

Hand-Held Thermometer Model CTH 6200

WIKA Data Sheet CT 51.01

Applications

- Service industry
- Measurement and control laboratories
- Industry (laboratory, workshop and production)
- Quality assurance

Special Features

- Pt 100 probes for -50 up to +250 °C
- Total uncertainty: < 0.2 K (of complete measuring chain)
- Integrated data logger
- Data logger evaluation software GSoft available
- Incl. factory calibration certificate



Hand-Held Thermometer CTH 6200

Description

Areas of application

The Hand-Held Thermometer CTH 6200 is universally suitable for all kinds of precise temperature measurement applications and offers extremely high user convenience. Due to its portable design this instrument is especially useful for commissioning, maintenance and service / calibration.

Functionality

The digital instrument is the heart of the Hand-Held Service Instrument. It allows the connection of temperature Pt 100 probes model CTP 62x0.

Standard Hand-Held Temperature probes are immersion or penetration probes. Other probes or useful accessories are available on request.

An integrated data logger or functions like MIN, MAX, Hold or Alarm ensure that the instrument can be used for many

different applications.

The excellence of the easy-to-use and lightweight instrument is complemented by an extremely ergonomic design.

Complete Test Sets / Service Cases

For safe transport and storage of the instrument and its accessories a rugged service case is also available.

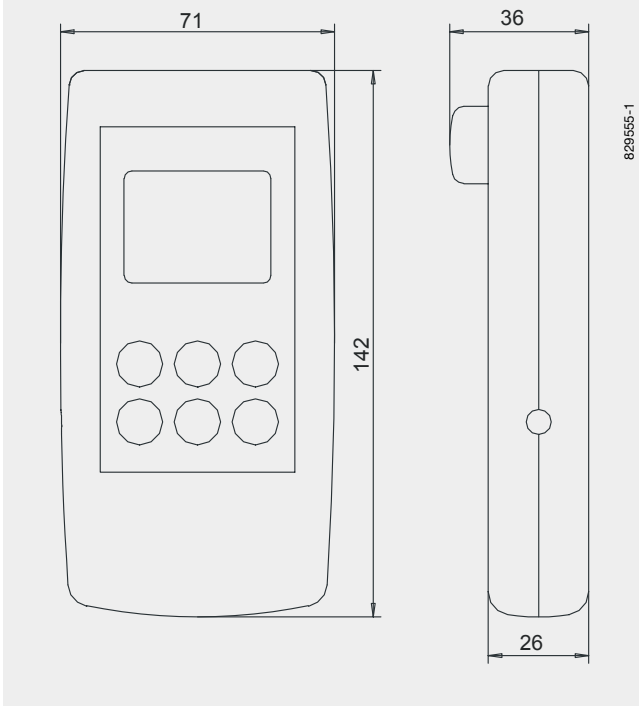
The service case offers space for 2 digital instruments model CTH 6200 and several probes. Moreover combinations with the Hand-Held Pressure Indicator CPH 6200 are possible.

Certified precision

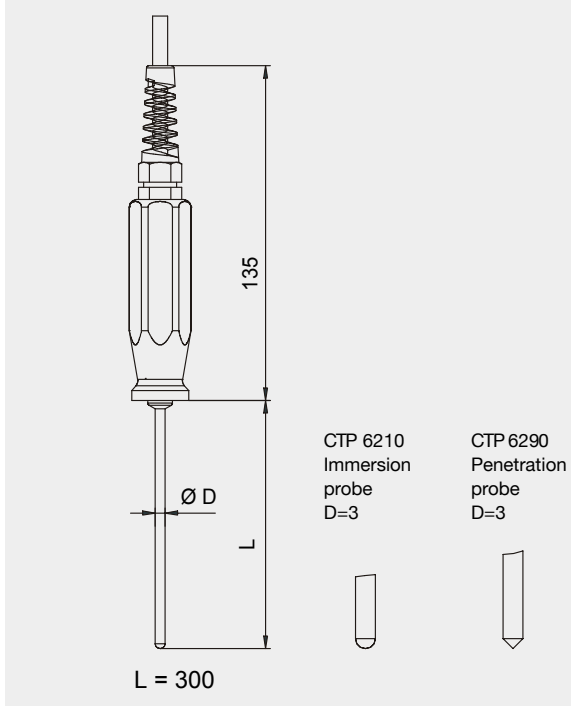
For each temperature probe the total uncertainty of the measuring chain is certified in a factory calibration certificate. On request a DKD calibration certificate can be supplied, instead.

