

# Digital thermometer

## With display in the handle

### Model CTP1500

WIKA data sheet CT 61.05

#### Applications

- Calibration of thermometers
- Temperature measurement for the purposes of quality assurance
- Measurements in service and maintenance applications

#### Special features

- Temperature range  $-50 \dots +250 \text{ }^{\circ}\text{C}$  [ $-58 \dots +482 \text{ }^{\circ}\text{F}$ ]
- Automatic alignment of the display (lengthwise or widthwise), depending on the position of the probe tube
- High accuracy of  $\pm 0.05 \text{ }^{\circ}\text{C}$  at  $-20 \dots +180 \text{ }^{\circ}\text{C}$  [ $-4 \dots 356 \text{ }^{\circ}\text{F}$ ]
- Various lengths and diameters available



Digital thermometer, model CTP1500

#### Description

The all-purpose CTP1500 digital thermometer, for superior mobile temperature measurement, is notable for its precision, flexibility and ease of handling. Through its high accuracy of  $\pm 0.05 \text{ }^{\circ}\text{C}$  in the range of  $-20 \dots +180 \text{ }^{\circ}\text{C}$  [ $-4 \dots +356 \text{ }^{\circ}\text{F}$ ], this instrument can also be used as a reference instrument in the biotechnology, pharmaceutical and food industries. The CTP1500 is thus ideally suited for all service and maintenance tasks.

Thanks to its handy design, the instrument can easily be taken anywhere in order to carry out quick tests in the system. The paperwhite display leads to a battery life of approx. 500 hours in continuous operation.

#### Protective bag

For the safe transport or storage of the instrument, a protective bag is available as a useful addition, in which the instrument can be stored safely.

This is available for instruments with a probe tube length of up to 300 mm [11.81 in].

#### Certified accuracy

For each temperature probe, the accuracy is certified by a acceptance test certificate which accompanies the instrument.

On request, a DAkkS calibration certificate will be provided for this instrument.

# Specifications

Basic information	
Probe type	<ul style="list-style-type: none"> <li>■ Immersion probe</li> <li>■ Penetration probe</li> </ul>
Measuring ranges	-50 ... +250 °C [-58 ... +482 °F]
Accuracies	±0.05 K at -20 ... +180 °C [-4 ... +356 °F] ±0.15 K in remainder of range
Dimensions (L x W x H)	Depending on the total length of the thermometer For details, see technical drawing
Weight	150 ... 300 g [0.33 ... 0.66 lbs] (incl. battery) Depending on the total length of the thermometers

Digital display instrument	
Display	<ul style="list-style-type: none"> <li>■ Paperwhite (E-ink display)</li> <li>■ High contrast</li> <li>■ 50 x 26 mm [1.97 x 1.03 in]</li> </ul>
Resolution	Adjustable via menu <ul style="list-style-type: none"> <li>■ 0.01 °C / 0.01 °F</li> <li>■ 0.1 °C / 0.1 °F</li> </ul>
Measuring rate	Clocked every 0.5 seconds
<b>Functions</b>	
Trend symbol	Signals a rising, falling or constant temperature
Unit	Adjustable via menu <ul style="list-style-type: none"> <li>■ °C</li> <li>■ °F</li> </ul>
Automatic switch-off	Adjustable via menu <ul style="list-style-type: none"> <li>■ Continuous operation</li> <li>■ Automatic switch-off after 10 minutes</li> </ul>
Min./Max. and average display	Adjustable via menu Simultaneous indication of mean value, minimum and maximum measured temperature values
<b>Case</b>	
Material	Impact-resistant ABS plastic
Dimensions (L x W x H)	40 x 110 x 60 mm [1.58 x 4.33 x 2.36 in]

Temperature probe	
Measuring element	Pt100
<b>Probe tube d x l</b>	
Immersion probe	d = 3 mm [d = 0.12 in] <ul style="list-style-type: none"> <li>■ l = 170 mm [l = 6.69 in]</li> <li>■ l = 300 mm [l = 6.69 in]</li> </ul>
	d = 6 mm [d = 0.24 in] <ul style="list-style-type: none"> <li>■ l = 170 mm [l = 6.69 in]</li> <li>■ l = 300 mm [l = 11.81 in]</li> <li>■ l = 500 mm [l = 19.69 in]</li> </ul>
Penetration probe	d = 4.5 mm [d = 0.18 in]      l = 150 mm [l = 5.91 in]
	Other probe tube lengths on request
Immersion depth	Depending on the probe tube length and temperature to be measured → See table „Working temperature“
Material	Stainless steel

Working temperature	Probe tube length	Maximum immersion depth	Minimum distance to handle
< 140 °C [284 °F]	150 mm [5.91 in]	90 mm [3.54 in]	60 mm [2.36 in]
	170 mm [6.69 in]	110 mm [4.33 in]	
	300 mm [11.81 in]	240 mm [9.45 in]	
	500 mm [19.69 in]	440 mm [17.32 in]	
> 140 °C [284 °F]	150 mm [5.91 in]	50 mm [1.97 in]	100 mm [3.94 in]
	170 mm [6.69 in]	70 mm [2.76 in]	
	300 mm [11.81 in]	200 mm [7.87 in]	
	500 mm [19.69 in]	400 mm [15.75 in]	

