

PRECISION QUICK-RESPONSE THERMOMETER FOR THERMOCOUPLES

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NEW!



VERY QUICK RESPONSE TIME!

HIGHLIGHTS:

- Serial interface (except GMH 3221)
- Correction factor for surface measuring can be switched on / off (except GMH 3221)

GMH 3221, GMH 3231 AND GMH 3251:

- 2 plug-in probes can be connected and read simultaneously
- Temperature differences

ADDITIONAL FUNCTIONS

GMH 3221 / 3231:



GMH 3251:



SUITABLE PROBES P.R.T. P. 32



GMH 3211 connection

GMH 3211

Art. no. 611381

Precision quick-response thermometer, accessories not included, 1 input



GMH 3221 connection



GMH 3231/51 connection

GMH 3221

Art. no. 611384

Simple two channel precision quick-response thermometer, accessories not included, 2 inputs

GMH 3231

Art. no. 611382

Two channel precision quick-response thermometer, accessories not included, 2 inputs, interface

GMH 3251

Art. no. 611383

Two channel precision quick-response thermometer, accessories not included, 2 inputs, data logger

Specifications:	GMH 3211	GMH 3221	GMH 3231	GMH 3251
Thermocouples:	K, J, T, N, S, E, B	K	K, J, T, N, S, E, B	K, J, T, N, S, E, B
Measuring channels:	1 thermocouple input (type K balancing material)		2 thermocouple inputs (type K balancing material)	
Measuring ranges				
type K:	-220.0 ... +1372.0 °C	-220.0 ... +1372.0 °C	-220.0 ... +1372.0 °C	-220.0 ... +1372.0 °C
type J:	-200.0 ... +1100.0 °C	-	-200.0 ... +1100.0 °C	-200.0 ... +1100.0 °C
type T:	-200.0 ... +400.0 °C	-	-200.0 ... +400.0 °C	-200.0 ... +400.0 °C
type N:	-200.0 ... +1300.0 °C	-	-200.0 ... +1300.0 °C	-200.0 ... +1300.0 °C
type S:	-50.0 ... +1768.0 °C	-	-50.0 ... +1768.0 °C	-50.0 ... +1768.0 °C
type E:	-60.0 ... +850.0 °C NEW	-	-60.0 ... +850.0 °C NEW	-60.0 ... +850.0 °C NEW
type B:	+300 ... +1750 °C NEW	-	+300 ... +1750 °C NEW	+300 ... +1750 °C NEW
Accuracy: (at nominal temperature)	±(0.5 °C +0.2 % of m.v.) (J, K, N, T, E) ±(0.8 °C +0.4 % of m.v.) (S, B)	±(0.5 °C +0.2 % of m.v.)		±(0.5 °C +0.2 % of m.v.) (J, K, N, T, E) ±(0.8 °C +0.4 % of m.v.) (S, B)
Analog output:	no	no	no	0 ... 1 V
Alarm:	no	no	no	CH1, CH2, CH1+2, DIF
Data logger:	no	no	no	manual: 1.000 data sets cyclic: 10.000 data sets
Probe connections (miniature flat plug):	1	2	2	2
Serial interface:	3-pin jack connector Ø 3.5 mm	-	3-pin jack connector Ø 3.5 mm	3-pin jack connector Ø 3.5 mm
Difference measurement:			Temperature difference probe 1 - probe 2 can be displayed if 2 probes are connected.	
Compensation value for surface measurements:	adjustable	-	adjustable	adjustable
Power supply:	9 V battery, d.c. connector	9 V battery	9 V battery, d.c. connector	9 V battery, d.c. connector
Battery life:	approx. 500 h	approx. 300 h	approx. 300 h	approx. 300 h

