# humidity, temperature and flow rate measuring device









DOUBLE DISPLAY OF HUMIDITY AND TEMPERATURE

- Calculation of dew point temperature, dew point distance and enthalpy
- Min-/Max value memory, hold function
- Serial interface
- Additional temperature input (type K)

### additional functions of GMH 3350

- 2 integrated logger functions
- Optical and acoustic min-/max- alarm
- Real-time clock with day, month and year

## **GMH 3330**

climate measuring device, probe not included

climate measuring device, probe not included, with data logger

Please order probes separately! (p.r.t. next page)

(No re-calibration required for probe exchange!)	
Specification:	
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. page 21)	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 $4\frac{1}{2}$ 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).

Weight:

Power supply:

Auto-Off-Function:

Power consumption:

Low battery warning:

Housing dimensions:

Min-/Max-value memory: memorizing of max. and min. values for humidity, temperature, dew point etc.

approx. 160 g (incl. battery)

9 V battery, type IEC 6F22 (included) as well as additional

d.c. connector for external 10.5-12 V direct voltage supply.

Impact-resistant ABS plastic housing, membrane key-

board. Front side IP65, integrated pop-up clip for table top

(suitable power supply: GNG10/3000)

1 ... 120 min (can also be deaktivated).

(device): 142 x 71 x 26 mm (H x W x D)

approx. 2.5 mA (incl. TFS0100)

Hold function: By pressing a button the current values will be "frozen".

or suspended use

Calculation of dew point: based upon humidity and temperature.

 ⚠ and 'bAt'

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: GOF400VE (p.r.t. p. 128). 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 seconds

### Additional functions of the GMH3350:

Min-/Max-alarm: the measuring value is constantly monitored if they remain within the min./max. limits set.

- Alarm: 3 different alarm settings

off: alarm function not activated

visual alarm via display, integrated buzzer and interface

no Sound: alarm via display and interface

- Controlling function: with the help of the switching module GAM3000 (optionally) electric equipment can be switched on/off or alarm memoried (p.r.t. accessories)

## Logger functions:

-manually: 99 data sets (data recall via keyboard or interface)

-cycle: 5.400 data sets (data recall via interface)

adjustable cycle time: 1 s ... 1 h

Logger start and stop via the keyboard or interface. Comfortable read-out and display software (GSOFT3050) available as additional equipment.

Real-time clock: clock with day, month and year.

### Accessories and spare parts:

### **GNG 10/3000**

plug-in power supply

### **GKK 3500**

case with cut-outs for GMH3xxx

## **GKK 3600**

case with foam lining for universal use

### **USB 3100 N**

interface converter, electrically isolated

device protection bag with cut out for sensor connection, suitable for: GMH3330, GMH3350

**GSOFT 3050** 

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**

Switching module for devices of the GMH3xxx-series incl. alarm output

### GMH3330 incl. TFS0100E and WPF4

device incl. measuring probe, certificate of calibration and case (p.r.t. page 6)