

Product information

Handheld

Temperature Measuring Device G1700 Series



- Available in 2 versions
 - with permanently connected sensor
 - with BNC connection for quickly changing sensors and precise, waterproof measurement (IP65 / IP67)
- Three-line display / overhead display at the push of a button
- Backlighting
- Sensor and cable temporarily (2 hours) resistant to temperatures up to 250°C; sensor and cable permanently resistant to temperatures up to 230°C, alarm function
- Hold function to freeze displayed measurements, min/ max function for minimum and maximum detected measurement
- Adjustable

General information

The primary focus in the development of the new G 1000 series was placed on the essential functions of the measurement technology. Pure measurement with a focus on precision, speed and reliability packaged in a compact housing distinguish an impressive price/performance ratio, Made in Germany. The new handheld measuring devices also impress with their ergonomic design, dust and water-protected design according to IP 65/67 and the illuminated display. The compact thermometer is available with a practical BNC connection for interchangeable sensors or as a complete device including sensor with maximum overall precision. The device redefines our entry-level measurement class - calibration log included. The matching sensors can be used at temperatures of up to 250 °C (incl. handle and cable) and are distinguished by their compact design and small tube diameter. Integrated: High-quality Pt1000 sensors.

Application

Precise measurements in liquids and air, for measurement of core temperatures (with insertion probe) or application temperature. Sensor handle and cable withstand temperatures up to 250 °C (permanent application temperature 230 °C); Laboratories, quality assurance, service, food, etc.

Technical Data

Measuring range	: -70.0..+250.0 °C (-94.0..+482.0 °F) with fixed Pt1000 sensor; -200.0..+450.0 °C (-328.0..+842.0 °F) with BNC sensor (observe permissible range of the sensor!)
Accuracy (at nominal temperature = 25 °C)	
G 1700	: -20 ... +100 °C: ±0.1 K ±1 digit (device otherwise with 0.1 % of measured value ±2 digits, BNC connection) plus sensor inaccuracy
G 1710 / 20 / 30	: -20 .. +100 °C: ±0.1 K ±1 digit (device with fixed -70..+250 °C: ±0.2 % of measured value ±2 digit connected sensor)
Operating conditions	: -20 ... +50 °C; 0..95 % r.h. (device) (non-condensing), temporarily usable up to 100% relative humidity
Display /Backlighting	: 3-line unit, with background light, protected by an unbreakable pane, overhead display at the push of a button
Power supply	: 2 x AA battery, approx. 5000 h operating time
Protection rating	: IP65 / IP67 (only with waterproof sensors in the connected state for devices with BNC connection)
Housing	: Break-proof ABS housing
Dimensions	: 108 x 54 x 28 mm (H x W x T) without sensor connection
Weight	: 130 g (without sensor)
Connection G 1700	: BNC socket: for interchangeable sensors, see accessories / interchangeable sensors
Scope of delivery	: - Dust-proof and waterproof handheld measuring device (with or without sensor) according to IP 65/67, calibration report 2x AA battery, operating manual

Sensors



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Sensor technical data

- G 1710** : Immersion sensor, Ø 3 mm, Pt1000 2-wire fixed connection, V4A, 1m cable
 - G 1720** : durable insertion sensor Ø 3 mm, Pt1000 2-wire fixed connection, V4A, 1m cable
 - G 1730** : extra-thin insertion sensor Ø 1.5 mm, Pt1000 2-wire fixed connection, V4A, 1 m cable
- Sensor reaction time (T90)** : Ø 3 mm: Water 0.4 m/s < 2 s;
Ø 1.5 mm: Water 0.4 m/s < 1 s

Ordering code

1.
G 1700 -

1. Option	
0	Waterproof alarm thermometer with BNC connection, without sensor

1.
G 1710 -

1. Option	
0	Waterproof alarm thermometer with universal sensor, Ø3 mm, handle and cable temporarily resistant to temperatures up to 250°C, permanently resistant up to 230°C

1.
G 1720 -

1. Option	
0	Waterproof alarm thermometer with universal sensor, Ø3 mm, handle and cable temporarily resistant to temperatures up to 250°C, permanently to 230°C

1.
G 1730 -

1. Option	
0	Waterproof alarm thermometer with quick insertion probe, Ø1.5 mm, handle and cable temporarily resistant to temperatures up to 250°C, permanently resistant up to 230°C

Accessories / interchangeable sensors

1.	Pt1000 immersion sensor, Art. no. 609549 (like G 1710) Pt1000 insertion sensor, with BNC connector, Ø 3 mm GF 1T-T3-B-BNC
2.	Pt1000 insertion sensor, Art. no. 609639 (like G 1720) Pt1000 insertion sensor, with BNC connector, Ø 3 mm GF 1T-E3-B-BNC
3.	Pt1000 insertion probe, extra thin, Art. no. 609645 (like G 1730) Pt1000 insertion probe, with BNC connector, Ø 1.5 mm GF 1T-E1.5-B-BNC
4.	GB AA, Art. no.: 610049 Spare battery AA (2 batteries required)

Other accuracy classes available on request

Additional beneficial accessories and services

1.	Air/gas sensor, GLF 175-BNC, Art. no. 607162 Large sensor handle, not waterproof for clean media, -70..+200 °C, Pt1000 class B
2.	Frozen goods sensor GGF 175 -BNC, Art. no. 610397 Large sensor handle, plug connection not waterproof for insertion into frozen goods, determines core temperature -70..+200 °C, Pt1000 class B
3.	Air / pipe-mounted sensor GTF 2000-BNC, Art. no. 607164, plug connection not waterproof -50..+200 °C, Pt1000 class B
4.	Surface sensor GOF 175-BNC, Art. no. 607163 Large sensor handle, not waterproof for solid surfaces, -70..+200 °C, Pt1000 class B
5.	Calibration service with calibration certificate

Additional accessories on request or in our catalogue.