Voltage supply and performance data	
Battery	2 x 1.5 V AA (LR6)
Battery status display	Icon display with 4 bars indicates the battery status in 20 % steps.
Battery life	Typically 500 hours for continuous operation

Operating conditions	
Medium temperature range	-50 ... +250 °C [-58 ... +482 °F]
Ambient temperature range	0 ... 50 °C [32 ... 122 °F]
Storage temperature range	-10 ... +50 °C [14 ... 122 °F]
Relative humidity, condensation	< 95 % r. h. (non-condensing)
Permissible media	All liquids and gases which are compatible with 316 stainless steel

## Approvals

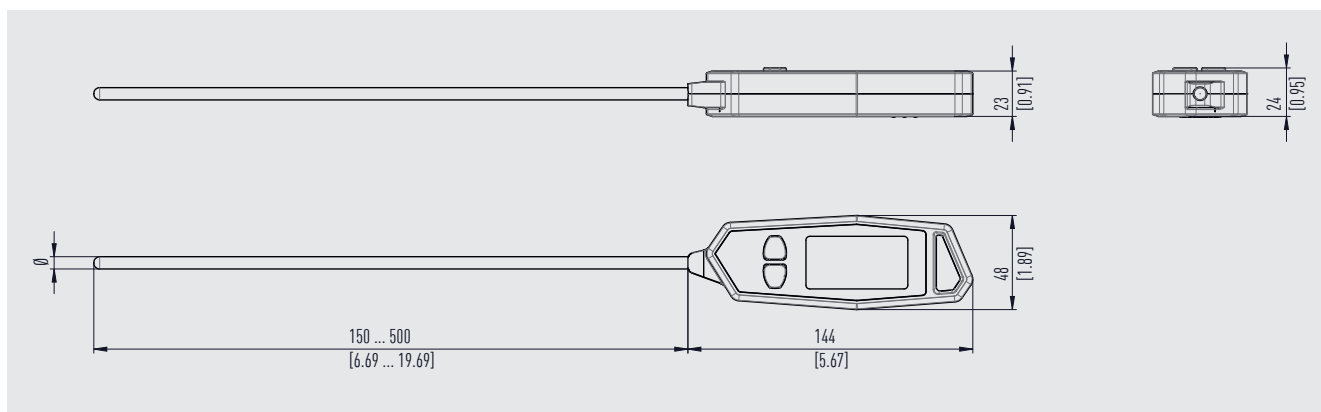
Logo	Description	Region
CE	EU declaration of conformity	European Union
	RoHS directive	

## Certificates

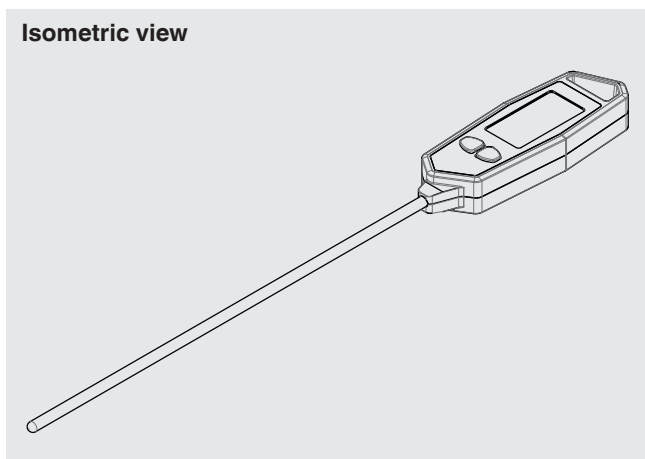
Certificates	
Calibration	<ul style="list-style-type: none"> <li>■ 3.1 inspection certificate per EN 10204</li> <li>■ DAkkS calibration certificate (traceable and accredited in accordance with ISO/IEC 17025)</li> </ul>
Recommended calibration interval	1 year (dependent on conditions of use)

→ For approvals and certificates, see website



## Dimensions in mm [in]



### Isometric view



## Accessories

Accessories for CTP1500		Order code
Description		CTX-A-R4-
	<b>Alkaline batteries</b> 2 x 1.5 V AA battery (LR6)	-M-
	<b>Transport bag</b> Suitable for digital thermometer with probe tube lengths of 150 ... 300 mm [5.91 ... 11.81 in]	-N-
<b>Ordering information for your enquiry:</b>		
1. Order code: CTX-A-R4-		↓ [ ]
2. Option:		

## Scope of delivery

- Precision thermometer model CTP1500
- 2 x 1.5 V AA battery (already inserted)
- Calibration certificate
- Instruction manual

## Ordering information

Model / Sensor type / Probe diameter / Probe length / Calibration / Test points for the calibration certificate / Number of test points / Transport bag / Further approvals / Additional ordering information

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