

Digital Thermometers

Electronic temperature measurement
with digital thermometers and sensors



Ludwig Schneider 

*High-precision measuring instruments for
temperature and density*

Digital Temperature Measuring Units

The temperature professionals

Ludwig Schneider ranks among the world's foremost manufacturers of high-precision temperature and density measuring instruments.

The product program ranges from general-purpose thermometers and high-precision laboratory thermometers to precision hydrometers and digital measuring systems.

Digital thermometers

The high-precision digital instruments are designed for the mains-independent measurement of temperatures e.g. in quality control as well as process and production control and are used in the chemical, pharmaceutical and food industry as well in R&D facilities.

On request individual marking (e.g. logos, product marks, labels etc.) is possible.

Product features

- Precise measuring
- Quick response times
- Excellent reading LCD displays
- Various type-dependent memory functions available (e.g. hold, max./min., temperature limit alarm, time/date etc.)
- A choice of digital thermometers is available with works test certificate

Color symbols



Also available with works test certificate



With certificate, traceable to international standards (PTB, NIST, ILAC etc.)



Waterproof (IP 67)



With integrated alarm function



With magnet (for the attachment at refrigerators etc.)



Suitable for the temperature control in the food sector



Digital push-in thermometer with plastic sleeve and clip Type 12050

Measuring range: -50...+150 °C

Accuracy: ± 1 °C (-30+150 °C), $< \pm 2$ °C

Resolution: 0.1 °C (-19.9+150.0 °C)
1 °C (< -19.9 °C)

Battery: 1 x 1.5 V (LR44 button cell)

Casing: 75 x 20 mm, plastic, black

Ambient temperature: -10...+50 °C

Temp. sensor (downwards): 125 x 3.5 mm stainless steel, with push-in tip

Response time: $T_{90} = 8$ sec

With max/min memory

Automatic switch-off after 60 min

Ref.-No. 55685

Digital Thermometers



Digital push-in thermometer with plastic sleeve and clip Type 12070

Measuring range: -50...+300 °C
Accuracy: ± 1 °C (-30+150 °C), $< \pm 2$ °C
Resolution: 0.1 °C (-19.9+150.0 °C)
1 °C (< -19.9 °C)
Battery: 1 x 1.5 V (LR44 button cell)
Casing: 75 x 20 mm, plastic, black
Ambient temperature: -10...+50 °C
Temp. sensor (downwards): 200 x 3.5 mm
Stainless steel, with push-in tip
Response time: T 90 = 10 sec
With max/min memory
Automatic switch-off after 60 min
Casing turnable by 90°
Ref.-No. 55681



Digital push-in thermometer with plastic sleeve and clip Type 13020

Measuring range: -50...+150 °C/-58...+302 °F
Accuracy: ± 1 °C (-30+150 °C)/ ± 1.8 °F (-22+302 °F), $< > \pm 2$ °C/ ± 4 °F
Resolution: 0.1 °C (-19.9+150.0 °C), 1 °C (< -19.9 °C)
Battery: 1 x 1.5 V (LR44 button cell)
Casing: \varnothing 54 mm, plastic, black, ambient temperature: -10...+50 °C
Temperature sensor (backwards): 135 x 4 mm, stainless steel, with push-in tip
Response time: T 90 = 10 sec, automatic switch-off after 60 min
Ref.-No. 64726



Digital push-in thermometer Type 13010

Measuring range: -50...+300 °C/-58...+572 °F
Accuracy: ± 1 °C (-30+150 °C)/ ± 1.8 °F (-22+302 °F), $< > \pm 2$ °C/ ± 4 °F
Resolution: 0.1 °C (-19.9+199.9 °C), 1 °C (< -19.9 °C, $> +199.9$ °C)
Battery: 1 x 1.5 V (LR44 button cell)
Casing: \varnothing 54 mm, plastic, black, ambient temperature: -10...+50 °C
Temperature sensor: 120 x 3.5 mm, stainless steel, with push-in tip, cable length: 1 m
Response time: T 90 = 10 sec
With clip and magnet, with hold function
Ref.-No. 64725

