

# Hand-held thermometer Model CTH6200

WIKA data sheet CT 51.01

## Applications

- Calibration service companies and service industry
- Measurement and control laboratories
- Industry (laboratory, workshop and production)
- Quality assurance

## Special features

- Pt100 probes for -50 ... +250 °C
- Accuracy: < 0.2 K (complete measuring chain)
- Integrated data logger
- GSoft data-logger evaluation software available
- Incl. factory calibration certificate



Hand-held thermometer model CTH6200

## Description

### Extensive application possibilities

The model CTH6200 hand-held thermometer is suitable for all precise temperature measurement tasks and impresses with its simple operation. Its design makes it especially suitable for the commissioning, maintenance and service/calibration of temperature instruments and equipment.

### Functionality

The digital indicator is the central unit of the hand-held temperature measuring instrument and provides the option to connect CTP62x0 series Pt100 temperature probes.

Both immersion and penetration probes are available from stock, along with an extensive range of accessories. Custom-specific probes are available on request.

An integrated data logger and various other functions (such as Min, Max, Hold or Alarm) ensure that the instrument can be used for many different applications of the hand-held thermometer.

Its simple operation, its very ergonomic form and its low weight round off the convenience of this hand-held temperature measuring instrument.

### Complete test and service cases

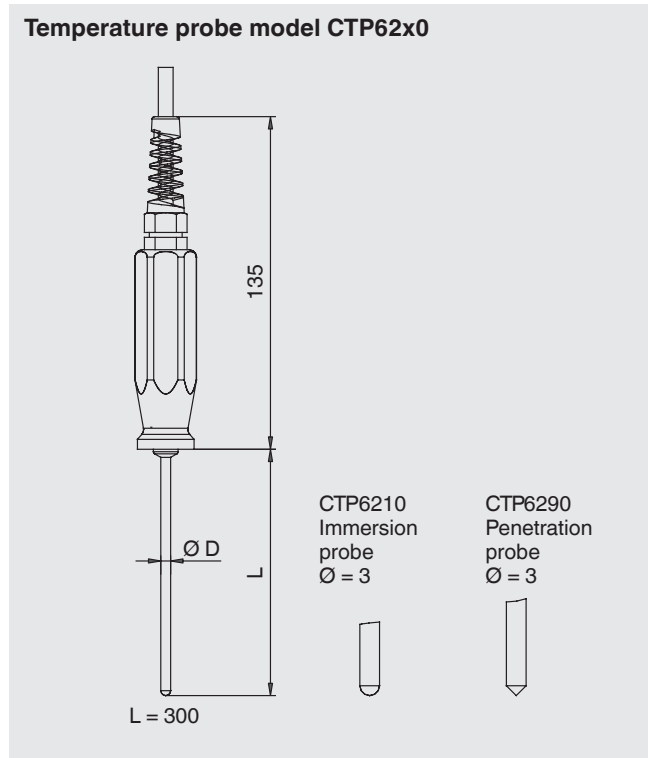
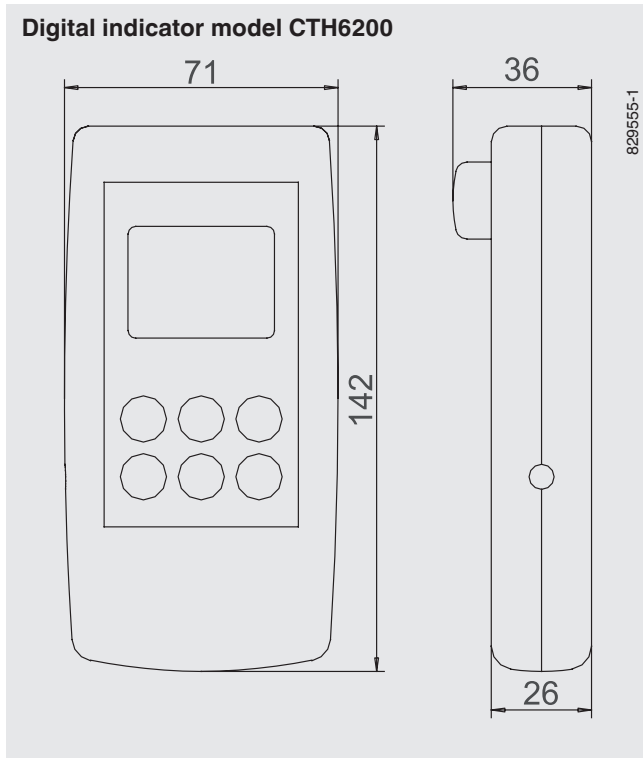
For the secure transportation and storage of the instrument and accessories, a rugged service case is available as a sensible addition. The service case can carry up to two model CTH6200 digital indicators and several temperature probes, or the case is available with a model CPH6200 hand-held pressure indicator as well.

