CLIMATE METER – PRECISION HYGRO- / THERMO- / BAROMETER

HIGHLIGHTS:

○ Alarm function with integrated buzzer

○ PC interface

○ Additional display of other measured variables such as dew point temperature and absolute humidity

○ precisely records all environmental conditions in laboratories

GFTB 200
Item No. 600161
Hygro- / thermo- / barometer

GENERAL:

With the GFTB 200, measurements of air pressure, humidity, and temperature are possible within a matter of seconds. Thanks to the use of high-precision sensors, the device achieves significantly better accuracies than comparable devices.
The dew point temperature monitoring with the GFTB 200 also provides effective protection against possible moisture damages caused by condensation in buildings and thus also against mold infestation. The integrated alarm function also reminds the user acoustically of sensible ventilation, which enables optimal and efficient use of the heating energy. With the additional measured variables such as wet bulb temperature, absolute humidity of the air, the air condition can be represented precisely and clearly.

APPLICATION:

Mobile weather station, indoor rooms, swimming pools, office and production rooms, laboratories, warehouses, museums, galleries, churches, refrigeration and air conditioning technology, construction, building physics and damage assessment, etc.

TECHNICAL SPECIFICATIONS:

Measuring ranges

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

calculated sizes

Dew point temperature T_d:	-40.0 .. + 70.0 ℃
Wet bulb temp. T_{wb}:	-27.0 .. + 70.0 ℃
Mixing ratio x:	0.0..280.0 g / kg
Absolute humidity:	0,0..200,0 g/m³
Resolution:	0.1 % RH; 0.1 ℃ and 0.1 ℉, respectively; 0.1 mbar

Accuracy (± 1 digit) (at nominal temperature = 25 ℃)

Temperature:	± 0.5 % of reading ± 0.1 ℃ (Pt1000 DIN class AA)
Humidity:	± 2.5 % RH (in the range 11..90 %)
Air pressure:	± 1.5 mbar (750..1100 mbar)

Probe

Temperature:	Pt1000
Humidity:	capacitive polymer humidity sensor
Air pressure:	piezoresistive sensor hybrid
Response time T_{90}:	10 s
Display:	4½-digit, approx. 11 mm high LCD display with additional displays
Control elements:	3 membrane keys for ON / OFF, min / max value hold
Nominal temperature:	25 ℃

Working conditions

Electronics:	-25 .. + 70 ℃; 0..80 % RH (not condensing)
Sensors:	-25 .. + 70 ℃; 0..100 % RH

Power supply:	9 V battery
Battery life:	approx. 400 days with 1 measurement / 60 s (SLOW mode) approx. 180 days with 1 measurement / s (FAST mode)
Interface:	serial interface, can be connected directly to the USB interface of a PC via galvanically isolated interface converter USB 3100 N (accessory).
Configurable display:	Either display of all measured variables alternately (2 or 4 second cycle) or manual switchover. Unnecessary readings can be hidden by the user.
Offset and Scale:	digital zero point / slope adjustment for all sensors
Trend display:	Air pressure falling / rising (with barometer)
Sea level correction:	The barometer display can be converted to sea level (the current altitude above sea level is entered).
Housing:	Housing made of impact-resistant ABS
Dimensions:	approx. 106 x 67 x 30 mm (H x W x D), additionally protruding sensor head on the front side, 35 mm long, 14 mm Ø, total length 141 mm.
Weight:	approx. 130 g including battery
Scope of delivery:	Device, battery, test report, operating instructions

VARIANT:

GFTB 200-KIT
Item No.600890
Hygro- / thermo- / barometer with USB interface kit
• USB interface converter USB 3100 N
• Multi-channel software EBS 20M for recording all units

ACCESSORIES OR SPARE PARTS:

GKK 252
Item No. 601056
Case with knob foam for universal use, 235 x 185 x 48 mm (W x H x D)

ISO-WPF4
Item No. 602543
ISO calibration certificate humidity, for ISO9000ff

ISO-WPD5
Item No. 602514
ISO calibration certificate pressure, for ISO9000ff

GFN 11
Item No. 475197
Humidity reference cell including adapter for TFS / GHTU, 11 % RH

GFN 33
Item No. 475198
Humidity reference cell including adapter for TFS / GHTU, 33 % RH

GFN 75
Item No. 475199
Humidityreference cell including adapter for TFS / GHTU, 75 % RH