Data sheet

Temperature measuring device
G 1700 series

Scope of delivery

– Dust-proof and waterproof handheld measuring device
  (with or without sensor) in accordance with 65/67
– Calibration log
– 2x AA battery
– Operating manual

Technical data

Measurement 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

(device with BNC connection)

: −20 ... +100 °C; ±0.1 K ±1 Digit
  otherwise 0.1 % of measured value ±2 digits, plus sensor inaccuracy

G 1710/20/30

(device with fixed sensor)

: −20 ... +100 °C; ±0.1 K ±1 digit
  −70 ... +250 °C; ±0.2 % of measured value ±2 digits

Operating conditions

(Device)

: −20 ... +50 °C;
  0 ... 95 % relative humidity (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 (with devices with BNC connection only with sensors with waterproof 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

Sensor

Sensor G1710

Sensor G1720

Sensor G1730

Use

The highest-precision measurements in liquids and in air, for measurement of core temperatures (with insertion sensor); sensor handle and cable temperature range of up to 250 °C (permanent use temperature of 230 °C); laboratories, quality assurance, service, food, and much more.
## Data sheet

### Sensor technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 1710</td>
<td>Immersion sensor Ø 3 mm, Pt1000</td>
<td>permanent 2-wire connection,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>V4A, 1 m cable</td>
</tr>
<tr>
<td>G 1720</td>
<td>Durable insertion sensor</td>
<td>Ø 3 mm, Pt1000 2-wire</td>
</tr>
<tr>
<td></td>
<td></td>
<td>fixed connection, V4A, 1 m cable</td>
</tr>
<tr>
<td>G 1730</td>
<td>Extra-thin insertion sensor</td>
<td>Ø 1.5 mm, Pt1000 2-wire fixed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>connection, V4A, 1 m cable</td>
</tr>
<tr>
<td>Sensor reaction time (T90)</td>
<td>Ø 3 mm: Water 0.4 m/s &lt; 2 s; Ø 1.5 mm: Water 0.4 m/s &lt; 1 s</td>
<td></td>
</tr>
</tbody>
</table>

### Accessories/interchangeable sensors

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pt1000 immersion sensor, Art. no. 609549 (like G 1710)</td>
</tr>
<tr>
<td></td>
<td>Pt1000 insertion sensor, with BNC connector, Ø 3 mm</td>
</tr>
<tr>
<td></td>
<td>GF 1T-T3-B-BNC</td>
</tr>
<tr>
<td>2.</td>
<td>Pt1000 insertion sensor, Art. no. 609639 (like G 1720)</td>
</tr>
<tr>
<td></td>
<td>Pt1000 insertion sensor, with BNC connector, Ø 3 mm</td>
</tr>
<tr>
<td></td>
<td>GF 1T-E3-B-BNC</td>
</tr>
<tr>
<td>3.</td>
<td>Pt1000 insertion sensor, extra thin, Art. no. 609645</td>
</tr>
<tr>
<td></td>
<td>Pt1000 insertion sensor, with BNC connector, Ø 1.5 mm</td>
</tr>
<tr>
<td></td>
<td>GF 1T-E1.5-B-BNC</td>
</tr>
<tr>
<td>4.</td>
<td>GB AA, Art. no.: 610049</td>
</tr>
<tr>
<td></td>
<td>Waterproof alarm thermometer with 3 mm insertion sensor</td>
</tr>
<tr>
<td></td>
<td>Spare battery AA (2 batteries required)</td>
</tr>
</tbody>
</table>

### Ordering code

1. Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Waterproof alarm thermometer for interchangeable sensors</td>
</tr>
</tbody>
</table>

Please also order the sensor!

1. Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Waterproof alarm thermometer with universal immersion sensor or for universal application with immersion sensor</td>
</tr>
</tbody>
</table>

### 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 sensor, extra thin, Art. no. 609645 (like G 1730)
   - Pt1000 insertion sensor, with BNC connector, Ø 1.5 mm
   - GF 1T-E1.5-B-BNC

4. GB AA, Art. no.: 610049
   - Waterproof alarm thermometer with 3 mm insertion sensor
   - Spare battery AA (2 batteries required)

### 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.