted to sea level (therefore the input of the current altitude is needed).

**Housing:**

made of impact-resistant ABS

**Dimensions:**

approx. 106 x 67 x 30 mm (H x W x D), additionally the sensor head at the front side, 35 mm long, Ø 14 mm; resulting total length 141 mm

**Weight:**

approx. 130 g incl. battery

**Scope of supply:**

Device, battery, calibration protocol, manual

**Variant:****GFTB 200-KIT**

Art. no. 600890

Hygro-/Thermo-/Barometer with USB-interface kit

- USB interface converter USB 3100 N
- multi channel software EBS20M to record all device units

**Accessories and spare parts:****GKK 252**

Art. no. 601056

Case (235 x 185 x 48 mm) with foam lining

**ISO-WPF4**

Art. no. 602543

ISO certificates humidity, for ISO9000ff (p.r.t. page 15)

**ISO-WPFD5**

Art. no. 602514

ISO certificates pressure, for ISO9000ff (p.r.t. page 15)



## HIGHLIGHTS:

- easy and fast search for thermal bridges
- targeting laser for precise location even of inaccessible areas
- audible alarm below dewpoint

**GFTB 200 SET**

Art. no. 600163

Measurement set GFTB200 incl. infrared thermometer GIM 530 MS and case GKK 3600

**General:**

The additional infrared thermometer contained in the GFTB 200 SET makes it easy to check mould-problem areas on walls etc. The wall can easily be scanned by means of the laser beam within very short time. When wall temperature falls below the critical dewpoint (this is, when the wall gets wet), the device alerts with an audible signal.

**Note:** for technical data for the infrared thermometer GIM530MS please refer to catalog page 36.