HD 2107.1
HD 2107.2
HD 2127.1
HD 2127.2

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

L'HD2107.1 and l'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.

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 a multi-standard RS232C serial port and a 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, into 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 IP67 protection degree.

TECHNICAL SPECIFICATIONS OF THE INSTRUMENTS

Instrument	
Dimensions (Length x Width x Height)	185x90x40mm
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	**IP67**
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 data stored	Unlimited, independent of battery charge conditions
Time	
Date and time	Schedule 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	1s…3600s (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	1s…3600s (1 hour)
Serial interface RS232C	
Type	RS232C electrically 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
Immediate print interval	1s … 3600s (1 hour)
*USB interface - model **HD2107.2, HD2127.2***	
Type	1.1 - 2.0 electrically isolated
Connections	
Input module for the probes	8-pole male DIN45326 connector
Serial interface and USB	8-pole MiniDin 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 ±199.99°C** **0.1°C in the remaining range**
Instrument Accuracy	±0.01°C
Drift after 1 year	0.1°C/year


HD2107


HD2127


SWD10


HD2110CSNM

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

Model	Type	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	Type	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

HD2107.1: The kit consists of instrument HD2107.1, 4 per 1.5V alkaline Batteries, instruction manual, case and DeltaLog9 software. **Probes and cables have to be ordered separately.**
HD2107.2: The kit consists of instrument HD2107.2 **data logger**, 4 per 1.5V alkaline Batteries, instruction manual, case and DeltaLog9 software. **Probes and cables have to be ordered separately.**
HD2127.1: The kit consists of instrument HD2127.1, 4 per 1.5V alkaline Batteries, instruction manual, case and DeltaLog9 software. **Probes and cables have to be ordered separately.**
HD2127.2: The kit consists of instrument HD2127.2 **data logger**, 4 per 1.5V alkaline Batteries, instruction manual, case and DeltaLog9 software. **Probes and cables have to be ordered separately.**
HD2110CSNM: 8-pole connection cable MiniDin - Sub D 9-pole female for RS232C.
C.206: Cable for instruments of the series HD21…1 and .2 to connect directly to USB input of PC.
HD2101/USB: Connection cable USB 2.0 connector type A - 8-pole MiniDin.
DeltaLog9: Software for download and management of the data on a PC using Windows 98 to XP and Vista operating systems.
SWD10: Stabilized power supply at 230Vac/12Vdc-300mA-1000mA mains voltage.
HD40.1: Upon request, portable, serial input, 24 column thermal printer, 58mm paper width.


TP875


HD40.1

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.
TP472I.5: Immersion probe, Pt100sensor. Stem Ø 6mm, length 500 mm. Cable 2 meters long.
TP472I.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 without SICRAM module: direct 3 and 4 wires Pt100, 2 wires Pt1000.