PRECISION QUICK-RESPONSE THERMOMETER FOR THERMOCOUPLES

General specifications:	
Resolution:	0.1 °C or 1 °C
Working temperature:	-25 ... +50 °C
Display:	two 4½-digit LCDs (12.4 mm and 7 mm high)
Serial interface (except GMH 3221):	3-pole jack socket Ø 3.5 mm, direct connection to RS232 or USB interface of a PC via electrically isolated interface adapter GRS 310x or USB 3100 N (p.r.t. accessories).
Data logger (GMH 3251 only):	manual: 1.000 data sets (fetch data via buttons or interface) cyclic: 10.000 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 GSOF 3050 (see accessories) is available for comfortable read-out of logger data, see page 109.
Housing:	Impact-resistant ABS plastic housing, membrane keyboard, transparent panel, integrated pop-up clip
Dimensions:	142 x 71 x 26 mm (H x W x D)
Nominal temperature:	25 °C ±5 K
Weight:	approx. 155 g
Scope of supply:	device, battery, calibration protocol, manual

Accessories and spare parts:

GB 9 V

Art. no. 601115
Spare battery 9V

GNG 10/3000

Art. no. 600273
Plug-in power supply (220 / 240 V, 50 / 60 Hz), output voltage: 10.5 V / 10 mA, suitable for devices with power supply socket

ST-RN

Art. no. 601074
Nappa leathern device protection bag with 2 round cut-outs for sensor connection (1 x round, 1 x rectangular)

ST-N2

Art. no. 601072
Nappa leathern device protection bag with 2 rectangular cut-outs for sensor connection

GKK 3500

Art. no. 601052
with punched lining for 1 device (394 x 294 x 106 mm)

16 CHANNEL PRECISION QUICK-RESPONSE THERMOMETER FOR THERMOCOUPLES



HIGHLIGHTS:

- simultaneous display of 4 inputs
- 800.000 measuring data storable
- for thermocouples type K, J, T, N, R, S, B, E

16 INTERCHANGEABLE SENSORS CONNECTABLE



HD32-8-16

Art. no. 700077

Precision quick-response thermometer without accessories, 16 interchangeable sensor inputs, with data logger

General:

Ideal for complex temperature measuring tasks in which multiple temperature values must be measured, recorded and displayed at the same time.

Application:

Testing systems, drying and baking ovens, air conditioning control units, production and manufacturing processes, temperature monitoring in concrete or asphalt on roads and buildings

Specifications:

Thermocouples:	K, J, T, N, R, S, B, E	
Resolution:	0.05 °C or 0.1 °C	
Measuring range: (depends on thermocouple)	Type K: -200 °C ... +1370 °C Type J: -100 °C ... +750 °C Type T: -200 °C ... +400 °C Type N: -200 °C ... +1300 °C	Type R: +200 °C ... +1480 °C Type S: +200 °C ... +1480 °C Type B: +200 °C ... +1800 °C Type E: -200 °C ... +750 °C
Accuracy: (depends on thermocouple)	±0.1 ... ±0.4 °C	
Number of inputs:	16	
Operating conditions:	-5 ... +50 °C working temperature, -25 ... +65 °C storage temperature, 0 ... 90 % relative humidity	
Logger function:	800.000 data sets	
Display:	LCD display with background illumination, 128 x 64 pixel, simultaneous display of 4 inputs	
Serial interface:	Communication via galvanically isolated 9-pin USB connecting cable	
Power supply:	4 x 1,5 V Alkaline Batterie, über externes 12 V DC Netzteil oder über die Schnittstelle am PC	
Housing:	ABS, IP64	
Dimensions:	220 x 180 x 50 mm	
Weight:	1100 g	
Scope of supply:	Device, DeltaLog9 Software, carrying strap, batteries, manual	

Accessories and spare parts:

SWD-10

Art. no. 700039
power supply, 100 ... 240 V AC/12 V DC/1 A mains voltage

CP22

Art. no. 700078
Connection cable USB 2.0 for connection to PC.

Note:

Connection cable for PC and temperature sensors (page 32) must be ordered separately.