Handheld instrument

Display / Controller

Logger / EASYBus

Transmitter

Temperature probe

Alarm / Protection

Climate measuring device
Precision Hygro- / Thermo- / Barometer

WK

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

Applications:
- 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

Digital-Hygro-/Thermo-/Barometer

GFTB 200

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 display of the 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.

Specifications:

Measuring ranges:
Temperature: -25.0°C ... +70.0 °C
Air humidity: 0.0 ... 100.0 % r.F. (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
Moisture content x: 0.0 ... 280.0 g/kg
Absolute humidity d: 0.0 ... 200.0 g/m³
Resolution: 0.1%r.F.; 0,1°C bzw. 0.1°F, 0.1mbar
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 % r.F. (at range 11 bis 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 sec.
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 % r.F. (non condensing)
Sensors: -25...70 °C; 0...100 % r.F.
Power supply: 9V-Batterie Typ IEC 6F22
Current consumption: max. 20 µA at 1 meas. / 60 s (mode SLOW) approx. 70 µA at 1 meas. / 1 s (mode FAST)
Used battery indicator: automatically if battery used: "BAT"
Auto-off-function: When Auto-off is activated, the device switches automatically off, if keypad is not attended for a longer time (selectable 1..120min).
Interface: Serial interface, via electrical isolated interface converter USB 3100 of USB 3100 N (accessories) directly connectable to PC

Min / max value memory: Lowest and highest values are saved for all units.
Hold function: The current displayed value is 'frozen' (all units are affected)
Configurable display: choice between automatically displaying all values rotationally or manual selection, units not needed can be excluded
Sea level correction: The displayed value of the barometer can be converted to air pressure at sea level (therefore the altitude above sea level has to be entered)
Tendency indicator (for barometer)**:** air pressure falling/increasing
Offset- and scale: digital offset- and scale adjustment of measurements
Housing: impact-resistant ABS housing, approx. 106 x 67 x 30 mm (H x W x T); additionally the sensor head at the "length" side, 35 mm long, Ø 14 mm; resulting total length 141 mm
Weight: approx. 130 g incl. battery

Options: (upon upcharge)

- KIT USB-interface kit, consisting of:
 - USB interface converter **USB 3100 N**
 - multi channel software **EBS20M** (to record all device units)
 (ordering description: GFTB 200 / KIT)

Complete-offering:

GFTB 200 SET
(GFTB200 incl. infra-red thermometer GIM 530 MS and case GKK 3000)

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 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.

Additional advantages GFTB 200 SET:
- blindingly easy search for thermal bridges
- targeting laser for precise location even of inaccessible areas
- audible alarm below dewpoint
- fast evaluation of mould-problem areas

Note: for technical data for the infra-red thermometer GIM530MS please refer to catalog page 14.

Accessories:

GKK 252 case (235 x 185 x 48mm) with foam lining

WPF4 Certificate of calibration, humidity, for ISO9000ff **(p.r.t. p. 4)**

WPD5 Certificate of calibration, pressure, for ISO9000ff **(p.r.t. p. 4)**