# PORTABLE TEMPERATURE CALIBRATOR

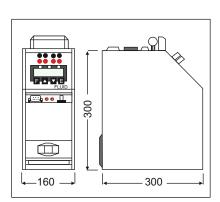




Application: Control and calibration of temperature sensor, in the laboratory and in the field, in conformity with ISO 9000 standards; control of thermostats; automatic computer - controlled calibrations









# HTA INSTRUMENTATION (P) LTD..





The Temperature Calibrator is a compact instrument used to calibrate transducers, RTD and temperature-measuring sensors in the field and in the laboratory. The possibility to generate positive temperature ramps makes it suitable for use in calibrating and testing thermostats.

#### **Technical Characteristics**

The oven consists of a metal block measuring 50 mm in diameter and 200 mm in height heated by a resistance which winds around the outer surface of the block. 3 holes, 4.5, 6.5 and 9.5 mm in diameter are made in the aluminium block (or aluminium bronze in models which work at 600°C) into which the calibration probes are inserted and one 17mm hole for the appropriate reduction inserts.

It is equipped with a PID microprocessor controller with a resolution up to 0.01°C, setting of the standard of measurement in °C/°F, programming of ascent / descent ramps and storage of the thermostats' operative temperature.

The instrument is equipped with an acquisition card having two adjustable inputs (Pt100 3/4 wires; Thermocouples: J, K, N, R, S) with bushes fitted with gold-plated contacts and automatic compensation of the cold junction.

The first input is provided for the reference sample probe, thus obtaining a complete calibration system which can be certified, in compliance with ISO 9000 regulations.

The second input is provided for probes that are being tested; hence, the instrument can display the temperatures of the furnaces, the temperature of the sensor to be checked and of the reference sample probe, at the same time.

Furthermore, it is equipped with the RS232 serial interface; it can operate in automatic mode connected to the PC by means of the AQ2SP software (optional) which enables to carry out probe calibrations and cyclical life tests; test results can be stored and printed, so they are easily traceable in compliance with ISO 9000 standards.

### **TECHNICAL DATA**

(Model with Aluminium block Ø 50mm)

Operating Range	: Environment /+550°C (600°C Optional)
Stability	: ±0.05°C a 450°C
Display Resolution	: 0.01/ 0.1°C
Reading Accuracy	: ±0.3°C @ 450°C
Reading	: °C or °F
Interface	: RS 232
Max. Ascent Rate	: 20°C / 1'
Max. Descent Rate	: 25°C/1'
Test Wells	: 4 holes Ø4.5, 6.5, 9.5, 176×135 mm
Power Supply	: 230V 50 Hz.
Dimensions	: 140×370×300 mm
Weight of Calibrator	: 10 Kg (17kg. vers. BA)
·	

#### **PULSAR\*\*- 2I-2**

Version equipped with two-input acquisition card to measure:

Type of Probe	Range	Precision
PT100 IEC 3/4 fill	-100 / 700°C	±0.3°C
Thermocouple J	0 / 1000°C	±1°C
Thermocouple K, N, R, S	0 / 1300°C	±1°C

#### Example:

PULSAR0394-00-2: it is equal to PULSAR with std. block with four holes, without adjustable inputs, supply 230V



#### STANDARD PACKAGE (code PULSAR 0394)

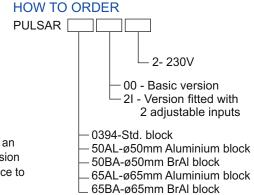
- Pulsar Calibrator
- Electric power cable
- Fuse kit
- Thermostat testing connection cables
- Instruction manual
- Calibration certificate traceable to National standard
- Tweezers for inset removing

#### ACCESSORIES KIT (std.)

- Carrying case
- Plastic bag
- Blank insert
- Insert with 1 hole Ø 9.5mm

#### **ACCESSORIES ON REQUEST**

- AQ2sp software
- Reference RTD probe with Certificate



## **CERTIFICATION:**

All instruments are fitted with an inspection, stability and precision report with a possible reference to basic samples.