

Double/difference quick-response thermometer for 5 different thermocouples!



- 2 plug-in probes can be connected and read simultaneously
- 5 different thermocouples can be used! (types J, K, N, S, T)
- Temperature differences (probe 1 - probe 2) can also be measured on metal surfaces and in liquid with non volt-free probes!
- Correction of meas. values for surface meas. can be switched on / off
- Serial interface, device can be connected to bus system (up to 5 devices can be connected to one PC interface)
- Min./Max. value memory, Hold function, Tare/diff-function
- Battery and d.c. operation
- Zero-point offset entry for each probe

Additional functions of the GMH3250:

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

GMH 3230 accessories not incl.

GMH 3250 accessories not incl.

Digital-precision quick-response thermometer for thermocouples
simultaneous connection of 2 plug-in probes (p.r.t. page 91 - 95)

Specification :

Thermocouples: J, K, N, S, T (acc. to DIN EN 60584)

Measuring ranges: (extract)

Type K: (NiCr-Ni) -199,9 ... +999,9°C or -220 ... +1370°C
(-199,9 ... +999,9°F or -364 ... +2498°F)

Type N: (NiCrSi-NiSi) -199,9 ... +999,9°C or -200 ... +1300°C
(-199,9 ... +999,9°F or -328 ... +2372°F)

Type S: (Pt10Rh-Pt) -50,0 ... +999,9°C or -50 ... +1750°C
(-58,0 ... +999,9°F or -58 ... +3182°F)

Resolution: 0,1°C or 1°C (0,1°F or 1°F)

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

Type K: -199,9 ... +999,9°C: ±0,03% of m.v. ±0,05% f.s. (T≥-60°C)
±0,2% of m.v. ±0,05% f.s. (T<-60°C)
-220 ... +1370°C: ±0,08% of m.v. ±0,1% f.s. (T≥-100°C)
±1°C ±0,1% f.s. (T<-100°C)

Type S: -50,0 ... +999,9°C: ±0,05% of m.v. ±0,08% f.s. (T≥200°C)
±1°C ±0,08% f.s. (T<200°C)
-50 ... +1750°C: ±0,1% of m.v. ±0,1% f.s. (T≥200°C)
±1°C ±0,1% f.s. (T<200°C)

Temperature drift: 0,01%/K

Point of comparison: ±0,3°C

Working temperature: -25 to +50°C

Relative humidity: 0 to +95%RH (non-condensing)

Storage temperature: -25 to +70°C

Probe connections: 2 jacks for flat-pin plug

Display: two 4 digit LCDs (12.4mm and 7mm high), as well as additional functional arrows.

Pushbuttons: 6 membrane keys

Interface: Serial interface, direct connection to RS232 or USB interface of a PC via electrically isolated interface adapter GRS3100 or GRS3105 resp. USB3100 (p.r.t. accessories).

Power supply: 9V-battery, type IEC 6F22 (included) as well as additional d.c. connector for external 10.5-12V direct voltage supply. (suitable power supply: GNG10/3000)

Auto-Off-Function: 1...120min (can also be deactivated).

Low battery warning: Δ and 'bAt'

Power consumption: approx. 1.6 mA

Min./max. value memory: Memorizing of max. and min. values for probe 1, probe 2 and difference.

Hold function: By pressing a button all current values will be memorized.

Housing dimensions: 142 x 71 x 26 mm (L x W x D)

Impact-resistant ABS plastic housing. Front side IP65, integrated pop-up clip for table top or suspended use

Weight: approx. 155 g

Special applications:

Difference measurements: with a resolution of 0,1° or 1°. Temperature difference probe 1 - probe 2 can be displayed if 2 probes are connected.

Tare/diff-function: Press button to set the difference display 'probe 1 - probe 2' to zero

Zero-point offset entry: By entering the offset temperature the parameter can be moved parallel to the calibration graph.

Compensation value for surface measurements:

A compensation value (to compensate for the loss when transferring heat from the meas. object to the probe) can be set and switched on/off for surface measurements if required.

Additional functions of the GMH3250:

Min-/Max-alarm: The meas. values of probe 1 or 2, probes 1 and 2 or the temp. difference are constantly monitored reg. the min. and max. values set.

- Alarm: 3 different alarm settings

off: alarm function not activated

on: 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 memorised (p.r.t. catalogue page 38)

Logger functions:

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

-cycle: 9.999 data sets (data recall via interface)

-adjustable cycle time: 1sec. ... 1h

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:

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. (p.r.t. page 39)

GAM 3000

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

suitable plug-in probes type K, N and S p.r.t. p. 91 - 95

miscellaneous accessories (cases, mains adaptors etc.) suitable for all GMH3xxx devices p.r.t. page 38 - 39