THERMOMETERS - *"glass"*

➤ Manufactured from solid stem glass rods with approximately 75 mm immertion depth.

➤ Printed large graduation on the front wall offers easy temperature reading.

➤ Large alcohol column with reded color enables easy and accurate readout.

➤ The amber front scale of the thermometer reflects the images more clearly.

catalogue number	operation range °C	subdivision	pack quantity
059.02.001	-20 / + 50	0.5 °C	10 pieces
059.02.002	-20 / +110	0.5 °C	10 pieces
059.02.003	-10 / +150	1 °C	10 pieces
059.02.004	-10 / +200	1 °C	10 pieces

THERMOMETER CLAMP
"with bosshead"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding thermomeres in the most secure way.

➤ Featured with a swivel bosshead which provides 360° swivel of the clamped object around their axis.

➤ Bosshead locking feature guarantees perfect position hold of the clamped objects.

➤ Fixing head featured with flexible springs offers easy insertion and axtraction of the thermometers.

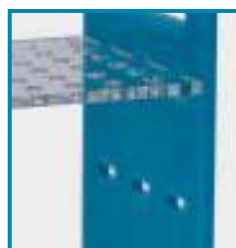➤ Clamps can be opened and closed smoothly with a 30 mm grip diameter.

catalogue number	pack quantity
060.04.001	1 piece

STAND
"adjustable height"

NEW

➤ Manufactured from acrylic for holding 72 thermometers in 12 x 6 array.

➤ Handles at both sides guarantees easy hold and secure grib.

➤ Adjustable height upper layer provides multi use options with shorter objects.

catalogue number	dimensions	pack quantity
059.05.001	210 x 110 x 220 mm	1 piece

Adjustable height upper layer provides multi use options with shorter objects.

NEW

NEW

THERMOMETER
"insertion"

➤ For temperature measurement in liquids, semi-solids. Specially offers practical solutions with foodstuff.

➤ Stainless steel probe with 127 mm lenght can easily be inserted into semi-solid samples.

➤ Offers temperature measurement on a large and clear 19 x 8 mm LCD display.

➤ Water resistant sturdy plastic housing offers long life cycle.

➤ Temperature measurement range is -58°F to +158°F (+/- 0,2°F) or -50°C to +300°C (+/- 0,1°C) selectively.

➤ °F & °C values are exchangeable by a switch control at the front panel.

➤ Supplied with a plastic sleeve for the protection of the measuring probe.

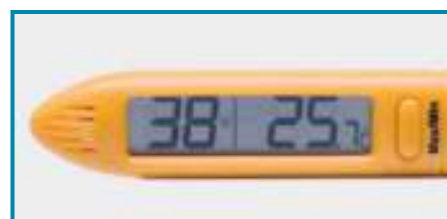| catalogue number	pack quantity
060.01.001	1 piece

THERMOMETER
"portable"

➤ For temperature measurement in liquids, semi-solids. Specially offers practical solutions with foodstuff.

➤ Stainless steel probe with 120 mm lenght can easily be inserted into semi-solid samples.

➤ Offers temperature measurement on a large and clear 34x14 mm LCD display.

➤ Water resistant sturdy plastic housing offers long life cycle.

➤ Temperature measurement range is -58°F to +572°F (+/- 2°F) or -50°C to +300°C (+/- 0,5°C) selectively.

➤ °F & °C values are exchangeable by a switch control at the front panel.

➤ Supplied with a plastic sleeve for the protection of the measuring probe.

catalogue number	pack quantity
060.01.002	1 piece

THERMOHYGROMETER
"portable"

➤ Pen shape, thermohygrometer is featured with a rotary probe enabling fast readings.

➤ Water resistant sturdy plastic housing with 138 mm lenght offers long life cycle.

➤ Featured with a clips for safe and practical use.

➤ Offers dual display for humidity and temperature on a large and clear 52 x 13 mm LCD display.

➤ Featured with maximum & minimum reading memory.

➤ Humidity measurement range is 20% RH – 95 %RH with +/- 3%RH accuracy.

➤ Temperature measurement range is 32 - 122°F (+/- 2°F) or 0 - 50°C (+/- 1°C) selectively.

➤ °F & °C values are exchangeable by a simple switch control at the back.

➤ Supplied with an instruction manuel with a battery.

catalogue number	pack quantity
060.03.002	1 piece

THERMOMETER
"desk-top"

➤ This desk top electronic thermometer can be also used as wall hanged.

➤ With the help of two probes can be used for in-door and out-door temperature measurement simultaneously.

➤ The folding stand at the back housing offers a convenient angle for easy reading of the results.

➤ Water resistant sturdy plastic housing with 135 x 75 x 19 mm dimensions offers long life cycle.

➤ Offers dual display for humidity and temperature on a large and clear 51 x 41 mm LCD display.

➤ Featured with maximum & minimum temperature reading memory with an alarm function and date / time display.

➤ Temperature measurement range is -4°F to +122°F (+/- 0,2°F) or -20°C to +50°C (+/- 0,1°C) selectively.

➤ °F & °C values are exchangeable by a switch control at the front panel.

➤ Supplied with an instruction manuel with a battery.

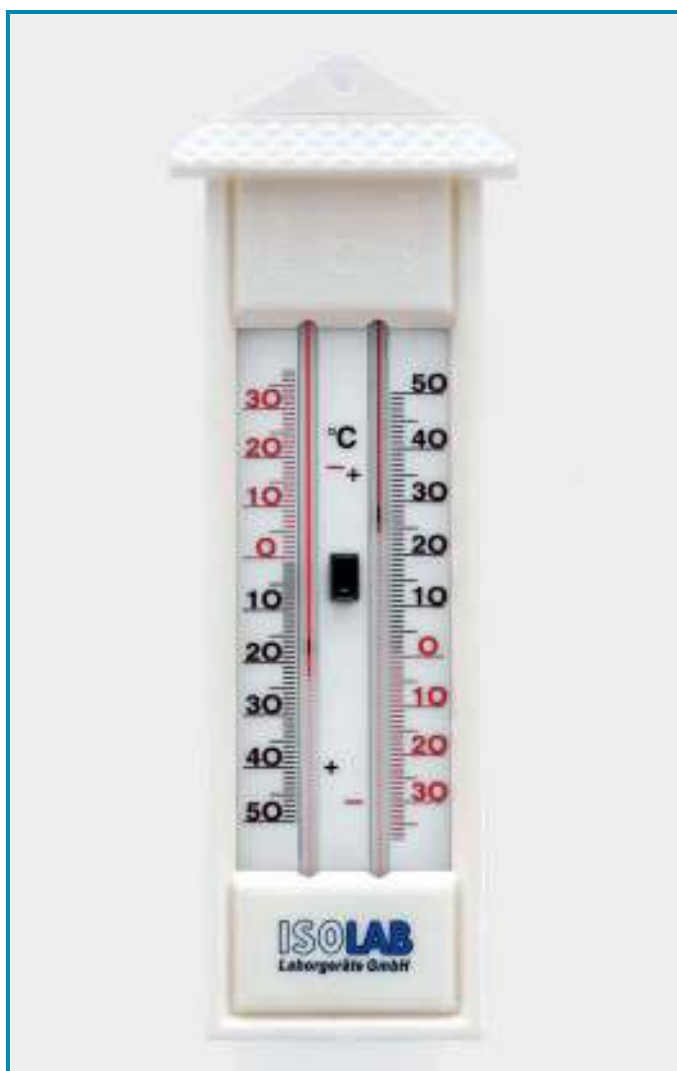| catalogue number	pack quantity
060.02.001	1 piece

THERMOHYGROMETER
"desk-top"

➤ This desk top thermohygrometer can be also used as wall hanged.

➤ The folding stand at the back housing offers a convenient angle for easy reading of the results.

➤ Water resistant sturdy plastic housing with 109 x 70 x 19 mm dimensions offers long life cycle.

➤ Offers dual display for humidity and temperature on a large and clear 40 x 30 mm LCD display.

➤ Featured with maximum & minimum temperature reading memory with an alarm function.

➤ Humidity measurement range is 10% RH – 99 %RH with +/- 1%RH accuracy.

➤ Temperature measurement range is -58°F to +158°F (+/- 0,2°F) or -50°C to +70°C (+/- 0,1°C) selectively.

➤ °F & °C values are exchangeable by a switch control at the front panel.

➤ Supplied with an instruction manuel with a battery.

catalogue number	pack quantity
060.03.001	1 piece

MAXIMUM & MINIMUM THERMOMETER
"mechanical"

➤ Suitable both for out-door or in-door applications.

➤ Weather resistant, robust housing is featured with an inclined shelter for further protection.

➤ Offers a measuring range from -30°C to +50°C with a presicion of 1°C.

➤ Featured with a push button switch for automatic resetting.

catalogue number	temperature range	dimensions	pack quantity
059.03.001	-30°C / +50°C	63 x 22 x 230 mm	1 piece

MAXIMUM & MINIMUM THERMOMETER
"electronic"

➤ Suitable both for out-door or in-door applications.

➤ Weather resistant, robust housing is featured with an inclined shelter for further protection.

➤ Offers a measuring range from -50°C to +70°C with a presicion of 0,1°C.

➤ Featured with a push button switchs for automatic resetting and selecting.

Offers 3 parameters
➤ Maximum temperature
➤ Minimum temperature
➤ Actual temperature

catalogue number	temperature range	dimensions	pack quantity
059.03.002	-50°C / +70°C	80 x 30 x 150 mm	1 piece

1   LLG-General purpose thermometer, red filling

Graduation resistant against acids and alkalies.
Breakage protected versions with FEP-coating available on request.