### Certified accuracy

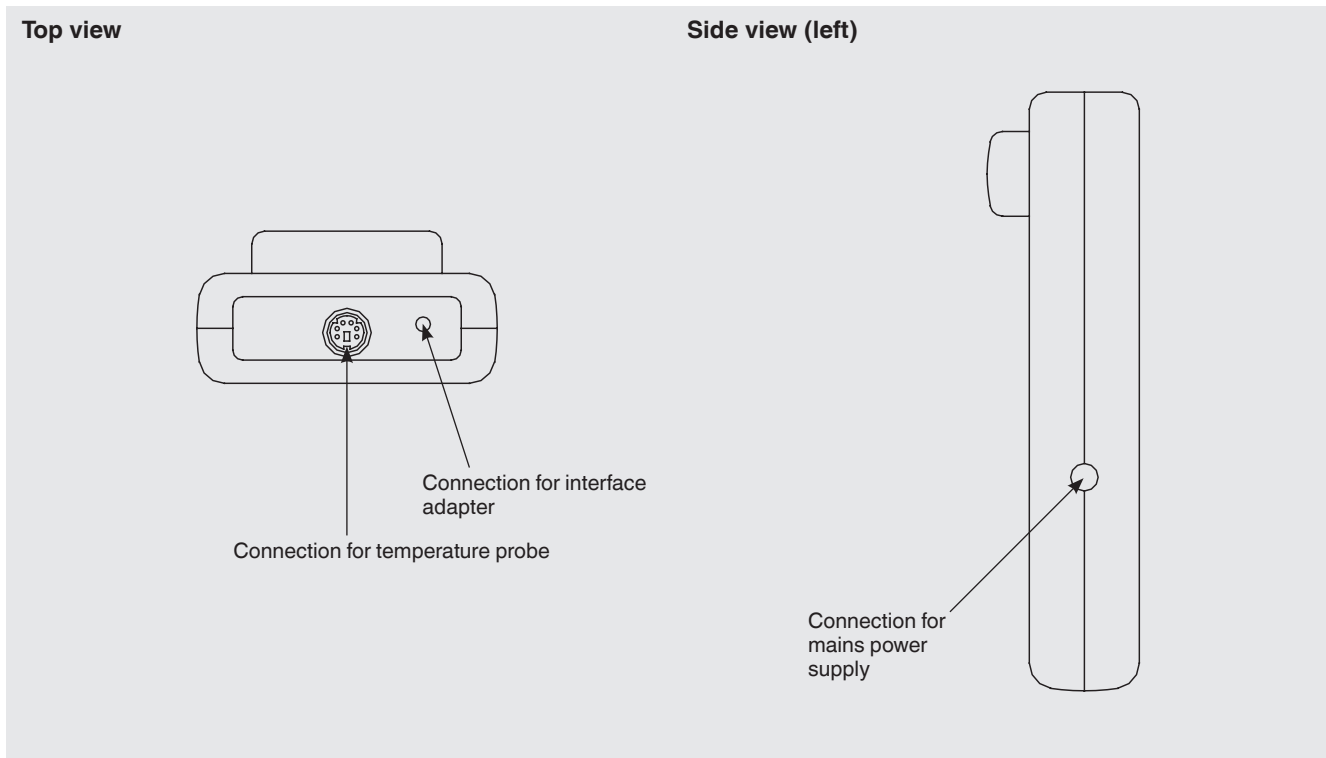
For each temperature probe, the accuracy for the complete measuring chain is certified by a factory calibration certificate which accompanies the instrument.

On request, we are also pleased to provide a DKD/DAkKS calibration certificate for the instrument from our own DKD/DAkKS laboratory.

