

# PULSAR-35Cu

PORTABLE TEMPERATURE CALIBRATOR +30/+600°C



**PULSAR-35Cu** 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 and negative temperature ramps makes it suitable for use in calibrating and testing thermostats.

**PULSAR-35Cu** Temperature calibrator consists of a metal block measuring 50 mm in diameter heated by a resistance which winds around the outer surface of the block

A hole having diameter 35x190 mm is made in the block for the appropriate reduction inserts.

**PULSAR-35Cu** is equipped with a PID microprocessor controller with a resolution up to 0.01°C, setting of the unit of measurement in °C, °F and K, programming of ascent/descent ramps and storage of thermostats operative temperature.

In **PULSAR-35Cu 2I version** the instrument is equipped with an acquisition card having two configurable

inputs (Pt1000, Pt100 3/4 wires; thermocouples E, J, K, N, R, S, T, B) with automatic compensation of cold junction.

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

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

**PULSAR-35Cu** is equipped with RS232 serial interface to operate in automatic mode connected to the PC by means of the Aq2Sp2 software which is capable to automate control procedure and allows to print reports, so they are easily traceable in compliance with ISO 9000 standards.

## APPLICATIONS:

- Control and calibration of temperature sensors, in the laboratory and in the field, in accordance with ISO 9000 standards
- Control of thermostats
- Automatic computer-controlled calibrations

## MAIN CHARACTERISTICS:

- Operating range T ambient / +600°C (1112°F)
- 2 different version
- High stability and precision
- Light weight and compactness
- Retractable handle
- Multi-hole inserts available
- Automatic ramping function
- RS232 connection



## Standard Equipments:

- Calibrator PULSAR-35Cu
- Electric power cable
- Kit of fuses
- Thermostat connection cables
- Instruction manual
- Test report
- Tweezers for insert removing
- **2D3007**: 5 holes insert (Ø 3.5 - 5 - 6.5 - 8.5 - 12.5x125 mm)
- RS232 serial interface
- Kit of clamp connection (only 2I version)

Pulsar calibrators can be supplied with custom-designed inserts, according to customer requirements, or black body and PT100 DN 3 probe.

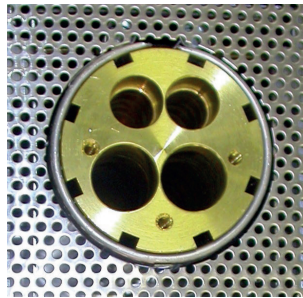
## Equalization blocks

Execution on demand versions with equalizing block DN 50 and 65 mm in Anticorodal with perforations on customer request

Example of Ø 65 brass block for testing aircraft probes.

## Accessories on demand:

- **2D3006**: blind insert
- **2D3006 - SPEC5A**: 4 holes insert DN 6.5 mm
- **2D3006 - SPEC5B**: 4 holes insert DN 5 mm
- **2D3498**: black body
- **2D3223**: PT100 probe DN 3 mm for black body
- Accredia certificate (only 2I version)
- USB/RS232 converter
- Cordura® soft bag
- Aluminium case



## Cordura® Soft Bag

**Code:** 2TRMBAG-PYROS  
**Dimensions:** 410x220x380 mm  
**Weight:** 1.450 kg  
**Packaging dimensions:** 600x370x500 mm

Practical and sturdy Cordura® bag with two side pockets for inserts, a front pocket for documents, shoulder carrying strap; particularly lightweight, it is suitable for carrying and protecting the calibrator with its inserts.



## Aluminium case

**Code:** 2DC505-000  
**Dimensions:** 450x280x380 mm  
**Weight:** 4.8 Kg  
**Packaging dimensions:** 600x370x500 mm

Sturdy aluminum case that provides maximum safety for carrying the instrument.



Specifications	PULSAR-35Cu
Temperature range*	$T_{amb} \div +600^{\circ}\text{C}$
Display accuracy**	$\pm 0.3^{\circ}\text{C}$
Units of measure	$^{\circ}\text{C}/^{\circ}\text{F}/\text{K}$
Display resolution	0.1°C/0.01°C
Mean heating time (stabilization included)	from $T_{amb}$ to 600°C 52 minutes
Mean cooling time (stabilization included)	from 600°C to 100°C 65 minutes
Stability(°C)	$\pm 0.05^{\circ}\text{C}$ @ 450°C $\pm 0.09^{\circ}\text{C}$ @ 842 °F
Axial uniformity for 60 mm from the bottom	$\pm 0.15^{\circ}\text{C}$ @ 400°C
Radial Uniformity	$\pm 0.35^{\circ}\text{C}$ @ 400°C
Hole diameter	35 mm
Hole depth	185 mm
Insert material	nickel-plated brass
Switch test, voltage	On/off 12 VDC
Adjustable ramp function	from 0.1°C/min
Pc interface	RS232
Automatic calibration	on 5 points
Operating voltage	115 o 230 VAC 50 o 60 Hz
Electric power	800 W
Calibrator size	160x360x350 mm
Calibrator weight with standard equipment	10 Kg

\* Temperature deviation between the display and the reference probe  
 \*\* Maximum temperature difference at a stable temperature over 30 minutes

## How to order:

### • STANDARD VERSION

PULSAR-35Cu - 00-1 - 115 V 50/60 Hz  
 PULSAR-35Cu - 00-2 - 230 V 50/60 Hz

### • 2I VERSION

PULSAR-35Cu - 2I-1 - 115V 50/60 Hz  
 PULSAR-35Cu - 2I-2 - 230V 50/60 Hz

## Inserts code:

### • 2D3006

without hole blank insert DN 35x190 mm  
 holes on demand, possibility of to do 2,3,4,5,6,8 holes from 3.5 to 20 mm

### • 2D3007

5 holes insert DN 35x190 mm:  
 (Ø 3.5 - 5 - 6.5 - 8.5 - 12.5x185 mm).  
 Brass made with patterned holes.