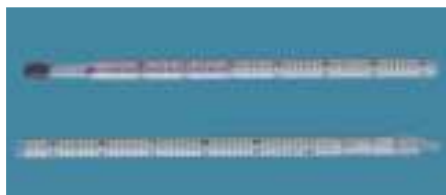| Measuring range °C	Length mm	Graduations °C	Diam. mm	Immersion depth	Capillary	PK	Cat. No.
-35 ... +50	300	1	6 ±1	total	white enameled, round	1	**9.236 720**
-20 ... +110	300	1	6 ±1	total	white enameled, round	1	**6.206 594**
-20 ... +150	300	1	6 ±1	total	white enameled, round	1	**9.236 723**
-20 ... +150	300	1	6 ±1	76 mm	white enameled, round	1	**9.236 731**
-10 ... +110	260	1	6 ±1	total	yellow enameled, round	1	**9.236 721**
-10 ... +110	270	1	6 ±1	76 mm	yellow enameled, round	1	**9.236 727**
-10 ... +150	260	1	6 ±1	total	yellow enameled, round	1	**9.236 722**
-10 ... +200	300	1	6 ±1	total	yellow enameled, round	1	**9.236 724**
-10 ... +200	300	1	6 ±1	total	white enameled, round	1	**9.236 725**
-10 ... +200	300	1	6 ±1	76mm	white enameled, round	1	**9.236 730**
-10 ... +250	300	1	6 ±1	total	yellow enameled, round	1	**9.236 726**

2   LLG- General-purpose thermometers, red filling

Enclosed-scale type, with eyelet. With uncoated, prismatic measuring capillary. Red spirit filling (except 9.235 265: blue).
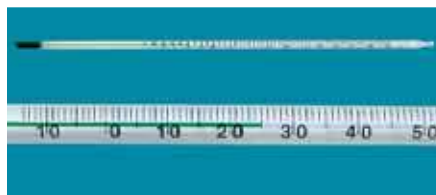
Measuring range °C	Length mm	Graduations °C	Diam. mm	Immersion depth	PK	Cat. No.
-10/0 ... +50	200	1	7 - 8	total	1	**9.235 245**
-10/0 ... +100	260	1	7 - 8	total	1	**9.235 250**
-10/0 ... +150	260	1	7 - 8	total	1	**9.235 255**
-10/0 ... +200*	300	1	7 - 8	total	1	**9.235 260**
-10/0 ... +250*	300	1	7 - 8	total	1	**9.235 265**

* Note: With these types the colour can fade after extended periods of use at higher temperatures.

3   LLG- General-purpose thermometers, green filling

Glass, solid stem, with loop, white backed. Environmentally friendly thermometer, with biodegradable, green spirit filling.

Measuring range °C	Length mm	Graduations °C	Diam. mm	Immersion depth mm	PK	Cat. No.
-10/0 ... +110	300	1.0	6-7	76	1	**9.235 275**
-10/0 ... +110	300	0.5	6-7	76	1	**9.235 276**
-10/0 ... +150	300	1.0	6-7	76	1	**9.235 277**
-10 ... +250	300	2.0	6-7	76	1	**9.235 278**
-10 ... +360	300	2.0	6-7	76	1	**9.235 279**

4   LLG-Precision thermometer, calibratable, red filling

Capillary: yellow enameled, round. Optional available with official calibration certificate, works certificate or DKD-calibration certificate. Please specify with order.
Breakage protected versions with FEP-coating available on request.

Measuring range °C	Length mm	Graduations °C	Diam. mm	PK	Cat. No.
-100 ... +30	300	1.0	6 ±1	1	**6.259 873**
-50 ... +50	280	1.0	6 ±1	1	**9.236 800**
-10 ... +100	305	1.0	6 ±1	1	**9.236 783**
-10 ... +150	305	1.0	6 ±1	1	**9.236 784**
-10 ... +200	350	1.0	6 ±1	1	**9.236 788**
-50 ... +50	300	0.5	6 ±1	1	**9.236 801**
-10 ... +100	270	0.5	6 ±1	1	**9.236 785**
-10 ... +150	350	0.5	6 ±1	1	**9.236 786**
-1 ... +101	610	0.1	6 ±1	1	**9.236 790**
-0 ... +50	420	0.1	6 ±1	1	**9.236 787**

1   LLG-Low temperature thermometers, -200 to +30°C

Suitable for official calibration. Enclosed scale type, 8 to 9mm diameter, with translucent glass scale and Richter seal. Prismatic, uncoated measuring capillary. The -200 to +30°C thermometer has a luminous blue measuring capillary, and is pentane filled. Further thermometers are available, red toluene filled with uncoated measuring capillary. Graduated every 1°C.

Measuring range °C	Length mm	PK	Cat. No.
-50 ... +50	300	1	9.235 705
-80 ... +30	300	1	9.235 708
-100 ... +30	300	1	9.235 710
-200 ... +30	300	1	9.235 720

2   Laboratory thermometers

To DIN standards as indicated. Calibrated with state certificate. Enclosed scale type, 8 to 9 mm diameter. Prismatic measuring capillary, uncoated. Mercury filled.

Measuring range °C	Resolution °C	Length mm	DIN	PK	Cat. No.
0 to +50	1 / 2	220	12775	1	9.235 505
0 to +50	1 / 10	420	12775	1	9.235 545
0 to +50	1 / 5	350	12775	1	9.235 546
0 to +100	1 / 2	270	12775	1	9.235 510
0 to +100	1 / 1	305	12775	1	9.235 547
0 to +100	1 / 5	420	12775	1	9.235 548
0 to +100	1 / 10	550	12775	1	9.235 549
0 to +150	1 / 1	305	12775	1	9.235 550
0 to +250	1 / 1	350	12778	1	9.235 525
0 to +360	1 / 1	380	12778	1	9.235 536

3   ASTM-Thermometers "ACCU-SAFE"

Schneider

High precision and mercury free. ASTM-Thermometers with blue, environmental safety filling, suitable for calibration, immersion total. With DAkkS-calibration or works calibration certificate on request.

Further types available on request, also in °F.

Measuring range °C	Resolution °C	Tolerance ± °C	Length mm	PK	Cat. No.
-38 ... +50	1	0.5	300	1	9.236 850
-20 ... +102	0.2	0.2	435	1	9.236 852
-2 ... +80	0.2	0.2	415	1	9.236 854
+34 ... +42	0.1	0.1	300	1	9.236 936
+95 ... +103	0.1	0.1	300	1	9.236 858
+19 ... +35	0.1	0.1	610	1	9.236 860
-34 ... +49	0.3	0.3	300	1	9.236 862
-18 ... +82	0.3	0.3	300	1	9.236 864
-32 ... +2	0.1	0.1	401	1	9.236 866
-8 ... +32	0.1	0.1	401	1	9.236 868
+25 ... +55	0.1	0.1	401	1	9.236 870
+50 ...+80	0.1	0.1	401	1	9.236 872
+75 ... +105	0.1	0.1	401	1	9.236 874
+95 ... +155	0.2	0.2	401	1	9.236 876
+18,9 ...25,1	0.1	0.1	615	1	9.236 879
23,9 ... 30,1	0.1	0.1	615	1	9.236 880
38,6 ... 41,4	0.1	0.1	300	1	9.236 881
-7 ... 105	0.1	0.1	300	1	9.236 882

1 Thermometers, ground glass joint

With NS14.5/23 cone. With fixed immersion (immersion length = lower section + ground joint). Enclosed-scale type, NS 14.5/23. Translucent glass scale. Upper section approx. 11mm diameter, lower section 7.5mm diameter. Richter-top finish seal without button. Suitable for official calibration. Graduated every 1°C.

Measuring range	Corpus	Immersion length	Charge	PK	Cat. No.
°C	mm	mm	colour		
-10 to +150:1	250	75	red	1	**9.236 021**
-10 to +150:0.5	350	75	red	1	**9.236 022**
-10 to +250:1	300	75	blue	1	**9.236 023**
-10 to +360:1	350	75	green	1	**9.236 024**
-10 to +150:1	250	100	red	1	**9.236 025**
-10 to +150:0.5	350	100	red	1	**9.236 026**
-10 to +250:1	300	100	blue	1	**9.236 027**
-10 to +360:1	350	100	green	1	**9.236 028**

2 Support Labo-Clip

Amarell

Stable support for clamping test tubes, thermometers, pH electrodes and other laboratory instruments onto laboratory containers (e.g. beakers). Extensive chemical resistance, with strong flexible foam rubber plate perforated with 5 apertures of varying diameters. Metal components are corrosion-resistant. Applicable from -40°C to +120°C.

Type	PK	Cat. No.
Labo-Clip	1	**9.234 990**

3 Adapter for thermometer, borosilicate glass 3.3

Isolab

Manufactured from borosilicate glass 3.3 according to DIN 12257 standard, ideal to use for thermometers with Ø 6 - 8 mm. Screw joint provides easy depth adjustment of thermometer. Seal material: NBR

Neck thread	Cone	Adapter bore diam.		PK	Cat. No.
GL	NS	mm			
14	14/23	6 - 8		1	**4.008 360**
14	29/32	6 - 8		1	**6.244 589**

4 Contact thermometers

Heju

With MS 121st2 flat plug or MS 121st3 diode plug as indicated.

Further contact thermometers available on request.

Measuring range	Grad.	Length*	Connector	PK	Cat. No.
°C	°C				
0 ... +100	1	50	Flat	1	**9.233 010**
-20 ... +150	1	50	Flat	1	**9.233 015**
0 ... +100	1	150	Flat	1	**9.233 210**
0 ... +250	2	200	Flat	1	**9.233 325**
-20 ... +150	1	300	Flat	1	**9.233 365**
0 ... +250	1	300	Flat	1	**6.090 811**
0 ... +250	2	300	Flat	1	**9.233 367**
0 ... +360	1	300	Flat	1	**9.233 369**
-20 ... +150	1	100	Diode	1	**9.233 116**
0 ... +250	2	100	Diode	1	**9.233 126**
-20 ... +150	1	150	Diode	1	**9.233 216**
0 .... +250	2	150	Diode	1	**9.233 226**
0 .... +250	2	200	Diode	1	**9.233 326**
-20 .... +150	1	300	Diode	1	**6.072 628**
0 .... +250	1	300	Diode	1	**9.233 372**
0 .... +360	1	300	Diode	1	**6.085 906**

* Probe length (mm)

Contact thermometers, accessory connecting cable

With flat coupling and diode connection for relay.