## Dimensions in mm



## Electrical connections to the digital indicator



Specifications	Hand-held thermometer model CTH6200 (complete measuring chain)
Measuring inputs	1
Probe type	Pt100 (4-wire)
Measuring range	-50 ... +250 °C
Resolution	0.01 K up to 200 °C; then 0.1 K
Calibration <sup>1)</sup>	3.1 calibration certificate per DIN EN 10204
Measurement uncertainty for the measuring chain <sup>2)</sup>	0.2 K (optional: increased accuracy through specific adjustment)
Display	Large LCD screen for the display of 2 values and additional information
Indication range	-99.99 ... +99.99 °C or -199.9 ... +650.0 °C (dependent on temperature probe)
Temperature units	°C, °F

Specifications	Digital indicator model CTH6200
Functions via keypad	Min/Max memory, Hold, Logger (Start/Stop)
Functions via menu	Min/Max alarm (audible/visual), automatic Power-Off function [1 ... 120 min], zero point/slope input, Data logger settings
Data logger	- discrete value logger: up to 99 recordings incl. time via key press - cyclic logger: automatic recording of up to 16,200 values incl. time - cycle time: selectable from 1 to 3600 seconds
Interface (serial)	RS-232 or USB via specific interface cable
Current supply	9 V zinc-carbon battery (in scope of delivery), {alternative: 9 V rechargeable battery or mains power supply}
Current consumption	slow measuring cycle: < 1.6 mA; fast: < 7.0 mA; Low-Power logger funct.: < 0.3 mA
Nominal temperature	25 °C
Temperature drift	≤ 0.002 °C/K
Permissible	
■ Ambient temperature	-10 ... +50 °C
■ Relative humidity	0 ... 95 % r.H. (non-condensing)
■ Storage temperature	-25 ... +70 °C
Case	Impact-resistant ABS plastic, membrane keypad, transparent screen
Weight	approx. 160 g
CE conformity	
■ EMC directive	2004/108/EC, EN 61326 Emission (Group 1, Class B) and interference immunity (controlled electromagnetic environment)

Specifications	Temperature probe model CTP62x0
Sensor design	Immersion and penetration probe
Probe type	Pt100 (4-wire)
Measuring ranges	
■ CTP6210 immersion probe	-50 ... +250 °C
■ CTP6290 penetration probe	-50 ... +250 °C
Wetted parts	Immersion probe and penetration probe: V4A
Connection to the CTH6200	4-pin Mini DIN connector with PVC cable (approx. 1.0 m)

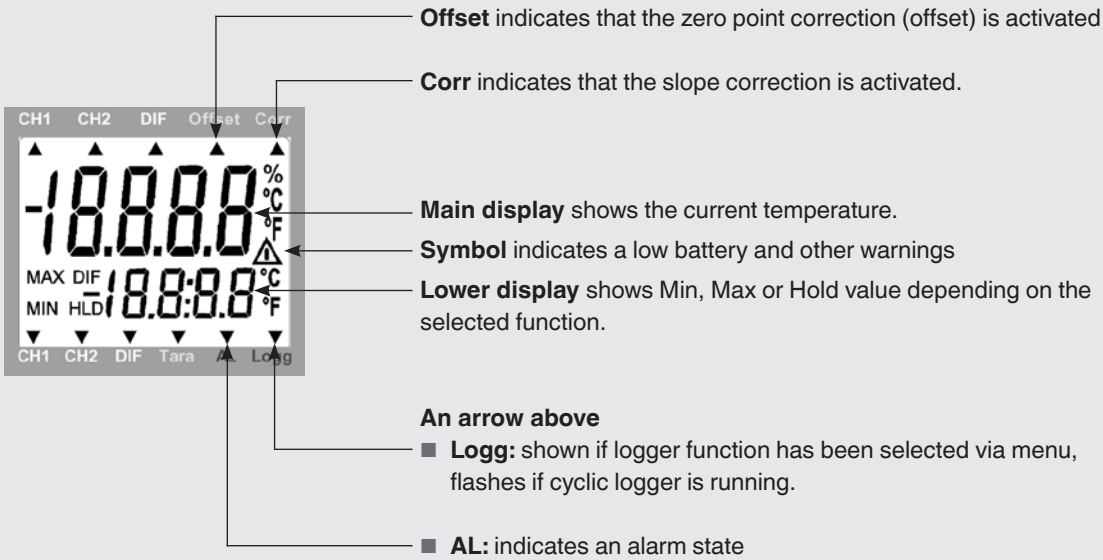
1) Calibration at 23 °C ± 2 °C ambient temperature.