Dimensions in mm

Digital instrument CTH 6200

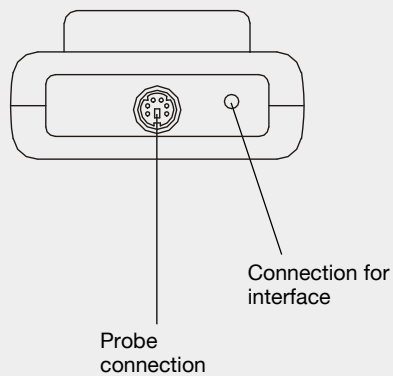


Temperature sensor CTP 62x0

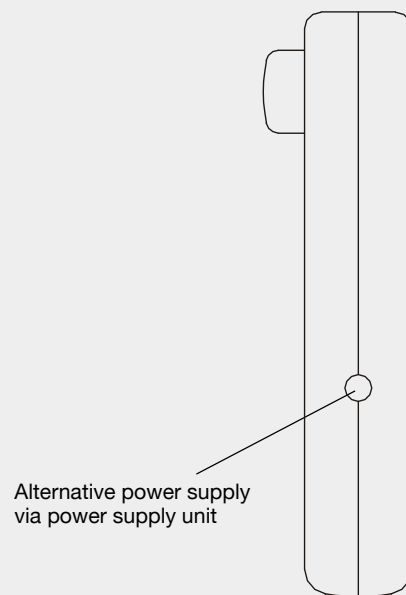


Electrical connections digital instrument

Top view



Side view (left)



Characteristics of the complete measuring chain (digital instrument and probe):

Input	1
Sensor type	Pt 100 (4-wire)
Measuring range ex stock	-50 ... +250 °C
Total measurement uncertainty ¹⁾	0.2 K (Optional: higher accuracy due to adjustment)
Calibration*	Calibration report 3.1 according to DIN EN 10 204
Display	2 x 4 1/2-digit LCD display for actual value and additional information
Resolution	0.01 K up to 200 °C; than 0.1 K
Units	°C, °F

CTH 6200 Digital Instrument specific details:

Measuring range	-99.99 ... +99.99 °C or -199.9 ... +650.0 °C respectively (dependent on probe)
Functions via key press	Min-, Max-memory, Hold, Logger (Start/Stop)
Functions via menu	Min-, Max-alarm (acoustic/visual), autom. Power-Off-Function [1 ... 120 min] Zero point / span correction, Logger settings
Data logger	- individual value logger: up to 99 recordings incl. time via keypress - cyclic logger: automatic recording up to 16,200 values incl. time, with cyclic time selectable from 1 ... 3600 seconds
Interface (serial)	RS-232 interface via interface converter (USB adapter on request).
Power supply	9V-zinc-carbon battery (incl. in scope of delivery), {alternative: 9V rechargeable battery or mains supply}
Power consumption	approx. 1.25 mA
Nominal temperature	25 °C
Temperature drift	≤ 0.002 °C/K
Permissible ambient temperature	-10 ... +50 °C
Air humidity	0 ... 95 % relative humidity without moisture condensation
Storage temperature	-25 ... +70 °C
Housing	impact-resistant ABS, membrane keyboard, transparent panel
Weight	approx. 160 g

CTP 62x0 Temperature Sensor specific details (Pt 100):

Probes available	Immersion and Penetration probe
Electrical connection	4-pole Mini-DIN plug with PVC cable (approx. 1.0 m)
Temperature range	
- Immersion probe CTP 6210	-50 ... +250 °C
- Penetration probe CTP 6290	-50 ... +250 °C
Material wetted parts	Immersion and Penetration probe: stainless steel
Dimensions	see page 2