Heju

For	Cable m	PK	Cat. No.
Contact thermometers with flat plug MS 121st2	0.8	1	**9.233 400**
Contact thermometers with diode plug MS 121st3	1.5	1	**6.091 756**

1   LLG-Exact-Temp thermometers

For monitoring critical temperature conditions in
- deep freezes
- refrigerators
- cold rooms
- blood bank refrigerators
- incubators, warming chambers

Characteristics:
- thermometer certifiable to National Standards
- supplied with works test certificate
- thermometer stem safely encapsulated in PTFE
- each thermometer is mounted in a square-shaped shatter-proof plastic bottle filled with a liquid to ensure accurate readings despite the opening and closing of instrument doors.
- each thermometer has an individual serial number.

LLG-Exact-Temp Standard thermometers, red spirit-filled

For	Measuring range	Grad.	Length	Bottle filling	PK	Cat. No.
	°C	°C	mm			
Ultra Low Freezers	-90 ... +20	1.0	145	Sand	1	**9.235 663**
Freezers	-30 ... 0	0.5	125	Ethylene Glycol	1	**9.235 664**
Blood banks	-5 ... +20	0.5	145	Ethylene Glycol	1	**9.235 665**
Coolers	-5 ... +15	0.5	125	Ethylene Glycol	1	**9.235 666**
Incubators	+18 ... +50	0.5	135	Ethylene Glycol	1	**9.235 667**
Warming rooms, ovens	+20 ... +130	1.0	135	Vermiculite	1	**9.235 668**
Warming rooms, ovens	+35 ... +200	1.0	145	Vermiculite	1	**9.235 669**

LLG-Precision thermometers Exact-Temp, blue spirit-filled

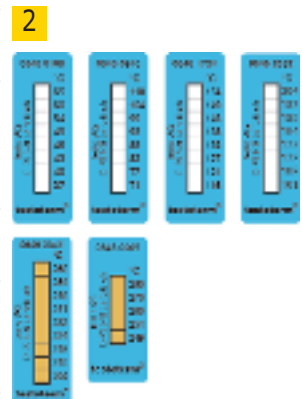| For	Measuring range	Grad.	Length	Bottle filling	PK	Cat. No.
	°C	°C	mm			
Freezers	-25 ... -5	0.1	210	Ethylene Glycol	1	**9.235 675**
Refrigerators	-2 ... +10	0.1	180	Ethylene Glycol	1	**9.235 676**
Blood banks	-2 ... +10	0.1	180	Ethylene Glycol	1	**9.235 677**
Incubators	+15 ... +30	0.1	180	Ethylene Glycol	1	**9.235 678**
Incubators	+25 ... +45	0.1	190	Ethylene Glycol	1	**9.235 679**
Warming rooms, ovens	+50 ... +115	0.1	200	Vermiculite	1	**9.235 680**

2   8-step irreversible temperature strips testoterm®

Strips for 8 temperatures. 5 types cover the measuring range +37 to +280°C, each strip displays 8 different temperatures. Each strip measures 50 x 18mm.
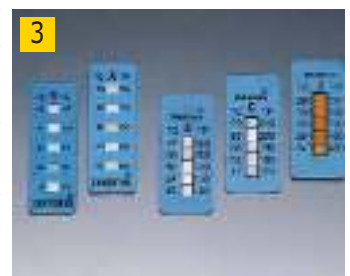
Testo

Type	Measuring range °C	Description	PK	Cat. No.
06460108	+37 ... +65	8 temperature changing points	10	**9.246 002**
06460916	+71 ... +110	8 temperature changing points	10	**9.246 003**
06461724	+116 ... +154	8 temperature changing points	10	**9.246 004**
06462532	+160 ... +199	8 temperature changing points	10	**9.246 005**
06463341	+204 ... +260	8 temperature changing points	10	**9.246 006**

3   5-step irreversible temperature strips Thermax®

5-step irreversible temperature measuring strips covering the temperature range 29 to 290°C.
Each strip measures 35 x 15mm.

Type	Measuring range °C	PK	Cat. No.
S	+29 ... +40	10	**9.246 310**
A	+37 ... +46	10	**9.246 311**
B	+49 ... +71	10	**9.246 312**
C	+77 ... +99	10	**9.246 313**
D	+104 ... +127	10	**9.246 314**
E	+132 ... +154	10	**9.246 315**
F	+160 ... +182	10	**9.246 316**
G	+188 ... +210	10	**9.246 317**
H	+ 216 ... +249	10	**9.246 318**
I	+249 ... +290	10	**9.246 319**

1 Refrigerator thermometer

Plastic, with loop or hook clip mountings. Measuring range -40 to +40°C. Graduated every 1°C.
Dimensions (L x dia.) 185 x 20mm.

Type	PK	Cat. No.
Refrigerator thermometer	1	**9.242 340**

2 Maxima-Minima-Thermometer

TFA Dostmann

- ivory plastic
- beige
- with push button
- mercury-free

Dimensions:	230 x 60mm
Weight:	120g

Type	PK	Cat. No.
Maxima-Minima-Thermometer	1	**9.241 134**

3 LLG Min/Max Thermometer with outdoor sensor

Digital thermometer with outdoor sensor.
- Two-tier LCD display
- Measuring temperature range -50°C to +70°C
- Display resolution 0.1°C
- Accuracy ±1°C
- Dimensions 110 x 70 x 20mm
- Display size 40 x 30mm
- AAA 1.5V battery included
- Length of the cable 190cm

Type	PK	Cat. No.
LLG Min/Max Thermometer with outdoor sensor	1	**9.243 165**

4 Maximum/Minimum Indoor/outdoor thermometer

Amarell

Optimal for controlling of refrigerator and freezer temperatures. Measuring range
- 50 to +70°C, accuracy 0.1°C. External remote sensor cable, length 3m, with stand and
 accessories for wall mounting. Dimensions: approx. 80 x 55 x 20mm, with battery.

Official calibration certificate with one or two test points available on request.

Type	PK	Cat. No.
Maximum/Minimum indoor/outdoor thermometer	1	**9.235 120**

5 Digital Maxima-Minima-Thermometer

TFA Dostmann

Digital thermometer, wall hanging, for indoor or outdoor use. With blue, splash-proof
casing, selectable °C/°F ranges and battery.

weight:	161g

Measuring range °C	Width mm	Depth mm	Height mm	PK	Cat. No.
-20 ... +50	75	44	115	1	**9.241 131**

6 Laboratory Max./Min. thermometer

Display of current, highest and lowest temperature, hold function, alarm at freely adjustable temperature values (upper/lower limit), measuring range -50 to +70°C, accuracy ±0.5°C at -20 to +25°C, otherwise ±1°C, selectable °C/°F readout. Supplied with table stand and magnet, probe with 3m cable and 3V Lithium CR2032 button cell (acc. to EN 13485).

Type	PK	Cat. No.
Laboratory Max./Min. thermometer	1	**9.851 022**

1   Thermometer Checkfridge

- specially designed to monitor the internal temperature of freezers and refrigeration *Hanna*
  units
- magnetic backing provides an easy way to attach the thermometer to all metal refrigerators and freezers
- the sensor with 1 metre cable can be easily placed within the freezer/fridge cabinet
- Very high accuracy
- The unique Cal Check Function enables the user to check the internal electronics of the thermometer

Specifications

Measuring range/Resolution:	-50 to +150°C/ 0.1°C
Accuracy:	±0.3°C (-50 to +90°C)
Probe:	40 x 5mm, with 1 metre cable
Battery type:	1 x 1.5V
Dimensions (B x T x H):	93 x 39 x 31 mm
Weight:	100g

Type	PK	Cat. No.
Checkfridge	1	**9.851 098**

2   Digital Maxima-Minima-Thermometers Exact-Temp

High-precision instruments to monitor freezers, blood bank freezers, incubators, climate *Schneider*
chambers and ovens.
The unbreakable plastic bottle is filled with a special medium to ensure accurate measurments even at open doors.

- Thermometers traceable to international standards (with certificate of conformance and accuracy)
- Accuracy: ±0.5°C, resolution 0.1°C
- Temperature units: °C or °F
- 3 display modes: maximum, minimum and ambient temperature
- Alarm function
- 3 m long cable (diameter: 1mm)
- Alkaline battery (AAA) included
- Breakage protected PETG plastic bottles (with 30ml ethylene glycol mixture)
- Bottles with magnets attached for easy wall or door mounting
- Individual serial numbers
- The instruments are available with works certificate on request.

Application	Measuring range °C	Certified Temperature °C	PK	Cat. No.
Freezers	-50 to 70	-20	1	**9.236 710**
Freezing point	-50 to 70	0	1	**9.236 711**
Refrigerators	-50 to 70	4	1	**9.236 712**
Incubators/Water baths	-50 to 70	37	1	**9.236 713**
Climate chambers	-50 to 70	21	1	**9.236 714**

3   LLG-Digital pocket themometer Type 12060

Measuring range -50 to +150°C, accuracy ±1°C. With hold function. Probe made of stainless steel, 125 x 3.5mm, with
protective plastice sleeve and clip, with battery 1 x 1.5V (LR44). Dimensions (L x W): 60 x 20mm.

Type	PK	Cat. No.
LLG-Digital pocket themometer Type 12060	1	**9.236 701**

4   LLG-Digital pocket themometer Type 12090

Waterproof. Measuring range -50 to +150°C/-58 to +302°F, accuracy ±1°C. With hold function. Probe made of stainless
steel, 85 x 3.5mm, with protective plastic sleeve, with battery 1 x 1.5V (LR44).
Overall dimensions (L x W): 185 x 30mm.