Digital Thermometers



Digital push-in thermometer with plastic sleeve and clip
Type 12060

Measuring range: -50...+150 °C
 Accuracy: ± 1 °C (-30+150 °C), $< \pm 2$ °C
 Resolution: 0.1 °C (-19.9+150.0 °C)
 1 °C (< -19.9 °C)
 Battery: 1 x 1.5 V (LR44 button cell)
 Casing: 58 x 20 mm, plastic, black
 Ambient temperature: -10...+50 °C
 Temp. sensor (backwards): 125 x 3.5 mm,
 Stainless steel, with push-in tip
 Response time: T 90 = 4 sec
 With max/min memory
 Automatic switch-off after 60 min
Ref.-No. 55680



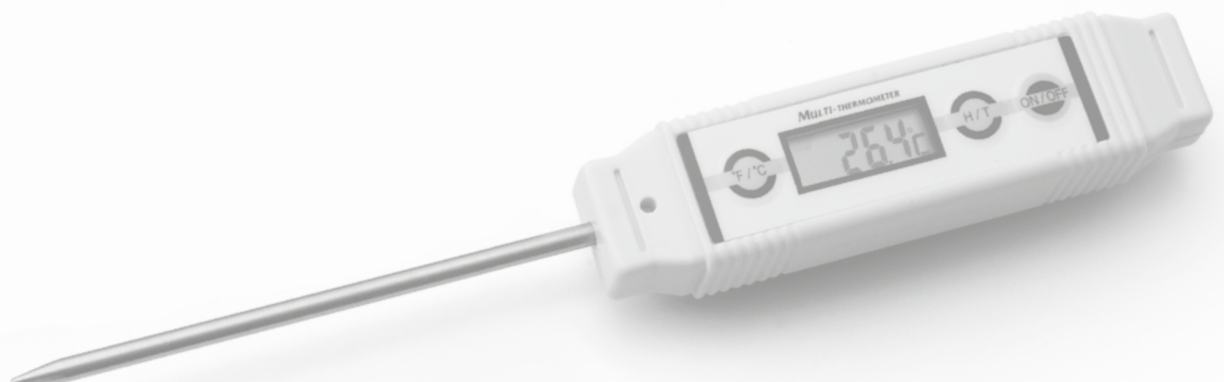
Digital push-in pocket thermometer with plastic sleeve
Type 12080

Measuring range: -50...+300 °C/-58...+572 °F
 Accuracy: ± 1 °C (-30+150 °C), $< \pm 2$ °C
 ± 1.8 °F (-22+302 °F), $< \pm 4$ °F
 Resolution: 0.1 °C (-19.9+199.9 °C)
 1 °C (< -19.9 , $> +199.9$ °C)
 Battery: 1 x 1.5 V (LR44 button cell)
 Casing: 215 x 40/20 mm, plastic, black
 Ambient temperature: -10...+50 °C
 Temperature sensor: 120 x 3.5 mm,
 stainless steel, with push-in tip
 Response time: T 90 = 8 sec
 Automatic switch-off after 60 min
 With hold function, with max/min memory
Ref.-No. 55682



Waterproof digital push-in pocket thermometer with plastic sleeve
Typ 12090

Measuring range: -50...+150 °C/-58...+302 °F
 Accuracy: ± 1 °C (-30+150 °C), $< \pm 2$ °C
 ± 1.8 °F (-22+302 °F), $< \pm 4$ °F
 Resolution: 0.1 °C (-19.9+150.0 °C)
 1 °C (< -19.9 °C)
 Battery: 1 x 1.5 V (LR44 button cell)
 Casing: 188 x 24 x 20 mm, plastic, white
 Ambient temperature: -10...+50 °C
 Degree of protection: IP67 (waterproof)
 Temp. sensor (backwards): 85 x 3.5 mm,
 stainless steel, with push-in tip
 Response time: T 90 = 6 sec
 Automatic switch-off after 60 min
 With hold function
Ref.-No. 55686