2) The measurement uncertainty applies for the respective indicator-probe combination following adjustment and calibration.

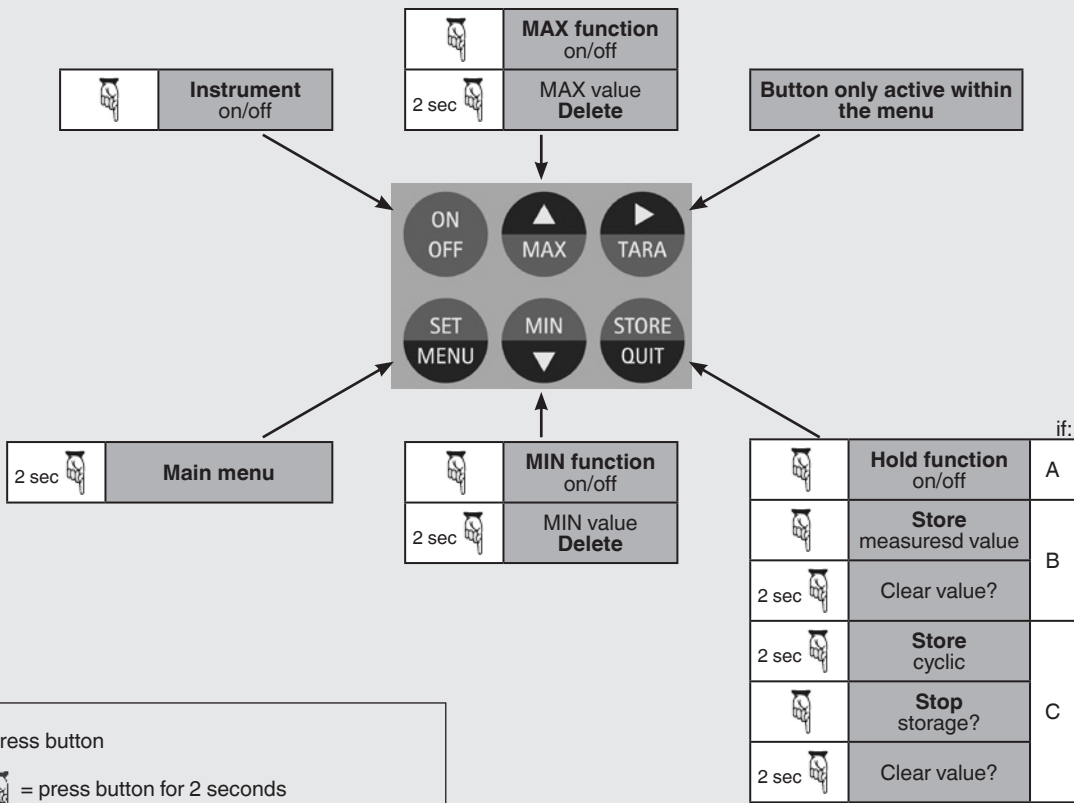
{ } Items in curved brackets are optional extras for an additional price.

# CTH6200 hand-held thermometer operating functions

## Display



## Keyboard



= press button  
 2 sec = press button for 2 seconds  
 For more information: see operating instructions

A = Logger functions deactivated  
 B = Logger function STORE activated via menu  
 C = Logger function CYCLE activated via menu

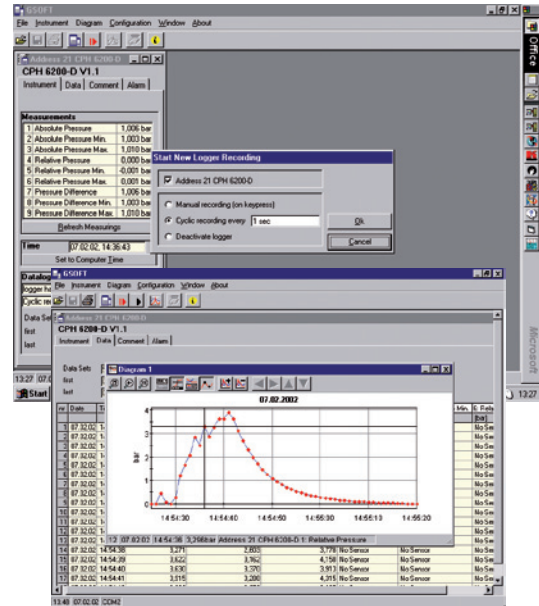
## GSoft data-logger evaluation software

The GSoft data-logger evaluation software is used to display the logger data (from the model CTH6200 hand-held thermometer and/or the model CPH6200/CPH6210 hand-held pressure indicators) on a PC in tabular form and as charts.