Type	PK	Cat. No.
LLG-Digital pocket themometer Type 12090	1	**9.236 707**

5   LLG-Digital pocket themometer Type 12080

Waterproof. Measuring range -50 to +300°C/-58 to +572°F, accuracy ±1°C until 150°C, above ±2°C. With hold function
and Max/Min function. Probe made of stainless steel, 85 x 3.5mm, with protective plastic sleeve,
with battery 1 x 1.5V (LR44). Overall dimensions (L x W): 195 x 50mm.

Type	PK	Cat. No.
LLG-Digital pocket themometer Type 12080	1	**9.236 703**

1

1 Thermometer Pocket-Digitemp

Waterproof instrument in plastic housing (food-grade).
Low budget, durable instrument for measuring temperature in air, gas, liquid and platical substances
(acc. to EN 13485).
Range of applications: Food (HACCP), industry, agriculture and hobby.
Features: waterproof, 1-second measuring frequency, Max-Min-Hold function, °C/°F-selectable.

Sensor:	NTC
Measuring range:	-40°C to +200°C
Resolution:	0.1°C
Accurancy:	±0.8°C (at 0°C to 100°C) others 1.5°C
Dimensions:	202 x 20 x 16mm (long version)
	150 x 20 x 16mm (short version)
Probe dimensions:	126 x 3.5mm (long version)
	75 x 3.5mm (short version)
Weight:	40g

Type	PK	Cat. No.
short version	1	9.851 028
long version	1	9.851 029

2

3

2 3 Mini-Thermometer TDC 110

ebro

- Probe: Stainless steel, diam. 4mm, length 120 mm
- Pointed probe, fixed
- Robust and impact-resistant
- Exchangeable battery
- °C/°F switchable
- Automatic deactivation after approx. 10 min.
- With needle guard and spare battery

Specifications

Measuring range:	-50°C to +150°C
Sensor:	NTC
Accuracy (±1 Digit):	±1°C (-10°C ... -120°C). ±2°C for remaining measuring range
Readabilty:	0.1°C
Operating range:	0 to +50°C
Batterie:	1.5 V, G 10-A
Dimensions:	50 x 40 mm
Weight:	approx. 13g

Type	PK	Cat. No.
Mini-Thermometer TDC 110	1	6.237 979

4

Digital pocket themometer ThermoJack/ThermoJack PRO

Dostmann electronic

Foldable pocket themometer, watertight. Ideal for measuring foods (acc. to EN13485),
liquids etc. ThermoJack PRO with calibration certificate.

9.851 997

Type	Measuring range °C	Accuracy °C	Resolution °C	Probe	PK	Cat. No.
ThermoJack	-40 ... +250	± 0.5 (-20 ... +150)*	0.1	70	1	9.851 997 4
ThermoJack PRO	-50 ... +350	± 0.5 (-30 ... +150)*	0.1	110	1	9.851 999

*otherwise ±1.0°C or 1%, the larger value applies

5

5 Core Thermometer TDC 150

NEW!

ebro

- Fast temperature checks
- Including needle protection
- Battery exchangeable

Specifications:

Accuracy:	±1°C (-30°C to 150°C)
Battery lifetime:	approx. 5000 hours
Battery:	1.5 V, LR44, G13
Dimensions:	24 x 26 x 85mm
Sensor:	NTC
Measuring range:	-50°C to+150°C
Operating Temperature:	0°C to+50°C
Resolution:	0.1°C (-20°C to +150°C)
Response time (t99):	10 sec (water)
Display:	LCD-7mm
Housing material:	ABS
Protection class:	IP 65 (waterproof)
Temperature probe:	Stainless steel, diam. 3.5mm, L = 125mm, pointed

Type	Description	PK	Cat. No.
TDC 150	Core Thermometer	1	6.233 287

1   Digital pocket thermometer TLC 700

The practical folding thermometer TLC 700 is suitable for measuring the core   *ebro*
temperature during transport, storage and receiving of goods. Thanks to the foldable
penetration probe the waterproof thermometer (IP 65) can be stored safely.
The device is primarily characterized by its small size and the large display and comes with a calibration certificate.

Specifications

Measuring range/Resolution:	-30 to +220°C/ 0.1°C
Accuracy:	±0.5°C (-30 to +100°C)
	±1.0°C (remaining range)
Probe:	70mm
Battery type:	1 x 3V (CR 2032)
Dimensions (WxDxH):	118 x 33 x 15mm
Weight:	approx. 41g

Type	PK	Cat. No.
Digital pocket thermometer TLC 700	1	**9.908 018**

2   Digital thermometer, Checktemp C

With very high measurement accuracy of ±0.3°C (-20 to +90°C) and integral stainless   *Hanna*
steel insertion probe. Equipped with the unique "Checkcal" function which tests internal
instrument electronics when the Checktemp is switched on.

Range:	-50 to +150°C
Resolution:	0.1°C
Accuracy:	±0.3°C (-20 to 90°C)
	±0.5°C (rest of range)
Overall L x W x H:	170 x 50 x 25mm
Probe L x dia.:	105 x 3mm
Weight:	100g

Type	PK	Cat. No.
Checktemp C	1	**9.950 179**

3   Digital thermometer Checktemp 1 C

With very high measurement accuracy of ±0.3°C (-20 to +90°C) and integral stainless   *Hanna*
steel insertion probe with handle and 1 metre cable, ensuring flexibility in use. Equipped
with the unique "Checkcal" function which tests internal instrument electronics when the Checktemp 1 is switched on.

Specifications

Range:	-50 to +150°C
Resolution:	0.1°C
Accuracy:	±0.3°C (-20 to 90°C) ±0.5°C (rest of range)
Overall L x W x H:	170 x 50 x 25mm
Probe length L x dia.:	106 x 3mm
Weight:	80g

Type	PK	Cat. No.
Checktemp 1 C	1	**9.950 180**

4   Digital hand held thermometer Type 12200

Waterproof. Measuring range -50 to +300°C/-58 to +572°F, accuracy ±1°C until 150°C above ±2°C. With hold function
and Max/Min function. Penetration probe made of stainless steel, 140 x 3.5mm with 1m cable and handle.
With battery 1 x 1.5V AAA. Overall dimensions (L x W): 140 x 75mm.

Type	PK	Cat. No.
Digital hand held thermometer Type 12200	1	**9.236 705**

1

Core Thermometer TTX 100/110

The robust and shock-resistant insertion thermometer TTX 100 and TTX 110 are suitable *ebro*
for HACCP core temperature measurement during transport, storage and incoming goods
department in accordance with DIN EN 13485 as well as for laboratory temperature measurements.

- Inexpensive calibrated thermometer
- Battery included and replaceable by the user if required
- Splash-proof
- factory calibration certificate
- Temperature probe for TTX 100 is permanently attached, with 60 cm silicone cable, probe with grip, needle Ø 3 mm,
  length = 105 mm, pointed
- Temperature probe for TTX 110 is permanently attached, needle Ø 3 mm, length = 90 mm, pointed

6.231 995

2

6.230 658

Specifications

Measuring range:	-50 to +350°C
Accuracy:	±0.8°C or ±0.8%, with the bigger value being applicable
Resolution:	0.1°C from -60°C to + 199°C and 1°C for the remaining measuring range
Housing material:	ABS
Operating temperature:	-20°C to +50°C
Storage temperature:	-30°C to +70°C
Reaction time (90%):	5s
Dimensions:	90 x 42 x 17 mm (without probe)
Battery lifetime:	typical 100 h with uninterrupted use
Battery:	CR 2032, replaceable
Protection class:	IP 55

Type	Description	PK	Cat. No.
TTX 100	Fixed probe with cable	1	**6.231 995** 1
TTX 110	Fixed probe without cable	1	**6.230 658** 2
TTX-WM	Wall holder for TTX 100/TTX 110	1	**9.908 026**

3

3 Hand held thermometer Type 13100

Digital temperature measuring device with 2 input channels, incl. 1 sensor with flat plug *Schneider*
(measuring range up to approx. +150°C, cable length: 3 m). For measuring sensors
type K (NiCr-Ni). Measuring range: -200...+1370°C/-328...+2498°F. Resolution: 0.1°C/F. Accuracy: ±0.1%. With hold
function, with max/min memory and automatic switch-off after 30 min. With PC interface and bag. Battery: 1 x 9 V
block.
Dimensions: 184 x 64 x 30 mm

Description	PK	Cat. No.
Hand held thermometer Type 13100	1	**9.236 715**
Power adapter (100-240V, 50-60Hz)	1	**9.236 716**
Insertion sensor with handle type K, measuring range: -50 to +600°C (±2.5°C)	1	**9.236 717**
Surface sensor with handle type K, measuring range: -50 to +400°C (±2.5°C)	1	**9.236 718**
90° Surface sensor with handle type K, measuring range: -50 to +400°C (±2.5°C)	1	**9.236 719**

4

4 Digital thermometer ama-digit ad 14 th

Temperature range: -35 to +500°C, resolution 1°C. Rapid response and ergonomic *Amarell*
design. Dimensions (WxDxH) 90 x 60 x 25mm. With stainless steel probe (L x dia.)
approx. 100 x 2.5mm. With battery.

Type	PK	Cat. No.
ama-digit ad 14 th	1	**9.243 100**

5

5 Digital thermometer ama-digit ad 15 th

Color back (available in 4 additional colors)Range: -40 to +120°C, resolution 0.1°C. *Amarell*
Precise and cost-effective. Dimensions (WxDxH) 90 x 60 x 25mm. With stainless steel
probe approx. 30 x 2.5mm (L x dia). With battery.

Type	PK	Cat. No.
ama-digit ad 15 th	1	**9.243 101**

1   Digital thermometer ama-digit ad 20 th

Temperature range: -50 to +300°C. Resolution 0.1°C from -50 to +180°C, 1°C for the rest of the range. Dimensions (WxDxH) 90 x 60 x 25mm. With battery. For appropriate temperature probes see order no. 9.243 111 to 114.

