

Calibrated Systems



Scope of supply:
Measuring device GMH 3750
or GMH 3710, temperature
probe GTF 401 1/3 DIN,
plastic case GKK 3500 and
certificate of calibration with
3 calibration points.

General:

The overall error of a measuring device consists of the sum of the instrument error and the probe error. To minimize the overall error, we offer calibrated and optimized systems below.

Due to their excellent system accuracy they are especially suitable for quality assurance according to ISO9000ff, as reference instruments in manufacturing processes, laboratory, service and maintenance, etc.

The system optimization is done via a special characteristic curve which is determined for each temperature probe separately and stored in the instrument (GMH 3750) or with probe adjusting via offset and slope input (GMH 3710).

GMH 3750 / SET1

incl. certificate of calibration

Specifications:

optimized measuring range: -20 ... +70 °C

Temperature probe: GTF 401 1/3 DIN, Pt100, 4-wire
(for tech. data please refer to p. 126)

System accuracy: better than 0,07 °C (at opt. range)

Calibration points: -20 °C / 0 °C / 70 °C

GMH 3750 / SET2

incl. certificate of calibration

Specifications:

optimized measuring range: 0 ... +250 °C

Temperature probe: GTF 401 1/3 DIN, Pt100, 4-wire
(for tech. data please refer to p. 126)

System accuracy: better than 0,3 °C (at opt. range)

Calibration points: 0 °C / 100 °C / 250 °C

GMH 3710 / SET1

incl. certificate of calibration

Specifications:

optimized measuring range: -20 ... +70 °C

Temperature probe: GTF 401 1/3 DIN, Pt100, 4-wire
(for tech. data please refer to p. 126)

System accuracy: better than 0,1 °C (at opt. range)

Calibration points: -20 °C / 0 °C / 70 °C

GMH 3710 / DKD1

incl. DKD calibration certificate DIN 17025

Specifications:

optimized measuring range: -20 ... +70 °C

Temperature probe: GTF 401 1/3 DIN, Pt100, 4-wire
(for tech. data please refer to p. 126)

System accuracy: better than 0,1 °C (at opt. range)

Calibration points: -20 °C / 0 °C / 70 °C

Accessories and spare parts:

GMHKonfig free
(visit our homepage: Download --> Software)

Software description:

Comfortable software to edit the user defined sensor curve of the GMH 3750.
(e.g. for calibration laboratories etc.)

Note:

please note that for the interface communication with the device a interface converter (GRS 3100, GRS 3105 or USB 3100 N) is necessary (p.r.t. page 65).

Precision Thermometer Pt1000



**PLUG-IN PROBE, BATTERY AND
PERMANENT MAINS OPERATION POSSIBLE**

GMH 175

Precision Thermometer

Battery/mains operation, for plug-in probes, Pt1000 2-wire

Application:

high-precision measurements in liquids, soft media, air/gases

Specifications:

Measuring range: -199.9 ... +199.9 °C

Resolution: 0.1 °C

Accuracy: (at nominal temperature = 25 °C)

Device: 0.1 °C ± 1 digit (within range of: -70.0 ... +199.9 °C)

Probe: Pt1000 probe, 2-wire,
probe connection via 3.5 mm Ø jack connector.

Probes not included - please order separately!

For suitable sensors see below or refer to page 127.

Display: 3½ digit, approx. 13 mm high

Working temperature: -30 ... +45 °C
(low temperature - for use in cold storage rooms!)

Storage temperature: -30 ... +70 °C

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

Battery service life: approx. 200 operating hours

Low battery warning: „BAT“

Dimensions: approx. 142 x 71 x 26 mm (H x W x D).
impact resistant ABS plastic case, front side IP65, integrated
pop-up clip for table top or suspended use.

Weight: approx. 160 g (incl. battery)

Accessories and spare parts:

Suitable plug-in temperature probes:
(Probes interchangeable without recalibration)

GTF 175
immersion probe for liquids and aggressive gases

GES 175
insertion probe for soft media

GOF 175
surface probe for solid surfaces

GLF 175
air/gas probe for clean media

Detailed description and more probes please refer to page 127

ST-R1
device protection bag with cut-out for probe connection, suitable for GMH175, ...

GB 9 V
spare battery