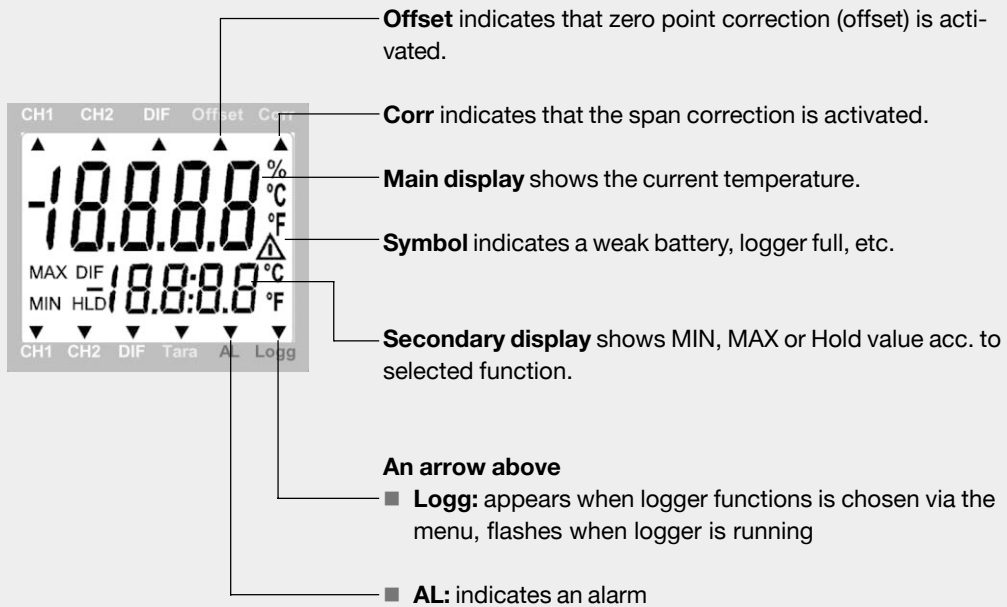
1) The total measurement uncertainty is stated for the whole measuring chain after adjustment and calibration.

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

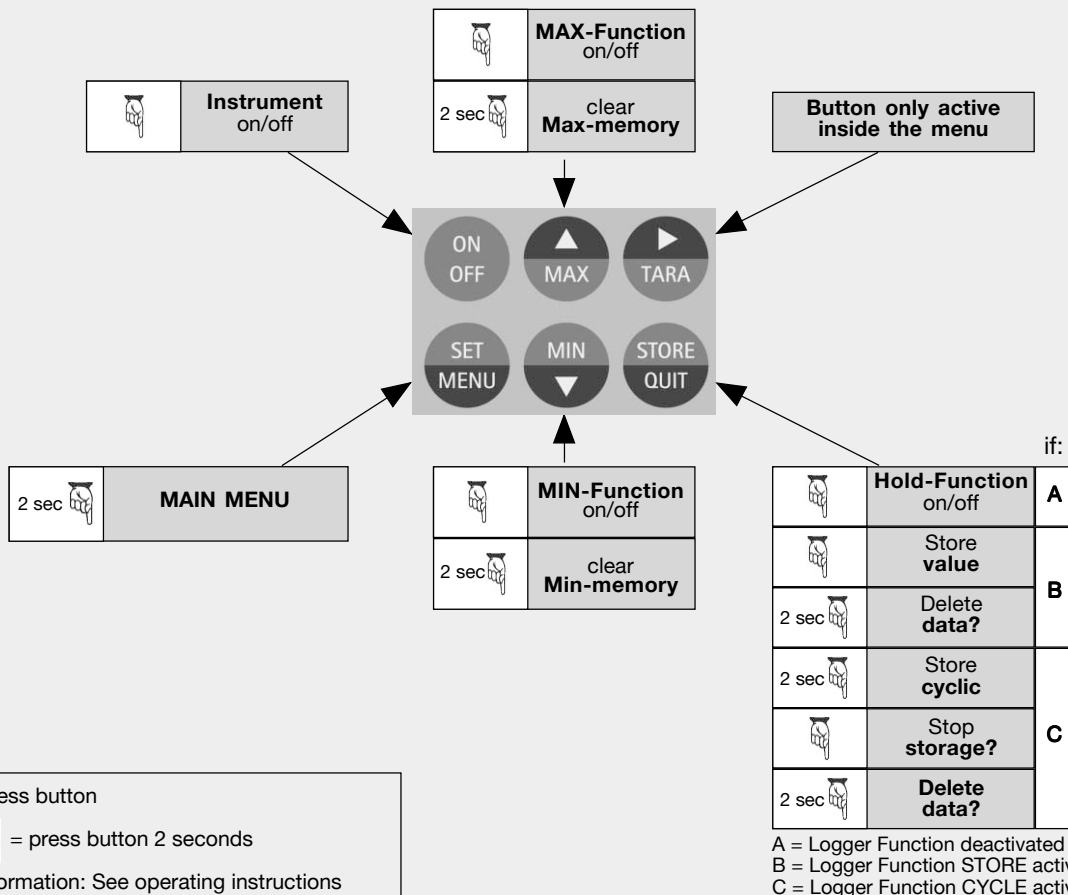
{ } Items in curved brackets are optional extras for additional price.