Amarell

Type	PK	Cat. No.
ama-digit ad 20 th	1	**9.243 102**

2   Temperature probes, Pt100 for ama-digit ad 20 th

Class A. Stainless steel sheathed probe, approx. 105 x 3mm L x dia.
With handle and approx. 1m cable.

Amarell

Type	PK	Cat. No.
Pt100 immersion probe	1	**9.243 111**
Pt100 penetration probe	1	**9.243 112**
Pt100 surface probe	1	**9.243 113**
Pt100 air probe	1	**9.243 114**

3   Temperature meter, digital, testo 925

Without probe. Economical. Very robust. With 1 measuring input. **With battery and calibration protocol.** For °C, °F, °K. Hold function and battery display.

Testo

Digital thermometers, testo 925, accessory probes:
- Waterproof immersion/penetration probe
- Precise and rapid, waterproof immersion probe
- Rapid reaction surface probe
- Robust, economical, air probe

Measuring range:	-50 to +1000°C
Sensor:	Type K (NiCr-Ni)
Accuracy:	-40 to +900°C : ±0.5°C, ±0.3%
	remaining range: ±0.7°C, 0.5%
Battery:	9V, 6F22

Type	PK	Cat. No.
Temperature meter, digital, testo 925	1	**9.851 324**
TopSafe testo 925, protective cover against impact and dust	1	**9.718 011**
Immersion / penetration probe	1	**9.718 200**
Immersion probe	1	**9.718 202**
Surface probe	1	**9.718 222**
Air probe	1	**9.718 230**

Digital thermometer testo 110

Without probe. For use with accessory NTC sensor probes. For control measurements in the food industry and laboratories. Features: switchable °C readout, with Hold function, low battery indicator and battery saving automatic switch-off after a period without use. **With battery and calibration certificate.**

Testo

Accuracy: System accuracy using immersion/penetration probes.
- 20 to +80°C : ±0.2°C, ±0.3°C: rest of range

Battery:	9V, 6F22

Description	Measuring range °C	PK	Cat. No.
Digital thermometer testo 110	-50 ... +150	1	**9.851 300** 4
TopSafe (IP68 protective boot)		1	**9.718 020**
NTC immersion/penetration probe, diam. 4mm, length 110mm	-50 ... +150	1	**9.851 716**
NTC surface probe, with widened measuring tip, diam. 5mm, length 115mm	-50 ... +150	1	**9.851 720**
NTC air probe, robust, diam. 5mm, length 115mm	-50 ... +125	1	**9.851 723**
Robust food penetration probe with special handle, diam. 5mm, length 115mm	-25 ... +150	1	**9.851 352**

9.851 300

1

1   Electronic Contact Thermometer GFX 460

ebro

Applications:
- control of magnetic stirrers, stirrer/hotplates, etc.
- laboratory
- process monitoring

Attributes:
- high accuracy through fuzzy logic algorithm
- minimizes temperature overshoot
- suitable for all magnetic stirrers

Safety features: Probe failure identification, Probe limit warning.
Safety and control circuit according to DIN 12878 Class 1 and 2

Also suitable for Heidolph Magnetic stirrers MR-Hei Standard constructed up to June 2014.

Specifications

Measuring range:	-50 to +300°C
Resolution:	1°C
Accuracy:	±1°C
Measuring rate:	1s
Measuring probe:	Pt1000
Operating temperature:	-5 to +60°C
Storage temperature:	-30 to +70°C
Type of control:	Fuzzy logic control
Protection class:	IP 65
Connection:	5-pin diode plug DIN 45322
Display:	Background illumination LED display for control status
Power supply:	external 9-12V d.c., 20mA
Dimensions (WxDxH):	54 x 22 x 110mm without probe
Housing material:	Polyamide, acid-resistant
Weight:	approx. 150g

Type	Description	PK	Cat. No.
GFX 460	with V2A probe, 205 x 3 mm L x dia.	1	**9.908 056**
GFX 460 G	with glass-coated probe, 235 x 7 mm L x dia.	1	**9.908 057**
Relay box		1	**9.908 059**

2

2   Laboratory Thermometer TFX 410-1

ebro

Robust and impact resistant temperature measurement device for Pt 1000 penetration probe (connection Lemo size 0). For control measurements in laboratories, food sector, storage and incoming goods. For temperature determination of air, liquids, plastic substances and food. Conform to HACCP and DIN EN 13485. With battery and factory calibration certificate.

- Probes made of stainless steel, for temperatures up to +400°C
- Accuracy: exceeds DIN IEC 584, class 1

Please order probes separately.

Specifications:

Measurement range:	-50°C to +300°C
Accuracy:	±0.3°C
Resolution:	0.1°C
Sensor:	Pt 1000 (connection Lemo size 0)
Operating temperature:	-25°C to +50°C
Automatic switch-off:	After 2 hours, optional
Dimensions (L x W x H):	54 x 22 x 109 mm (without probe)
Weight:	Approximately 90 g
Battery:	3.0 V Lithium, replaceable
Battery lifetime:	Approximately 5 years
Protection class:	IP 67

Type	Description	Length mm	Diam. mm	PK	Cat. No.
TFX 410-1	Laboratory thermometer (without probe)			1	**6.207 171**
TPX 100	Blunt probe, without cable	120	3	1	**9.908 021**
TPX 200	Pointed probe, without cable	120	3	1	**6.251 438**
TPX 200-20	Pointed probe, without cable	200	3	1	**9.908 022**
TPX 200-30	Pointed probe, without cable	300	3	1	**9.908 023**
TPX 200-40	Pointed probe, without cable	400	3	1	**9.908 024**
TPX 400	Pointed probe with 60 cm silicone cable (red) and grip	120	3	1	**6.233 543**
TPX 400-40	Pointed probe with 40 cm silicone cable (red) and grip	120	3	1	**9.908 025**
TPX 400-150	Pointed probe with 150 cm silicone cable (red) and grip	120	3	1	**6.254 169**

1   Laboratory Thermometer TFX 422C

ebro

Due to the new German calibration law, which became effective on January 01 2015, we were forced to stop the sales of the TFX 422 Laboratory Thermometer with PTB certification. The so called certification of conformity replaces the calibration by the measurement office. Our new Conformity Certified Laboratory Thermometer TFX 422C is the equivalent successor: same properties, same quality.

- PTB approved
- Robust and impact resistant
- High accuracy
- Waterproof IP 67
- Approx. 5 years battery life
- According to EN 13485
- With fixed Pt 1000 probe
- 2 cable lengths (60cm, 150cm) available

Specifications:

Measurement range:	-50°C to +200°C
Accuracy:	±0.3°C
Resolution:	0.1°C
Sensor:	Pt 1000 (l 120mm, Ø 3mm)
Operating temperature:	-25°C to +50°C
Deactivation:	Automatically after 2 hours, deactivalable
Dimensions (L x W x H):	109 x 54 x 22 mm (without probe)
Weight:	Approximately 90 g
Battery:	3.0 V Lithium, 1 Ah, type CR 2477, replaceable
Battery lifetime:	Approximately 5 years
Protection class:	IP 67

Type	Description	PK	Cat. No.
TFX 422C-60	Thermometer with certification of conformity, with 60 cm cable	1	**6.266 921**
TFX 422C-150	Thermometer with certification of conformity, with 150 cm cable	1	**6.266 922**

Precision thermometer TFX 430 (without probe)

ebro

Features:
- high accuracy
- four-wire measuring system
- waterproof IP67
- approx. 5 years battery life
- factory calibration certificate
- different probes for different applications

Specifications

Measuring range:	-100 to +500°C
Accuracy:	±0.05°C (from -50 to +199.99°C); remaining measuring range: ±0.2°C
Resolution:	0.01°C (from -100 to +199.99°C); remaining measuring range: 0.1°C
Operating temperature:	-20 to +50°C
Storage temperature:	-30 to +70°C
Probes:	Pt100
Measurement interval:	1 to 15 secs, adjustable
Battery:	Lithium 3V, 1Ah, Type CR2477
Deactivation:	Automatically after 2 hours, deactivatable
Dimensions:	109 x 54 x 22mm
Weight:	approx. 90g
Protection class:	IP67
Housing material:	ABS

9.908 075

Type	Description	PK	Cat. No.
TFX 430	Precicion-Thermometer, without probe	1	**9.908 075**
TFX 430 + TPX 130	Precicion-Thermometer, with probe (length 130mm, 3mm dia., blunt)	1	**9.908 076**
TFX 430 + TPX 230	Precicion-Thermometer, with probe (length 130mm, 3mm dia., pointed)	1	**9.908 077**
TFX 430 + TPX 330	Precicion-Thermometer, with probe (length 190mm, 8mm dia., glass-coated)	1	**9.908 078**
TPX 230	Probe, length 130mm, 3mm dia., blunt for TFX 430	1	**6.233 571**
TPX 130	Probe, length 130mm, 3mm dia., pointed for TFX 430	1	**6.235 806**
AX 110	Extention cable, length 1m, silicone for TFX 430	1	**6.226 725**

1

6.227 520

Digital thermometer testo 735-2

3 channel temperature instrument testo 735-2, certified acc. to DIN EN ISO 13485. Highly accurate temperature measurement in corrosive media.

