

Climate measuring device – Precision Hygro- / Thermo- / Barometer



FUNCTIONS:



**ALARM FUNCTION
WITH INTEGRATED BUZZER**

HIGHLIGHTS:

- air humidity, temperature and air pressure measurement
- additional display for further parameters, e.g. dew point temperature and absolute humidity
- min / max value memory
- very low power consumption (> 6500 operating hours)
- PC interface

GFTB 200

Digital-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:

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

Calculated parameters:

Dew point temperature Td:	-40.0 ... 70.0 °C
Wet bulb temperature Twb:	-27.0 ... 70.0 °C
mixing ratio x:	0.0 ... 280.0 g/kg
Absolute humidity d:	0.0 ... 200.0 g/m ³
Resolution:	0.1 % RH; 0.1 °C / 0.1 °F, 0.1 mbar

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

Temperature:	±0.5 % v.MW. ±0.1 °C (Pt1000 1/3 DIN B)
Air humidity:	±2.5 % RH (at range 11 ... 90 %)
Air pressure:	±1.5 mbar (750 ... 1100 mbar)

Sensors:

Temperature:	Pt1000
Air humidity:	capacitive polymer humidity sensor
Air pressure:	piezo-resistive sensor hybrid

Response time: T₉₀ = 10 s

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

Operation elements: 3 keys for ON/OFF, min/max value display, hold

Nominal temperature: 25 °C

Working conditions:

electronics:	-25 ... 70 °C; 0 ... 80 % RH (non condensing)
sensors:	-25 ... 70 °C; 0 ... 100 % RH

Power supply: 9 V battery

Current consumption: approx. 30 µA at 1 measuring / 60 s (mode SLOW)
approx. 70 µA 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 und Scale:

digital offset- and scale adjustment of measurements

Housing:

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, manual

Variants:

GFTB 200-KIT

Product-ID: 600890

Digital-Hygro-/Thermo-/Barometer with USB-interface kit, consisting of:

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

Accessories and spare parts:

GKK 252

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

WPF4

Certificate of calibration, humidity, for ISO9000ff (p.r.t. p. 7)

WPD5

Certificate of calibration, pressure, for ISO9000ff (p.r.t. p. 6)



HIGHLIGHTS:

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

GFTB 200 SET

Measurement set GFTB200 incl. infrared thermometer GIM 530 MS and case GKK 3000

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 24.