



HD2307.0 THERMOMETER SENSORS: Pt100, Pt1000

L'HD2307.0 is a portable instrument equipped with large LCD display. It measures temperature by means of immersion, penetration, contact or air probes. Its sensor can be 3 or 4 wires Pt100, Pt1000. Probes are equipped with an automatic recognition module: factory calibration data are stored inside. The *Max, Min* and *Avg* function calculate the maximum, minimum or average values. Other functions include: the relative measurement REL, the HOLD function, and the automatic switching-off system, excludable. **The instrument has IP67 protection degree.**

TECHNICAL SPECIFICATIONS OF THE INSTRUMENTS

Instrument Dimensions

(Length x Width x Height) 140x88x38mm

Weight 160g (complete with Batteries)

Materials ABS

Display 2x4½ digits plus symbols Visible area: 52x42mm

Operating conditions

 $\begin{array}{lll} \mbox{Operating temperature} & -5 \dots 50 \mbox{°C} \\ \mbox{Storage temperature} & -25 \dots 65 \mbox{°C} \\ \end{array}$

Working relative humidity 0 ... 90% RH, no condensation

Protection degree II

Power supply

Batteries 3 Batteries 1.5V type AA

Autonomy 200 hours with 1800mAh alkaline batteries

Current consumption with instrument off $~<20\mu\text{A}$

Unit of measurement °C - °F

Connections

Module input for probes DIN45326 8 poles male Connector

Measurement of temperature by Instrument

Pt100 measurement range -200...+650°C Pt1000 measurement range -200...+650°C
 Resolution
 0.1°C

 Accuracy
 ±0.05°C

 Drift after 1 year
 0.1°C/year

TECHNICAL SPECIFICATIONS OF PROBES AND MODULES EQUIPPED WITH INSTRUMENT Temperature probes Pt100 sensor with SICRAM module

Temperature probes Pt100 sensor with SICRAM module						
Model	Туре	Application field	Accuracy			
TP472I	Immersion	-196°C+500°C	±0.25°C (-196°C+350°C) ±0.4°C (+350°C+500°C)			
TP472I.0	Immersion	-50°C+400°C	±0.25°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP473P	Penetration	-50°C+400°C	±0.25°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP473P.0	Penetration	-50°C+400°C	±0.25°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP474C	Contact	-50°C+400°C	±0.3°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP474C.0	Contact	-50°C+400°C	±0.3°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP475A.0	Air	-50°C+250°C	±0.3°C (-50°C+250°C)			
TP472I.5	Immersion	-50°C+400°C	±0.3°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP472I.10	Immersion	-50°C+400°C	±0.30°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP49A	Immersion	-70°C+400°C	±0.25°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP49AC	Contact	-70°C+400°C	±0.25°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP49AP	Penetration	-70°C+400°C	±0.25°C (-50°C+350°C) ±0.4°C (+350°C+400°C)			
TP875	Globe-thermometer Ø150mm	-30°C+120°C	±0.25°C			
TP876	Globe-thermometer Ø 50mm	-30°C+120°C	±0.25°C			
TP87	Immersion	-50°C+200°C	±0.25°C			
TP878 TP878.1	For solar panels	+5°C+80°C	±0.25°C			
TP879	For compost	-20°C+120°C	±0.25°C			

Common features

Temperature drift @20°C 0.003%/°C

4 wires Pt100 and 2 wires Pt1000 Probes

Model	Туре	Application field	Accuracy
TP47.100	4 wires Pt100	-50+400°C	Class A
TP47.1000	2 wires Pt1000	-50+400°C	Class A

Common features

Temperature drift @20°C

Pt100 0.003%/°C Pt1000 0.005%/°C

PURCHASING CODES

HD2307.0: The kit consists of instrument HD2307.0, 3 per 1.5V alkaline Batteries, instruction manual and case. Probes have to be ordered separately.

Probes equipped with SICRAM module

TP472I: Immersion probe, Pt100sensor. Stem Ø 3 mm, length 300 mm. Cable 2 meters long. **TP472I.0:** Immersion probe, Pt100sensor. Stem Ø 3 mm, length 230 mm. Cable 2 meters long. **TP473P:** Penetration probe, Pt100sensor. Stem Ø 4mm, length 150 mm. Cable 2 meters long.

TP473P.0: Penetration probe, Pt100sensor. Stem Ø 4mm, length 150 mm. Cable 2 meters long.
TP474C: Contact probe, Pt100sensor. Stem Ø 4mm, length 230mm, contact surface Ø 5mm. Cable 2 meters long.

TP474C.0: Contact probe, Pt100sensor. Stem Ø 4mm, length 230mm, contact surface Ø 5mm. Cable 2 meters long.

TP475A.0: Air probe, Pt100sensor. Stem Ø 4mm, length 230mm. Cable 2 meters long.

TP4721.5: Immersion probe, Pt100sensor. Stem Ø 6mm, length 500 mm. Cable 2 meters long.

TP4721.10: Immersion probe, Pt100sensor. Stem Ø 6mm, length 1,000mm. Cable 2 meters long.
TP49A: Immersion probe, Pt100sensor. Stem Ø 2.7mm, length 150mm. Cable 2 meters long.

Aluminium handle. **TP49AC:** Contact probe, Pt100sensor. Stem Ø 4 mm, length 150mm. Cable 2 meters long. Aluminium handle.

TP49AP: Penetration probe, Pt100sensor. Stem Ø 2.7mm, length 150mm. Cable 2 meters long. Aluminium handle.

TP875: Globe thermometer Ø 150 mm with handle. Cable 2 meters long.
TP876: Globe thermometer Ø 50 mm with handle. Cable 2 meters long.

TP87: Immersion probe, Pt100sensor. Stem Ø 3 mm, length 70 mm. Cable 2 meters long.

TP878: Contact probe for solar panels. Cable 2 meters long. **TP878.1**: Contact probe for solar panels. Cable 5 meters long

TP879: Penetration probe for compost. Stem Ø 8 mm, length 1 meter. Cable 2 meters long.

Temperature probes without SICRAM module

TP47.100: Direct 4 wires Pt100 sensor immersion probe. Stem Ø 3 mm, length 230mm. 4 wires connection cable with connector, 2 meters long.

TP47.1000: Pt1000 sensor immersion probe. Stem Ø 3 mm, length 230mm. 2 wires connection cable with connector, 2 meters long.

TP47: Only connector for probe connection: direct 3 and 4 wires Pt100, 2 wires Pt1000.