Suitable for precise temperature measurements in chemicals at 338°C and 98 % acid content. With the robust and yet highly precise 3-channel temperature measuring instrument testo 735-2, and the corresponding Pt100 laboratory probe, you measure temperature reliably even in corrosive media. Thanks to its glass coating, the Pt100 probe is ideally suited to typical temperature measurements in laboratories. **Please order Pt100 probe separately.**
- Ideally suitable for use in a laboratory thanks to a glass-coated Pt100 probe
- Implementation and recording of measurement series
- Evaluation, visualization, documentation with free software ComSoft Professional
- Consistent compliance with quality standards
- Norm-compliant work
- Measurement, analysis and documentation of results with one instrument
- Highest level of precision over entire measuring range due to system adjustment
- Recording of measurement series (instrument store 10.000 measurement values) with freely selectable cycle

2

9.851 718

Specifications

Measuring range with Pt100 probe:	-50 to +400°C
Working temperature:	-20 to +50°C
Housing material:	ABS/TPE/metal
Batterie type:	Alkali manganese, AA
Dimensions (L x W x H)	220 x 74 x 46mm
Weight:	428g
Protection class:	IP 65
Guarantee:	2 year

Description	PK	Cat. No.
Temperature measuring instrument testo 735-2 incl. ComSoft Professional Software	1	**6.227 520** 1
Laboratory probe Pt100, glass-coated, glass tube DURAN®	1	**9.851 718** 2
Mains unit, 5VDC 500 mA with Euro plug, 100-250 VAC	1	**7.633 482**
Service case for basic equipment measuring instrument and probes	1	**6.207 195**

3

3 Infrared-Thermometer Slim Flash

Non-contact temperature measurement via infrared. Response time 1 second. Measuring range -33 to +199°C, Accuracy ±2°C or 2%, incl. CR2032 button cell.

Dostmann electronic

Type	PK	Cat. No.
Infrared-Thermometer Slim Flash	1	**9.851 998**

4

6.241 105

Combination Infrared and Penetration Thermometer TLC 730

Handy, waterproof infrared thermometer with large measurement range for noncontact measurement of the surface temperature and secure core temperature measurement with the folding penetration probe. For time-saving, precise temperature measurements at incoming goods, production and storage of diverse goods and food. Conform to HACCP and DIN EN 13485. With battery and factory calibration certificate.

ebro

Specifications:

Measurement range:	-50°C to +350°C
Accuracy infrared:	±4°C at -50°C to -30.1°C
	±2.5°C at -30°C to -18.1°C
	±1.5°C at -18°C to -0.1°C
	±1.0°C at 0°C to +65°C
	±2.0°C or 2 % at +65°C to +350°C
Accuracy penetration probe:	±0.5°C at -18°C ... +120°C
	Otherwise ±1°C [1%], whichever is larger
Resolution:	0.1°C
Sensor:	Type K
Operating temperature:	-25°C to +50°C
Dimensions (L x W x H):	48 x 24 x 172 mm (without probe)
Weight:	Approximately 140 g
Battery:	2 x 1.5 V AAA, replaceable
Deactivation:	Automatically after 15 sec., deactivatable
Protection class:	IP 55

Type	Description	PK	Cat. No.
TLC 730	Combination infrared and penetration thermometer	1	**6.241 105** 4
AG 121	Nylon case for TLC 730	1	**6.207 112**

1 2 Infrared thermometer, DualTemp Pro, with penetration probe

For simple, rapid, non-contact, temperature measurement.
- dual display
- wide measurement ranges:
- infra-red: -33 to +250°C
- conventional penetration probe: -55 to + 250°C
- measuring spot:distance ratio 2.5:1
- Max./ Min., Hold functions
- auto-off after 15 secs.
- belt-clip included
- accessories: certificate of calibration & pilot drill for taking measurements from frozen items

Resolution:	0.2°C
Accuracy (IR):	-33°C to 0°C ±1.0°C ±0.1/1°C
	0°C to +65°C ±1.0°C
	+65°C to +200°C ±1.5%
Accuracy (penetration probe):	below -5°C ±1.0°C
	-5°C to +65°C ±0.5°C
	above +65°C ±1%
Spectral sensitivity:	6 to 14µm
Adjustable emissivity:	0.10 to 1.00
Operating temperature:	0 to 50°C
Battery:	Lithium cell CR2032
Dimensions:	24.2 x 39.8 x 156mm
Weight:	380g (incl. packaging)

Type	PK	Cat. No.
DualTemp Pro	1	**9.851 023**

3 Infra-red thermometer ScanTemp 385

With IR thermometers you can measure surface temperature. A short response time and non-contact measurement are key advantages. ideal for monitoring applications such as:
- moving parts (running paper webs…)
- registering the surface temperature of gears and motors
- checking live electrical parts (components, transformers…)
- newly coated or painted parts
- food and corrosive substances

Specifications

Temperature range:	-35°C to +365°C
Precision:	±2% or 2°C, the higher value counts
Response time:	< 1 sec
Spectral sensitivity:	6 to 14µm
Operating temperature:	0 to 50°C
Optical resolution:	12:1
Laser:	Spot laser
Dimensions (L x W x H):	147.9 x 112.6 x 41.4mm
Weight:	150g (incl. packaging)
Battery:	2 x 1.5V AAA Batteries

Type	PK	Cat. No.
ScanTemp 385	1	**9.851 996**

4 Infra-red thermometer ScanTemp 410

Infra-red thermometer with laser aiming. For quick, easy and safe measurement of surface temperatures. Easy to use: just point, press the button and read the measurement from the large, illuminated display.

Specifications

Temperature range:	-33°C to 500°C
Precision:	±2 % of measurement or 2°C
Response time:	0.5 secs.
Spectral sensitivity:	7 to 18µm
Operating temperature:	0 to 50°C
Optical resolution:	11:1
Laser:	Spot laser
Dimensions (L x W x H):	175 x 39 x 79mm
Weight:	300g (incl. packaging)
Battery:	2 x 1.5V AAA Batteries

Type	PK	Cat. No.
ScanTemp 410	1	**9.851 919**

1 Infrared Thermometers TFI 250/TFI 54

Non-contact measurement of the surface temperature with infrared. Ideal for fast and secure measurements of moving or energized parts and food. With batteries and factory calibration certificate.

ebro

Specifications:

Measurement range:	-60°C to +550°C
Accuracy:	±2°C or 2% (at 0°C to +550°C), whichever is larger
Resolution:	0.1°C
Optical resolution:	12:1
Operating temperature:	0°C to +50°C
Response time:	1 sec.
Emissivity factor:	0.95 fixed (0.1 to 1.0 possible)
Dimensions (L x W x H):	153 x 115 x 48mm (TFI 250)
	144 x 117 x 43mm (TFI 54)
Weight (with batteries):	177g (TFI 250), 180g (TFI 54)
Battery:	2 x 1.5V AAA, replaceable
Protection class:	IP 20 (TFI 250), IP 54 (TFI 54)

9.908 031

Type	Description	PK	Cat. No.
TFI 250	Infrared thermometer	1	**9.908 031** 1
TFI 54	Splash water proof infrared thermometer	1	**9.908 032**

2 Dual Infrared Thermometer TFI 550 with NiCr-Ni Connection

Addtional connection for NiCr-Ni temperature probes with SMP-connection. Please order probes separately.
- Optics D:S = 30:1
- Dual laser
- NiCr-Ni connection for core temperature measurement with penetration probe
- Alarm when Min/Max exceeded
- Factory calibration certificate

ebro

Specifications:

Measurement range:	-60°C to +550°C (-76°F to 1022°F)
Accuracy:	±2°C at -18°C to +23°C
	(±3.6°F at 0°F to 73°F)
	±1 % of measurement
	±1°C (whichever is larger) at +23°C to +510 C
	±1.8°F (whichever is larger) at 73°F to 950°F
Resolution:	0.1°C at -9.9°C to +199°C, otherwise 1°C
	(0.2°F at 14°F to 391°F, otherwise 1.8°F)
Response time (t_{99}):	Approximately 1 s
Emissivity factor:	0.1 to 1.0
Distance : spot ratio:	30:1
NiCr-Ni probe measurement:	
Measurement range:	-64°C to +1400°C (-83°F to 2552°F)
Connection:	SMP
Accuracy:	±1 % of measurement value/±1°C (±1.8°F),
	whichever is larger
Battery:	2 x AAA (Micro)
Battery lifetime:	Typically 180 hours
Operating temperature:	0°C to +50°C (32°F to 122°F)
Storage temperature:	-20°C to +65°C (-4°F to 149°F)
Protection class:	IP 20
Weight:	approx. 180g

Type	Description	PK	Cat. No.
TFI 550	Dual Infrared Thermometer (without probe)	1	**6.238 001**

Disposable data logger TEMPMATE-PDF

The innovative single-use data logger with a built-in USB connector, is ideal solution for low-cost temperature monitoring of transports.
TEMPMATE-PDF loggers will be supplied according each customer's specifications.

Dostmann electronic

9.726 424

Product features
- Recording cycle 6, 15 or 90
- ON-Board PDF report generator, no software required
- Built-in USB connector, no hardware required
- Bank-card size
- Quick-start with START button
- Easy to read LED ind
- Food-safe packaging
- Free costumisation service
- Includes Certificate

At quantities of 100 pieces, the TM logger can be customized.
Following pre-programmed settings can be made free of charge:
- Upper and lower alarm set point (e.g. <+2°C and >+8°C)
- Alarm delay (default: 30 min.)
- Start delay (default: 0 min.)

Specifications:

Temperature Range:	-30°C to +70°C
Accuracy:	±0.5°C
Resolution:	0.1°C
Data Memory:	12960 measurements
Recording Cycle*:	up to 90 days
Sampling Interval*:	1 min 6 days/2 min 15 days/ 10 min 90 days
Shelf Life:	12 months
Dimensions (L x W x H):	80mm x 52mm x 4mm
Weight:	10g
Protection Class:	IP 67
System Requirements:	Adobe® Reader
Certifications:	Calibration Certificate, CE, RoHS, EN 12830 S, T, C, D, 1

For	Interval	PK	Cat. No.
6 days	1 min	1	**9.726 426**
15 days	2 min	1	**9.726 428**
90 days	10 min	1	**9.726 424** 1

*dependent on model

2 Data Logger LOG32T

(NEW!)