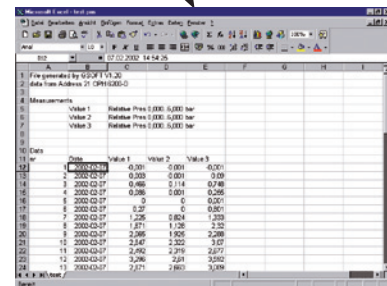
- Easy operation with self-explanatory toolbars
- Data from the pressure and temperature hand-helds can be displayed in a single chart (2 separate y-axes)
- Charts offer a zoom function
- Operation of the logger function via PC (remote control)
- Data can be exported (Excel®, etc.)
- Languages: German/English/French/Spanish

### System requirements

- IBM compatible PC (Pentium®)
- At least 20 MB free hard disc space
- CD-ROM drive
- At least 32 MB RAM
- Windows® operating system 95, 98, 2000, XP, Vista, Windows 7 or NT 4.0 (with Service Pack 3.0 or higher)
- Mouse
- One free serial port or USB-Port (via interface cable)

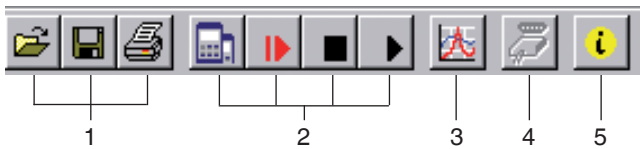


Data export e.g. in an Excel® file



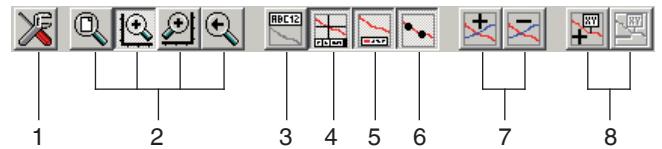
## Easy operation with self-explanatory icon buttons

### Main toolbar



1. File functions: open, save, print
2. Logger functions: start communication, start logger, stop, read data
3. Data display: create chart
4. Interface configuration
5. Program information

### Charts toolbar



1. Settings: Grid and colour settings, manual zooms
2. Zoom: all, left or right y-axes (via mouse), back
3. Rename chart
4. Cursor on/off (info footer)
5. Legend on/off
6. (Measuring point) Symbol on/off
7. Measurement series (add/delete)
8. Comments on measuring points (add, delete)

## Scope of delivery

- Model CTH6200 hand-held thermometer incl. 9 V battery
- 3.1 calibration certificate per DIN EN 10204
- Choice of temperature probes

## Options

- Immersion probe
- Penetration probe
- Other probes on request
- DKD/DAkkS calibration certificate

## Accessories

### Test cases

- Robust transport case
- Various test and service cases

### Software

- GSoft data-logger evaluation software for model CPH6200/CPH6210/CTH6200
- Appropriate interface cable

### Current supply

- AC adapter
- 9 V rechargeable battery and charger



Example of a service case (temperature and pressure)

## Products and services within our calibration technology programme

- |                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>■ DKD/DAkkS calibration services for pressure</li><li>■ Repair of calibration units of all makes</li><li>■ Portable pressure measuring devices for test and calibration tasks</li><li>■ Precision pressure indicators and pressure controllers</li><li>■ Primary standards for pressure</li><li>■ Testing technology system solutions</li></ul> | <ul style="list-style-type: none"><li>■ DKD/DAkkS calibration services for temperature</li><li>■ Portable measuring instruments and calibrators</li><li>■ Temperature dry well calibrators</li><li>■ Calibration baths and ovens</li><li>■ Precision thermometers</li><li>■ Primary standards for temperature</li><li>■ Consulting and training</li></ul> |
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