Operating instructions Hand-Held Thermometer CTH 6200

Display



Keypad



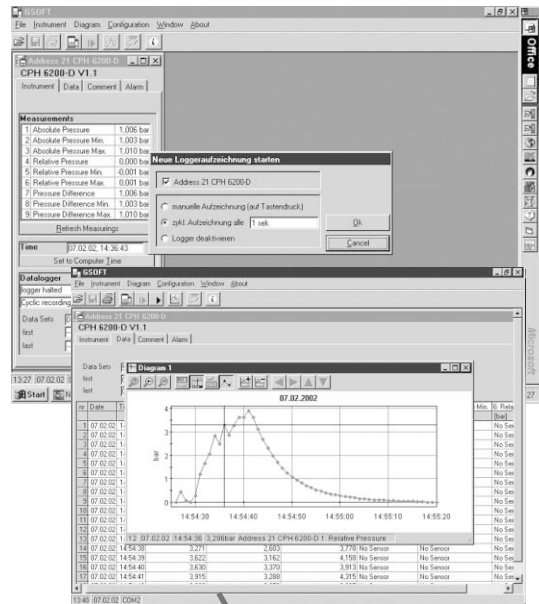
Data logger software GSoft

The Data logger evaluation software GSoft allows stored data of the internal Data logger (of a Hand-Held Thermo- meter model CTH 6200 or of a Hand-Held Pressure Indica- tor model CPH 6200) to be displayed as a tabel or chart on PC.

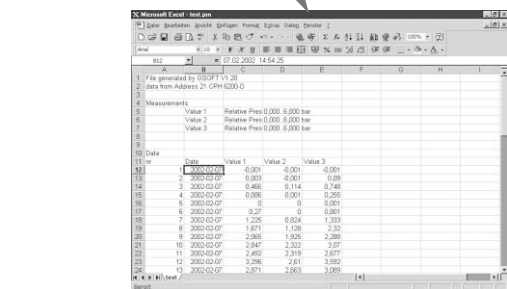
- Easy operation due to self-explanatory icon buttons
- Data of a Pressure and Temperature Hand-Helds in one diagram possible (2 separate y-Axes)
- Zoom function available
- Remote operation via PC possible
- Data can be exported to Excel®, etc.
- Language: English / German

System requirements

- IBM compatible PC (Pentium™)
- At least 20 MB hard disc capacity available
- CD-ROM drive
- At least 32 MB main memory
- Windows™ 95, 98, 2000, XP or NT 4.0 (with Service Pack 3.0) or better
- Mouse
- One unassigned serial interface or one USB-Port (via interface cable)



Export of data for example to Excel®



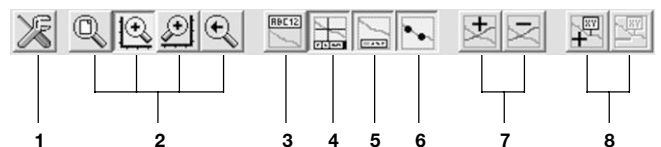
Easy operation due to self-explanatory icon buttons

Main Toolbar



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

Diagram Toolbar



1. Settings: grind and colour settings, manual zoom
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. (Measurement points) on/off
7. Add / erase measuring series
8. Comment-labels to a measuring point: add, delete

Scope of Supply

- CTH 6200 incl. 9V battery
- Calibration certificate 3.1 according to DIN EN 10 204
- Choice of sensor

Options

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

Accessories

Power supply

- Power supply unit
- Rechargeable battery 9V and battery charger

Test cases

- Rugged carrying case
- Various service cases

Software

- Data logger evaluation software GSoft for CTH/CPH 6200 devices



Example of a service case (temperature and pressure)

Products and Services within our Testing and Calibration Technology Program

- DKD calibration services for pressure
- Repair of calibration units of all makes
- Portable pressure measuring devices for testing and calibration tasks
- Precision pressure measuring units and pressure controllers
- Primary standards for pressure
- Testing technology system solutions
- DKD calibration services for temperature
- Temperature dry well calibrators
- Calibration baths and furnaces
- Temperature measuring instruments for testing and calibrating tasks
- Precision thermometers
- Primary standards for temperature
- Consulting and training

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.