Dostmann electronic

- Memory size: 60 000 measurements
- Usable without software (default settings) (15-minute-interval, without alarm settings)
- Optional free of charge software download for alarm setting and free adjustable recording interval (30sec to 24h)
- Automatic PDF creation
- Battery lifetime > 3 years (recording interval >15 minutes)
- Status and Alarm-LEDs, acoustic signal
- Includes wall mount
- HACCP (EN12830) conform
- IP65 watertight

Applications
The LOG32T is perfectly designed for product transportation or storage applications.
- Quality surveillance in laboratories during production in storage areas
- Monitoring conditions in manufacturing facilities
- Maintaining product storage according to HACCP
- Ambient conditions in power plants
- Monitoring of fridges for the pharmaceutical industry

Specifications

Measuring range:	-40 ... +70°C
Accuracy:	±0.5°C (-10 ... +40°C), otherwise ±1.0°C
Resolution:	0.1°C
Memory:	60 000 measurements
Interface:	USB (integr.)
Housing:	ABS
Dimensions (L x W x H):	100 x 19 x 19mm
Weight:	70g
Battery:	1 x 3.6 Volt Lithium ½ AA

Type	PK	Cat. No.
LOG32T	1	**9.726 431**

1

7.626 604

Mini data logger testo 174T

The mini data logger for temperature, testo 174T, is ideal for accompanying transports. *Testo*
Simply positioned close to the goods, e. g. in containers and refrigerated rooms, the data
logger monitors temperature continuously, securely and unobtrusively. The free software ComSoft testo 174 allows fast
programming of the data logger and easy analysis.

- High data integrity, even with empty battery
- Large measurement data memory
- Watertight in accordance with IP65
- Compact and robust
- Conforms to EN12830
- Issue of alarms via display
- Data transfer to the PC via USB interface
- Reliable temperature measurement for the monitoring of sensitive goods and cold chain during storage and transport

Specification

Probe type:	Internal NTC temperature sensor
Measuring range:	-30 to +70°C
Accuracy:	±0.5°C
Resolution:	0.1°C
Operating temperature:	-30 to +70°C
Storage temperature:	-40 to +70°C
Battery type:	2 x 3V button cell (2 x CR 2032 lithium), can be changed by user
Battery life:	500 days (15 min measuring cycle, +25°C)
Protection class:	IP65
Meas. cycle:	1min - 24h (can be selected)
Memory:	16.000 readings
Software:	can be used with Windows XP, Vista, Win7

Type	Description	PK	Cat. No.
testo 174T	Mini data logger, 1-channel, incl. wall bracket, battery (2 x CR 2032 Lithium) and calibration protocol	1	**7.626 604** 1
testo 174T set	Mini data logger, 1-channel, incl. USB interface for programming and reading out the logger, wall bracket, battery (2 x CR 2032 lithium) and calibration protocol	1	**7.626 614**

2

9.908 069

3

6.240 382

Data Logger EBI 20-T1/EBI 20-TE1

Applications: *ebro*
- reliable temperature recording
- transport
- storage monitoring
- refrigeration areas and coldrooms
Features:
- excellent price/performance ratio
- waterproof
- visual Alarm
- max/min values on display
- stores 40.000 readings, can be read off at any time
- replaceable battery

Specifications

Measuring range temperature:	-30 to +70°C
Accuracy, temperature:	±0.5°C (-20 to +40°C); ±0.8°C for remaining measuring range
Resolution temperature:	0.1°C
Memory:	40.000 samples
Sensor:	NTC
Operating temperature:	-30 to +70°C
Storage temperature:	-40 to +70°C
Measuring period:	1 minute to 24 hours
Measuring mode:	immediate loop measurement, measurement from starting point, start immediately until memory full, start/stop measuring, start when button pressed
Battery:	3V lithium (CR 2450), can be replaced by user
Protection class:	IP 67
Housing :	ABS
Dimensions:	69mm x 48mm x 22mm
Weight:	approx. 45g

Type	Description	PK	Cat. No.
EBI 20-T1-Set	Starter-Set (Temperature Logger, evaluation software, Interface)	1	**9.908 073**
EBI 20-TE1-Set	Starter-Set (Temperature Logger with external sensor, evaluation software, Interface)	1	**6.240 382** 3
EBI 20-T1	Temperature Logger	1	**9.908 069** 2
EBI 20-TE1	Temperature Logger with external probe	1	**6.228 382**
EBI 20-IF	Interface incl. evaluation software Winlog.basic	1	**9.908 072**
EBI 20-WM	Wall mounting incl. padlock	1	**9.908 079**
EBI 20-WM1	Truck wall holder	1	**6.242 239**

1　Temperature data logger LOG100

Large display for actual value, battery status display, easy to use software.
Perfect designed instrument for transportation or storage.

- quality surveillance in laboratories, at the production or in the storage
- ambient conditions in manufacturing facilities
- monitoring from storages after HACCP
- ambient conditions in power plants
- monitoring of fridges for the pharma industry
- memory for 60 000 data sets

Please order Software with USB-Cabel separately (9.726 413)

Specifications

Measuring range:	-30 to +70°C
Accuracy:	0.1°C
Precision:	±0.5°C (0 to +40°C), otherwise ±0.7°C
Housing:	Plastic (ABS)
Battery:	1 x CR2032 3V
Dimensions:	92 x 55 x 21mm
Weight:	95g (incl. packaging)
Alarm function:	Alarm for too low or too high temperatur and/or humidity values
	Calibration reminder

Type	PK	Cat. No.
Temperature data logger LOG 100	1	9.726 411
Windows Software DE-Graph for LOG 100 and LOG 110 with USB-cabel	1	9.726 413
external temperature sensor, 3 x 40 mm, -50 to +120°C with 3 m wire	1	9.726 416
external temperature sensor, 3 x 40 mm, -50 to +120°C with 8 m wire	1	9.726 417

Standard USB Data Logger EBI 300

- For temperature monitoring related to HACCP/IFS issues or other perishable goods　*ebro*
- Transportation of fresh, cool and deep cool products
- Monitoring of fridges and deep freezers
- Evaluation without software

Benefits:
- Access the data anywhere with the automatically generated PDF report and any PDF software
- Minimise training, user errors and IT costs using EBI 300's simple, easy to use design and standard software.
- Ensure data integrity since no data manipulation is possible
- EN 12830, ATP, VO(EG) 37/2005 Compliant
- Factory calibration certificate included
- Programmable via the free online configurator at www.ebi300.com

7.655 865

Specifications

Measuring range without probe:	-30°C to +70°C
Measuring range with probe TPC 300:	-35°C to +70°C
Accuracy:	±0.5°C (-20°C to +40°C); ±0.8°C for remaining measuring range
Resolution:	0.1°C
Memory:	40.000 samples
Sensor:	NTC for temperature
Battery life time:	up to two years
Measuring period:	1 minute to 24 hours
Maximum Start Delay:	72 hrs
Housing material:	Polycarbonate
Measuring modes:	Start/Stop, endless loop, start with button
Alarms:	High and low limits
Weight:	35g
Protection class:	IP 65
Programming Software:	Winlog.basic, Winlog.light and Winlog.pro

9.908 027

Type	Description	PK	Cat. No.
EBI 300	Standard USB data logger with calibration certificate	1	7.655 865
TPC 300	External NTC probe	1	9.908 027
EBI 300-WM2	Wall Bracket	1	9.908 017
EBI 300 TH	Temperature + humidity data logger incl. humidity probe TPH 400	1	6.266 910
EBI 300 TE	Temperture data logger incl. temperature probeTPC300	1	6.266 911

1

9.908 098

2

9.908 017

High Precision USB Data Logger EBI 310

ebro

- Automatic pdf-report creation with temperature/time values
- Transport of drugs, inoculants, blood products and primary products
- Transport of all temperature sensitive products
- Storage of reference samples in refrigerators and deep-freezers
- Minimize training costs and user errors through simple, easy to use design
- Eliminate costly and time consuming IQ/OQ procedures through standardized software and standard reporting process
- GMP, pharmaceutical law compliant; EN 12830, ATP, VO (EG) 37/205 compliant, 21 CFR Part 11 conform (Winlog.basic)

Attributes:
- USB-Port for PC and Notebook
- easy battery exchangeable
- "traffic light principle" by limit exceeded
- waterproof
- Programmable via the free online configurator at www.ebi300.com

Specifications

Operating Temperature:	-30°C to +75°C
Accuracy:	±0.2°C (-30°C to +30°C)
	±0.5°C for the remainder
Resolution:	0.1°C
Sensor:	Pt1000/NTC
Channel:	1
Memory Capacity:	120.000 measurements
Battery Life:	2 Years
PDF/LED:	Yes
Weight with battery:	35g
Protection class:	IP 65

Type	Description	PK	Cat. No.	
EBI 310	High Precision USB Data Logger	1	9.908 098	1
EBI 300-WM2	Wall Bracket	1	9.908 017	2
EBI 310 TH	Temperature + humidity data logger incl. humidity probe TPH 400	1	6.266 912	
EBI 310 TE	Temperture data logger incl. temperature probeTPC300	1	6.266 913	

3

6.264 938

4

6.264 939

External 2-channel probe for USB Data Logger EBI 310

ebro

Adapter for EBI 310 to measure two temperatures parallel.
Please order 2 sensors separately.

Specifications TPX 310

Measuring range (sensor):	-200 to +400°C
Working range (logger):	-30 to +70°C
Accuracy:	±2.0°C to -200 to -100°C
	±1.0°C to -100 to -20°C
	±0.2°C to -20 to +60°C
	±0.5°C to +60 to +250°C
	±1.0°C to +250 to +400°C
Protection class:	IP65

TPX 310-P1

Measuring range:	-200 to +200°C
Cable:	PTFE, 3 meters

Type	Description	PK	Cat. No.	
TPX 310	External 2-channel temperature sensor for EBI 310	1	6.264 938	3
TPX 310-P1	External sensor, length 45mm, 5mm diam., blunt for TPX 310	1	6.264 939	4

Further sensors available on request.

