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

FUNCTIONS:

AUTO OFF

BAT

HOLD

MIN MAX

O/S-CORR

ADDITIONAL DISPLAY FOR FURTHER PARAMETERS, E.G. DEW POINT TEMPERATURE AND ABSOLUTE HUMIDITY

PC INTERFACE

ALARM FUNCTION WITH INTEGRATED BUZZER

GFTB 200
Product-ID: 600161
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/m³
Resolution:	0.1 % RH; 0.1 °C or 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:	T_{90} = 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
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:	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

Variante:

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
Product-ID: 601056
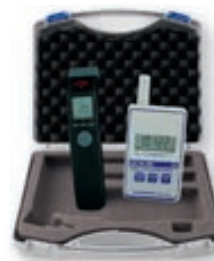case (235 x 185 x 48 mm) with foam lining

ISO-WPF4
Product-ID: 602543
Certificate of calibration, humidity, for ISO9000ff (p.r.t. page 7)

ISO- WPD5
Product-ID: 602514
Certificate of calibration, pressure, for ISO9000ff (p.r.t. page 7)

HIGHLIGHTS:

• *easy and fast search for thermal bridges*

• *targeting laser for precise location even of inaccessible areas*

• *audible alarm below dewpoint*

GFTB 200 SET
Product-ID: 600163
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.

Handheld instrument

Display / Controller

Logger / EASYBus

Transmitter

Temperature probe

Simulator

Alarm / Protection, Level