

# PULSAR

## PORTABLE TEMPERATURE CALIBRATOR

### 80Cu



#### Operating range:

Room temp. / +550 °C  
(Room temp. / 1022 °F)

#### Applications:

Control of high-length thermostats.

Removable testing insert:  
diameter 60 x 275 mm  
(2.3 x 10.8 in.).

Insert with customiozable holes.



GIUSSANI



# PULSAR 80Cu

PORTABLE TEMPERATURE CALIBRATOR

**PULSAR-80Cu** temperature calibrator is a compact instrument used to calibrate transducers and temperature-measuring sensors. The considerable size makes it suitable for test of thermostats with high-temperature bulb.

### TECHNICAL CHARACTERISTICS:

The **PULSAR-80Cu** temperature calibrator consists of a metal block measuring diameter 80 x 300 mm heated by a resistance which winds around the outer surface of the block. A hole measuring diameter 60 x 275 mm is made in the block for the appropriate reduction inserts.

The **PULSAR-80Cu** is equipped with a counter-current forced air cooling system, which keeps the temperature low in the upper part of the well; this system enables to check even very short probes, without heating the connecting head or the handgrip; 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 and K programming of ascent/descent ramps and storage of the thermostats' operative temperature.

In the **PULSAR-80Cu-2I** version the instrument is equipped with an acquisition card having two adjustable inputs able to read: Pt100 3/4 wires & thermocouples: J, E, K, N, R, S with automatic compensation of the cold junction.

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

The EXT 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 the temperature of the reference sample probe, at the same time.

Furthermore, **PULSAR-80Cu** is equipped with the RS232 serial interface; it can operate in automatic mode connected to the PC by means of the AQ2sp software 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.

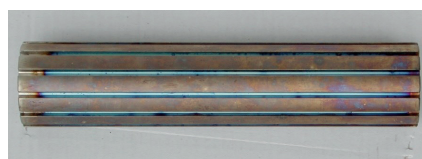
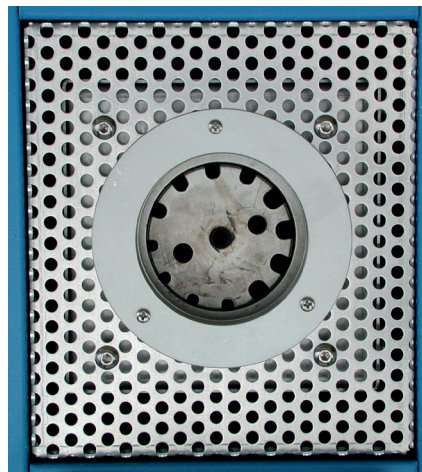
### TECHNICAL DATA (PULSAR-80Cu-00)

Operating range:	Room temp. + +550 °C (Room. Temp + 1022 °F)
Stability:	±0,05 °C (a 450 °C) ± 0.09 °F at 842 °F
Uniformity (a 400 °C)	
- Radial	±0,1 °C at 100 mm ±0.1 °F at 100 mm
- Axial	±0,3 °C (for 120 mm from the bottom) ±0.5 °F (for 120 mm from the bottom)
Maximum heating time:	9 °C/min (48 °F/min)
Maximum cooling time:	1,6 °C/min (35 °F/min)
Display resolution:	All temperatures: 0,1 °C / 0,01 °F
Display accuracy:	±0,3 °C (±0.5 °F)
Units of measurement:	°C - °F - K
Serial interface:	RS232
Well diameter:	60 mm (2.3 in.)
Insert hole depth:	275 mm (10.8 in.)
Power supply:	230 VAC - 50/60 Hz
Electric power:	1700 W
Calibrator size:	170 x 450 x 330 mm (6.6 x 17.7 x 12.9 in.)
Calibrator weight:	23 kg (50 lb)
Shipping weight with carrying case:	30 kg (60 lb)
Shipping size:	240 x 410 x 515 mm (9.4 x 16 x 20.2 in.)

### PULSAR-80Cu-2I

Version with data acquisition card and two input devices to measure:

Type of probe	Range	Accuracy
Pt100 IEC 3/4 wires	-100 / 700 °C	±0,3 °C
Thermocouple J E	0 / 1000 °C	±1 °C
Thermocouples K, N, R, S	0 / 1300 °C	±1 °C



### STANDARD EQUIPMENT:

- Power supply cable.
- Fuses kit.
- Thermostats connection cables.
- Instructions manual.
- Test report.
- Block extractor.
- Insert with on-request holes.
- RS232 serial interface.
- Kit of clamps connection (2I version only)

### ACCESSORIES ON REQUEST:

- Insert with customizable holes
- AQ2SP: AQ2sp software + serial cable.
- Accredia certificate (2I version only) executed with the reference probe plugged in Pulsar 80 Cu
- Pt100 reference probe
- USB/RS232 converter.
- Aluminium case.

### ORDERING CODES:

#### Standard version

PULSAR-80Cu - **00** - 230 V 50/60 Hz

#### Version with 2 adjustable inputs

PULSAR-80Cu - **2I** - 230 V 50/60 Hz

PULSAR-80Cu - Tel. 0363.398725



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**CERTIFICATION:**  
All instruments are supplied with final testing, stability and accuracy certification traceable to Accredia standards.