



**HD2107.1, HD2107.2, HD2127.1 E HD2127.2
THERMOMETERS SENSORS: Pt100, Pt1000**

HD2107.1 and HD2107.2 are portable instruments equipped with large LCD display fitted with one input. **HD2127.1 and HD2127.2** are instruments fitted with two inputs. They measure temperature by means of immersion, penetration, contact or air probes. Their sensor can be Pt100 with 3 or 4 wires, Pt1000 with 2 wires. They have centesimal resolution in the range $\pm 199.99^{\circ}\text{C}$, decimal in the rest of the range.

Probes are equipped with an automatic recognition module: factory calibration data are stored inside.

The instruments HD2107.2 and HD2127.2 are **data loggers**; they store up to 80.000 samples which can be transferred into a PC connected to the instrument through the serial ports RS232C and USB 2.0. It is possible to configure the storage interval, the printing and the baud rate by the menu.

All models are equipped with RS232C serial port and are able to transfer the acquired measures, in real time, to a PC or a portable printer.

Functions Max, Min and Avg calculate maximum, minimum and average values.

Further functions are: REL relative measure, HOLD and automatic switching-off system, excludable.

Instruments have IP66 protection degree.



HD2107



HD2127

TECHNICAL SPECIFICATIONS OF THE INSTRUMENTS

Instrument

Dimensions	185x90x40mm
(Length x Width x Height)	
Weight	470g (complete with batteries)
Materials	ABS, rubber
Display	2x4½ digits plus symbols Visible area: 52x42mm

Operating conditions

Operating temperature	-5 ... 50°C
Storage temperature	-25 ... 65°C
Working relative humidity	0 ... 90% RH, no condensation
Protection degree	IP66

Power supply

Batteries	4 Batteries 1.5V type AA
Autonomy	200 hours with 1800mAh alkaline batteries
Current consumption with instrument off	20µA
Main	12Vdc / 1000mA Output main adapter

Unit of measurement

°C - °F - °K

Security of stored data

Unlimited, independent of battery charge conditions

Time

Date and time	In real time
Accuracy	1min/month max drift

Measured values storage

model HD2107.2

Type	2000 pages containing 40 samples each
Quantity	Total of 80000 samples
Storage interval can be selected between	1,5,10,15,30 s.; 1,2,5,10,15,20,30 min.; 1 hour

model HD2127.2

Type	2000 pages containing 16 pairs of samples each
Quantity	Total of 32000 samples (channel A + channel B)
Storage interval can be selected between	1,5,10,15,30 s.; 1,2,5,10,15,20,30 min.; 1 hour

Serial interface RS232C

Type	RS232C galvanic isolated
Baud rate	can be set from 1200 to 38400 baud
Data bit	8
Parity	None
Stop bit	1
Flow Control	Xon/Xoff
Serial cable length	Max 15m
Print interval	Immediate or selectable between: 1,5,10,15,30 s.; 1,2,5,10,15,20,30 min.; 1 hour

USB interface - model HD2107.2, HD2127.2

Type	1.1 - 2.0 galvanic isolated
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Connections

Input module for the probes	8-pole male DIN45326 connector
RS232C serial interface	8-pole MiniDin connector
USB interface	Type B MiniUSB connector
Mains adapter	2-pole connector (positive at centre)

Measurement of temperature by Instrument

Pt100 measurement range	-200...+650°C
Pt1000 measurement range	-200...+650°C
Resolution	0.01°C in the range $\pm 199.99^{\circ}\text{C}$ 0.1°C in the remaining range
Instrument Accuracy	$\pm 0.01^{\circ}\text{C}$
Drift after 1 year	0.1°C/year

Temperature probes equipped with SICRAM module

- TP472I:** Immersion probe, Wire Wound Pt100 sensor. Stem Ø 3 mm, length 300 mm. Cable 2 meters long.
- TP472I.0:** Immersion probe, Thin Film Pt100 sensor. Stem Ø 3 mm, length 230 mm. Cable 2 meters long.
- TP473P.I:** Penetration probe, Wire Wound Pt100 sensor. Stem Ø 4mm, length 150 mm. Cable 2 meters long.
- TP473P.0:** Penetration probe, Thin Film Pt100 sensor. Stem Ø 4mm, length 150 mm. Cable 2 meters long.
- TP474C.I:** Contact probe, Wire Wound Pt100 sensor. Stem Ø 4mm, length 230mm, contact surface Ø 5mm. Cable 2 meters long.
- TP474C.0:** Contact probe, Thin Film Pt100 sensor. Stem Ø 4mm, length 230mm, contact surface Ø 5mm. Cable 2 meters long.
- TP475A.0:** Air probe, Thin Film Pt100 sensor. Stem Ø 4mm, length 230mm. Cable 2 meters long.
- TP472I.5:** Penetration probe, Thin Film Pt100 sensor. Stem Ø 6mm, length 500 mm. Cable 2 meters long.
- TP472I.10:** Penetration probe, Thin Film Pt100 sensor. Stem Ø 6mm, length 1000mm. Cable 2 meters long.
- TP49A.0:** Immersion probe, Thin Film Pt100 sensor. Stem Ø 2.7mm, length 150mm. Cable 2 meters long. Aluminium handle.
- TP49AC.0:** Contact probe, Thin Film Pt100 sensor. Stem Ø 4 mm, length 150mm. Cable 2 meters long. Aluminium handle.
- TP49AP.0:** Penetration probe, Thin Film Pt100 sensor. Stem Ø 2.7mm, length 150mm. Cable 2 meters long. Aluminium handle.
- TP875.I:** Globe thermometer Ø 150 mm with handle. Wire Wound Pt100 sensor complete of SICRAM module. Cable 2 meters long.
- TP876.I:** Globe thermometer Ø 50 mm with handle. Wire Wound Pt100 sensor complete of SICRAM module. Cable 2 meters long.
- TP87.0:** Immersion probe, Thin Film Pt100 sensor. Stem Ø 3 mm, length 70 mm. Cable 2 meters long.
- TP878.0:** Contact probe for solar panels. Thin Film Pt100 sensor. Cable 2 meters long.
- TP878.1.0:** Contact probe for solar panels. Thin Film Pt100 sensor. Cable 5 meters long.

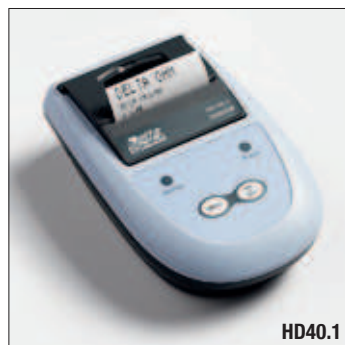
TP879.0: Penetration probe for compost. Thin Film Pt100 sensor. Stem Ø 8 mm, length 1000mm. Cable 2 meters long.

Temperature probes without SICRAM module

- TP47.100.0:** Immersion probe, Thin Film Pt100 sensor probe. Stem Ø 3 mm, length 230mm. 4 wires connection cable with connector, 2 meters long.
- TP47.1000.0:** Thin Film 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 without SICRAM module: direct 3 and 4 wires Pt100, 2 wires Pt1000.
- TP87.100.0** Immersion probe, Thin Film Pt100 sensor. Stem Ø 3 mm, length 70mm. Cable 2 meters long. 4 wires connection cable with connector 1 meter long.
- TP87.1000.0** Immersion probe, Thin Film Pt100 sensor. Stem Ø 3 mm, length 70mm. Cable 2 meters long. 2 wires connection cable with connector 1 meter long.



TP875.I



HD40.1