Digital Temperature Measuring Devices



Digital temperature measuring device with temperature sensor

Type 12200

Measuring range: -50...+300 °C/-58...+572 °F

Accuracy: ± 1 °C (-30+150 °C), $< > \pm 2$ °C
 ± 1.8 °F (-22+302 °F), $< > \pm 4$ °F

Resolution: 0.1 °C (-19.9+199.9 °C)
 1 °C (< -19.9, > +199.9 °C)

Batteries: 2 x 1.5 V (Alkaline AAA)

Casing: 140 x 75 x 27 mm, grey, splashproof

Ambient temperature: -10...+50 °C

Sensor with grip: 140 x 3.5 mm, stainless steel, with push-in tip, fixed cable (length: 1 m)

Response time: T 90 = 10 sec

With hold function, with min/max alarm

Automatic switch-off after 60 min

Ref.-No. 55684



Digital temperature measuring device with 2 input channels

Type 13100

For measuring sensors type K (NiCr-Ni)

Measuring range: -200...+1370 °C,
 -328...+2498 °F

Accuracy: ± 0.1 °

Resolution: 0.1 °

Battery: 1 x 9 V block

Casing: 184 x 64 x 30 mm, grey,
 Ambient temperature: -10...+50 °C

1 Temperature sensor with blade terminals,
 cable length: 3 m

With hold function, with max/min memory

Automatic switch-off after 30 min

With PC interface and bag

Ref.-No. 65625

Available accessories:

65627 Mains adapter (100-240 V, 0.3 A,
 50-60 Hz, Output: 9 V, 0.2 A)

65826 Software/USB-Set (cable, driver
 and German software)

65827 Software/USB-Set (cable, driver
 and English software)



Insertion sensor with handle type K (pic.)

Measuring range: -50...+600 °C (± 2.5 °C)

Acc. to DIN EN 60584 class 2

Ref.-No. 65861

Immersion sensor with handle type K

Measuring range: -50...+700 °C (± 2.5 °C)

Acc. to DIN EN 60584 class 2

Ref.-No. 65859

Air/gas sensor with handle type K

Measuring range: -50...+800 °C (± 2.5 °C)

Acc. to DIN EN 60584 class 2

Ref.-No. 65863

Surface sensor with handle type K

Measuring range: -50...+400 °C (± 2.5 °C)

Acc. to DIN EN 60584 class 2

Ref.-No. 65860

90° Surface sensor with handle type K

see above, but 90° angled sensor

Acc. to DIN EN 60584 class 2

Ref.-No. 65862

Beside this sensors various further types are available on request.

Digital Monitoring Thermometers



Digital thermometer for simultaneous monitoring of freezer and fridge

Type 13040

Measuring range: $-40...+70\text{ °C}/-40...+158\text{ °F}$, accuracy: $\pm 1\text{ °C}/\pm 2\text{ °F}$, resolution: 0.1 °

Batteries: 2 x 1.5 V (Alkaline AAA)

Casing: 135 x 45 x 23 mm, plastic, white, ambient temperature: $0...+50\text{ °C}$

With pull-out stand and two magnets, with min/max alarm (programmable)

With serial number, certified at 0 °C , accuracy: $\pm 1\text{ °C}$

With certificate traceable to international standards (PTB, NIST, ILAC etc.)

