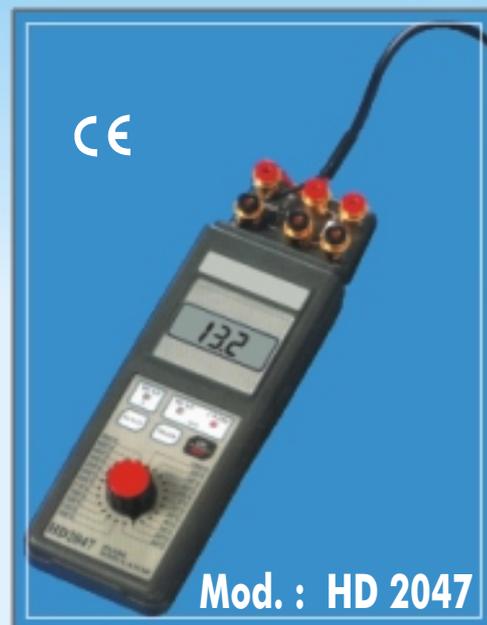


Portable Digital Simulator for Pt100 Input, Current / Voltage output

HD 2047 is a handheld instrument designed to test and calibrate instruments with Pt100 input (100 μ a 0°C) and voltage / current outputs, such as active or passive temperature transmitter, recorders, testers and data loggers, etc.

HD 2047 simulates up to 24 fixed values, following the Pt100 scale from -100°C up to +500°C, with a 2, 3 or 4 wire connections. The set points selection is made through a rotary switch placed on the front part of the instrument.

HD 2047 can measure with high accuracy voltage/current outputs of any transmitter connected to the instrument input: -20V...+20V continuous voltage range and 0...22mA continuous current range.



Mod. : HD 2047

GENERAL	
Power supply	4 batteries 1.5V, AA size
Operating time using 1.5V Batteries with capacity of 2250mAh	160 h (in "V READ" and "mA READ" operating mode) 30 h @ loop current = 12mA (in "2 WIRE" operating mode)
Low batteries signal	The battery sign lights up with a battery voltage of about 3.6V
Operating temperature	-5... +50°C
Operating relative humidity	0...90% R.H. (not condensing)
Weight/dimensions	580 g (without batteries) / 23 × 70 × 230 mm
VOLTAGE MEASUREMENT	
Measure Range	-1.999V... +1.999V : 1mV resolution -19.99V... + 19.99V : 10mV resolution
Accuracy	± 1mV : range - 1.999V... + 1.999V ± 10mV : range - 19.99V... + 19.99V
Input resistance	1M
Maximum voltage applied to terminals	48Vdc
CURRENT MEASUREMENT	
Measure range	0.00mA...19.99mA : 10 A resolution 0.0.22.0mA : 100 A resolution
Accuracy	± (0.01mA + 0.05% of range) : range 0.00mA...19.99mA ± 0.1mA : range 0.0mA...22.0mA
Shunt resistance	20
Overload protection	Current limit : 25mA

PASSIVE TRANSMITTERS : POWER SUPPLY/MEASURE	
Measure Range	-0.00V... +19.99V : 10 A resolution -0.0...22.0mA : 10 A resolution
Accuracy	± (0.01mA + 0.05% of range) : range 0.00mA...19.99mA ± 0.1mA : range 0.0mA...22.0mA
Shunt resistance	20
Overload protection	Current limit : 25mA
Maximum load @ 20mA	700
Applied Voltage	14Vdc
SIMULATING A Pt100	
Type of RTD	Pt100 (100 μ a 0°C, α = 0.003850, EN60751, IEC751, BS1904)
Temperature values	24 fixed values from - 100 up to + 500 °C
Accuracy	± 0.05% of simulated value
Room temperature effect	± 5 ppm / °C
Maximum power loss	125 m Ohm
Maximum load current	20mA

Order Code :

HD 2047 : Pt100 Simulator measures current loop and voltage signals from transmitters. The kit includes the instrument with batteries, a 4-wire and a 2-wire cable (L=600 mm) for the connection