1   Temperature/Humidity data logger LOG 110

Large display for actual value, battery status display, easy to use software.
Perfect designed instrument for transportation or storage.

Dostmann electronic

- quality surveillance in laboratories, at the production or in the storage
- ambient conditions in manufacturing facilities
- monitoring from storages after HACCP
- ambient conditions in power plants
- monitoring of fridges for the pharma industry
- memory for 60 000 data sets

Please order Software with USB-Cabel separately (9.726 413)

Specifications
Temperature

Measuring range:	-30 to +70°C
Accuracy:	0.1°C
Precision:	±0.5°C (0 to +40°C), otherwise ±0.7°C

Humidity

Measuring range:	0 to 99% R.H.
Resolution:	0.1% R.H.
Accuracy:	±3% R.H.
Housing:	Plastic (ABS)
Battery:	1 x CR2032 3V
Dimensions:	92 x 55 x 21mm
Weight:	95g (incl. packaging)
Alarm function:	Alarm for too low or too high temperature and/or humidity values
	Calibration reminder

Type	PK	Cat. No.
Temperature / Humidity data logger LOG 110	1	**9.726 412**
Windows Software DE-Graph for LOG 100 and LOG 110 with USB-cabel	1	**9.726 413**
external temperature sensor, 3 x 40 mm, -50 to +120°C with 3 m wire	1	**9.726 416**
external temperature sensor, 3 x 40 mm, -50 to +120°C with 8 m wire	1	**9.726 417**

2   Temperature/Humidity logger LOG32TH

- Memory size: 60 000 measurements
- Usable without software, 5-minute-interval default setting
- With free software, free adjustable recording interval: 30 seconds to 24 hours
- Automatic PDF creation (no drivers required)
- Battery lifetime >2 years (recording interval >15 minutes)
- Status and Alarm-LEDs
- Includes wall mount

Dostmann electronic

Application profile:
The LOG 32TH is perfectly designed for product transportation or storage applications.
- Quality surveillance in laboratories during production in storage areas
- Monitoring conditions in manufacturing facilities
- Maintaining product storage according to HACCP
- Ambient conditions in power plants
- Monitoring of fridges for the pharmaceutical industry

Specifications

Measuring range:	-40 to +70°C
Accuracy:	0.1°C
Precision:	±0.5°C (-10 to +40°C), otherwise ±1.0°C
Measuring range:	0 to 100%R.H.
Resolution:	0.1% R.H.
Accuracy:	±3% R.H. (40 to 60%), ±3.5% R.H. (20 to 40% and 60 to 80%), otherwise ±5% R.H.
Interface:	USB (integr.)
Housing:	Plastic (ABS)
Battery:	1 x 3.6V ½ AA Lithium
Dimensions:	100 x 19 x 19mm
Weight:	70g

Type	PK	Cat. No.
Temperature/Humidity logger LOG32TH	1	**9.726 422**

1

9.908 070

Humidity Logger EBI 20-TH1

ebro

Applications:
- reliable temperature and temperature/humidity recording
- transport
- storage monitoring
- refrigeration areas and coldrooms

Features:
- excellent price/performance ratio
- visual Alarm
- max/min values on display
- stores 40.000 readings, can be read off at any time
- replaceable battery

Specifications

Measuring range temperature:	-30 to +70°C
Measuring range humidity:	0% to 100% R.H.
Accuracy, temperature:	±0.5°C (-20 to +40°C); ±0.8°C for remaining measuring range
Accuracy, humidity:	±3% R.H. (10 to 90% R.H.)
Resolution temperature:	0.1°C
Resolution humidity:	0.1% R.H.
Memory:	40.000 samples
Sensor:	NTC for temperature/capacitive for humidity
Measuring period:	1 minute to 24 hours
Measuring mode:	immediate loop measurement, measurement from starting point, start immediately until memory full, start/stop measuring, start when button pressed
Battery:	3V lithium (CR 2450), can be replaced by user
Protection class:	IP 52
Housing :	ABS
Dimensions:	69mm x 48mm x 22mm

Type	Description	PK	Cat. No.
EBI-20 TH1-Set	Starter-Set (Temperature Humidity Logger, evaluation software, Interface)	1	**9.908 074**
EBI-20 TH1	Temperature Humidity Logger	1	**9.908 070** 1
EBI-20 IF	Interface incl. evaluation software Winlog.basic	1	**9.908 072**
EBI 20-WM	Wall mounting incl. padlock	1	**9.908 079**
EBI 20-WM1	Truck wall holder	1	**6.242 239**

2

6.239 884

Mini data logger testo 174H

Testo

The mini data logger for temperature and humidity, testo 174H, is ideal for monitoring temperature and humidity sensitive goods in storage. The testo 174H also monitors building climate, continuously, securely and unobtrusively. The free software ComSoft testo 174 allows fast programming of the data logger and easy analysis.

- Humidity sensor with long-term stability
- High data integrity, even with empty battery
- Large measurement data memory
- Display of the current temperature or humidity value
- Large measuring range
- Compact and robust
- Issue of alarms via display
- Data transfer to the PC via USB interface

Specification

Probe type:	NTC temperature sensor and internal capacitive humiditiy sensor
Measuring range:	0 to 100% RH, -20 to +70°C
Accuracy:	±0.5°C, ±3% RH
Resolution:	0.1% RH, 0.1°C
Operating temperature:	-20 to +70°C
Storage temperature:	-40 to +70°C
Battery type:	2 x CR 2032 lithium
Battery life:	1 year (15 min measuring cycle, +25°C)
Protection class:	IP20
Meas. cycle:	1min to 24h (can be selected)
Memory:	16000 readings
Software:	can be used with Windows XP, Vista, Win7

Type	Description	PK	Cat. No.
testo 174H	Mini data logger, 2-channel, incl. wall bracket, battery (2 x CR 2032 lithium) and calibration protocol	1	**6.239 884** 2
testo 174H-Set	Mini data logger, 2-channel, incl. USB-interface for programming and reading out the logger, wall bracket, battery (2 x CR 2032 lithium) and calibration protocol	1	**6.239 883**

TERMOHIGROMETR 31-DT-2

zakres pomiaru temperatury (^{0}C)	-50+70 0,1 ±
zakres pomiaru wilgotności	20%-99% 1 ±
zasilanie (V)	DC 1,5
wymiary ekranu (mm)	63x43
wymiary całkowite (mm)	115x64x19

cena netto zł

standardowo na wyświetlaczu:
godzina / temperatura / wilgotność

TERMOHIGROMETR 31-MT-2

zakres pomiaru temperatury (^{0}C)	-5+70
temperatura min/max	tak
zakres pomiaru wilgotności	30%-90%
pamięć wilgotności	tak
rozróżnianie (^{0}C)	0,1
zasilanie	bateria DC1,5V, Ag13
wymiar ekranu (mm)	35 x 24
wymiary całkowite (mm)	103x44x15
funkcje dodatkowe ekranu	czas/kalendarz/przełącznik °C i °F

cena netto zł 42,00

TERMOHIGROMETR 31-DT-3

zakres pomiaru temperatury wewnętrznej (^{0}C)	-30+50 ± 0,1
zewnętrznej (^{0}C)	-50+70 ± 0,1
zakres pomiaru wilgotności wewnętrznej	20%-99% 1
zasilanie	DC 1,5V
wymiary ekranu (mm)	63x43
wymiary całkowite (mm)	115x64x19

cena netto zł 68,00

standardowo na wyświetlaczu - 2x temperatura / wilgotność

TERMOMETR BAGIETKOWY

numer katalogowy	zakres [^{0}C]	działka	długość [mm]	wypeł.
WYPEŁNIENIE - PŁYN				
08-342-110	-10 +110	1/1	300	płyn
08-342-150	-10 +150	1/1	300	płyn
08-342-200	-10 +200	2/1	300	płyn
08-342-250	-10 +250	2/1	300	płyn
08-342-050	-30 +50	1/1	300	płyn
08-342-550	-50 +50	1/1	300	płyn
WYPEŁNIENIE - RTĘĆ				
08-341-050	-30 +50	1/1	300	rtęć
08-341-110	-10 +110	1/1	300	rtęć
08-341-150	-10 +150	1/1	300	rtęć
08-341-200	-00 +200	2/1	300	rtęć
08-341-250	-10 +250	2/1	300	rtęć
08-341-300	-10 +300	2/1	300	rtęć
08-341-360	-10 +360	2/1	300	rtęć

TERMOMETR CYFROWY YC811K - W OBUDOWIE
zakres od - 200 ÷ 1372°C
Pomiar : 1/sek, czas pracy baterii: 550H. Pamięć ostatniego
pomiaru, pomiar min - max.

Nr katalogowy 06-YC811K

TERMOMETR DŁUGOPISOWY - CYFROWY WT-1
zakres od - 50 ÷ 300°C
Z osłoną sondy. Rozdzielczość 0,1, dokładność 1°C w zak -20÷80,
a w pozostałym zakresie 5°C. Zasilany na baterie.
Nr katalogowy 06-WT-1

TERMOMETR DŁUGOPISOWY - ANALOGOWY

Nr katalogowy 08-344-000

TERMOMETR CYFROWY, TARCZOWY - WT-5
zakres -5 ÷ 150°C
Zasilanie solarne.Do żywności, osłona sondy, dokładność
co 1°C do poniżej 80°. Długości sondy 116 mm.
Nr katalogowy 06-WT-5

TERMOMETR CYFROWY
Z SONDĄ ZEWNĘTRZNĄ - WT-2
zakres -50 ÷ 300°C
Pamięć ostatniego pomiaru, pomiar min - max, dokładność
w zakresie 0-60oC - 1°C pozostały zakres co 5°C, alarm,
długość sondy ok 20cm zasilanie bateryjne.
Nr katalogowy 06-WT-2

TERMOMETR WEWNĘTRZNY

001   002
Nr katalogowy 08-343-001
Nr katalogowy 08-343-002