Ref.-No. 65810 With 2 temperature sensors (cable: 3 m) with suckers, response time: $T_{90} = 10\text{ sec}$



Type 13041

With 2 temperature sensors (cable: 3 m), attached in 5 ml plastic bottles, filled with ethylene glycol/water (for measuring delay/alarm lag at opened door)

Ref.-No. 65811



Digital thermometer for simultaneous monitoring of freezers and fridges with memory date/time

Type 13050

Measuring range: $-50...+70\text{ °C}/-58...+158\text{ °F}$, accuracy: $\pm 1\text{ °C}/\pm 2\text{ °F}$, resolution: 0.1 °

Batteries: 2 x 1.5 V (Alkaline AAA)

Casing: 135 x 45 x 23 mm, plastic, white, ambient temperature: $0...+50\text{ °C}$

With pull-out stand and two magnets, with min/max alarm (programmable)

With time display: 24 hours, with date display: day/month/year

With serial number, certified at 0 °C , accuracy: $\pm 1\text{ °C}$

With certificate traceable to international standards (PTB, NIST, ILAC etc.)

Ref.-No. 65812 With 2 temperature sensors (cable: 1 m), attached in 5 ml plastic bottles, filled with ethylene glycol/water (for measuring delay/alarm lag during opened door)

Digital Thermometers



**Digital min/max alarm thermometer,
display of 3 temperatures, with memory date/time
Type 13030**

Measuring range: -50...+70 °C/-58...+158 °F
 Accuracy: ± 0.3 °C/0.5 °F
 Resolution: 0.1 °
 Battery: 2 x 1.5 V (Alkaline AAA)
 Casing: 75 x 124 x 19 mm, plastic, white
 Ambient temperature: 0...+50 °C
 Temperature sensor with 3 m cable, response time: T 90 = 10 sec
 With min/max alarm, with pull-out stand

Ref.-No. 65809



**Digital min/max alarm thermometer with measuring delay,
display of 3 temperatures, with memory date/time
Type 13030**

Measuring range: -50...+70 °C/-58...+158 °F
 Accuracy: ± 0.3 °C/0.5 °F
 Resolution: 0.1 °
 Battery: 2 x 1.5 V (Alkaline AAA)
 Casing: 75 x 124 x 19 mm, plastic, white
 Ambient temperature: 0...+50 °C
 Temperature sensor (cable: 3 m) attached in 5 ml plastic bottle,
 filled with ethylene glycol/water (for measuring delay/alarm lag
 during opened door)
 With serial number, certified at a defined temperature
 With certificate traceable to international standards (PTB, NIST, ILAC)
 With min/max alarm, with pull-out stand

Ref.-No. 65809/-20C For freezers, approved at -20 °C

Ref.-No. 65809/4C For refrigerators, approved at +4 °C

Ref.-No. 65809/37C For incubators, approved at +37 °C



Digital Thermometer



Digital min/max alarm thermometer Large display of 3 temperatures Type 13000

Measuring range internal sensor: 0...+50 °C/+32...+122 °F
 Measuring range external sensor: -50...+70 °C/-58...+158 °F
 Accuracy: ±1 °C/±2 °F, resolution: 0.1 °
 Battery: 1 x 1.5 V (Alkaline AAA)
 Casing: 98 x 110 x 21 mm, plastic, black/grey
 Ambient temperature: 0...+50 °C
 Temperature sensor with 3 m cable, response time: T 90 = 10 sec
 With min/max alarm
 With pull-out stand
Ref.-No. 63800

Data Logger Temperature & Humidity



TempLoggi+ USB data logger for temperature and humidity Type 14000

For stationary or mobile measurements (e.g. proof of cold chain)
 Temperature measuring range: -30...+85 °C/-20...+185 °F,
 Temp. resolution: 0.1 °, temp. accuracy: ±0.3 °C/±0.6 °F
 Humidity meas. range: 0-100 % RH, humidity accuracy: ±2 % RH
 Battery: 1 x 3.6 V (1/2 AA Lithium)
 Casing: 125 x 28 x 22 mm, plastic, light grey
 LCD display: 18 x 13.5 mm, two-line
 Memory: 43,000 measuring units, measuring cycles: 2 sec – 24 h
 Degree of protection: IP 67 (waterproof)
 With wallmount made of transparent plastic
 With evaluation software
 With serial number, certified at +20 °C, accuracy: ±0.3 °C
 With certificate traceable to international standards (PTB, NIST, ILAC)
Ref.-No. 64535

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