



STANDARD-FUNCTIONS:



**CALCULATION OF DEW POINT TEMPERATURE,
DEW POINT DISTANCE
AND ENTHALPY**

ADDITIONAL TEMPERATURE INPUT (TYPE K)



ADDITIONAL FUNCTIONS GMH 3350:



GMH 3330

Product-ID: 600343
climate measuring device, probe not included

GMH 3350

Product-ID: 600345
climate measuring device, probe not included,
with data logger

General:

The GMH 33xx devices are universal precision hygrometer / Thermometer and flow meter with additional Thermocouple input in one. The plug-in probes are interchangeable without recalibration, because your calibration data are on an integrated memory stick (TFS) or they are interchangeable by the high mechanical precision (STS ...). The thermocouple input T2 is optimized to be able to quickly absorb surface temperatures to e.g. to display the dew point directly.

Application:

- Heating / Ventilation Air Conditioning (HVAC)
- Indoor air, meteorology, laboratory, research and teaching
- Energy assessment / optimization of buildings
- Identify research in structural damage

Specifications:

Measuring ranges:

Relative humidity:	0.0 ... 100.0 % RH
Ambient temperature:	-40.0 ... +120.0 °C (depending on TFS-probe)
Surface temperature:	-80.0 ... +250.0 °C
Flow rate:	depending on STS probe (p.r.t. next page)
Resolution:	0.1 % RH, 0.1 °C / 0.1 °F, 0.01 m/s

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

Relative humidity:	±0.1 %
Ambient temperature (Pt1000):	±0.2 %
Surface temperature (NiCr-Ni):	±0.5 % of m.v. ±0.5 °C
Flow rate:	±0.1 %

Probes: (p.r.t. next page) No calibration required for exchange of humidity/temperature or flow rate probe.

Probe connection: 6-pin screened Mini-DIN-socket

NiCr-Ni-connection: for miniature flat-pin plug

Display: two 4 1/2 digit LCDs (12.4 mm or 7 mm high), as well as additional functional arrows.

Working temperature: -25 ... +50 °C
Relative humidity: 0 ... 95 % RH (non-condensing)
Storage temperature: -25 ... +70 °C

Pushbuttons:	6 membrane keys
Interface:	serial interface, direct connection to RS232 or USB interface of a PC via electrically isolated interface adapter GRS 3100 or GRS 3105 resp. USB 3100 N (p.r.t. accessories).
Power supply:	9 V battery as well as additional d.c. connector for external 10.5-12 V direct voltage supply. (suitable power supply: GNG10/3000)
Power consumption:	approx. 2.5 mA (incl. TFS 0100)
Housing:	Impact-resistant ABS plastic housing, membrane keyboard, transparent panel, front side IP65, integrated pop-up clip
Dimensions:	142 x 71 x 26 mm (H x W x D)
Weight:	approx. 160 g (incl. battery)
Scope of supply:	Device, battery, manual

Additional functions:

Calculation of dew point: based upon humidity and temperature.
Calculation of dew point distance: by means of a surface measurement
Calculation of enthalpy: thermal content h of the air
Adjustment-function for atmospheric humidity measurements
NiCr-Ni-temperature measuring: any standard NiCr-Ni-probe (type K) can be plugged in. Recommendation: GOF 400 VE (p.r.t. p. 20). A compensation value can be set for surface measurement if necessary.
Flow measurements: Two different systems for averaging are integrated:
- **continuous averaging:** the average value displayed is calculated using the last measurements during the averaging time set.
- **averaging upon request:** by starting the current measuring value will be displayed for the averaging time. As soon as the time has expired the average value will be displayed, the device is in HOLD mode.
- **selectable averaging time:** 1 ... 30 s
Logger function
- **manual:** 99 data sets (fetch data via buttons or interface)
- **cyclic:** 5,400 data sets (fetch data via interface) adjustable cycle time: 1 s ... 1 h
The logger is started or stopped by keypad or interface. The software GSOF3050 (see accessories) is available for comfortable read-out of logger data.

Accessories and spare parts:

- GNG 10/3000**
Product-ID: 600273
plug-in power supply
- USB 3100 N**
Product-ID: 601092
interface converter, electrically isolated
- GSOF 3050**
Product-ID: 601336
software for the setting, data read-out and printing of all logger data stored for devices of the GMH3xxx-series with logger function
- GAM 3000**
Product-ID: 601132
Switching module for devices of the GMH3xxx-series incl. alarm output
- ST-RN**
Product-ID: 601074
device protection bag with cut out for sensor connection, suitable for: GMH3330, GMH3350
- GKK 3500**
Product-ID: 601052
case with cut-outs for GMH3xxx
- GKK 3600**
Product-ID: 601062
case with foam lining for universal use

COMPLETE SOLUTION



GMH 3330-TFS 0100E-WPF4

Product-ID: 602682
Complete Solution with humidity-/temperature probe TFS 0100 E and incl. certificate of calibration WPF4 (~20 % / ~40 % / ~60 % / ~80 % RH ascending / descending) and case GKK 3500.