

Dry Block Temperature Calibrator LR-Cal PULSAR-35CU

- for mobile or stationary use
- micro processor controlled (PID)
- RAMP function
- Thermostat test feature

Typical applications:

- Calibration and checking of all kind of thermometer
- Calibration and checking of thermostats
- Computer aided calibration via RS232 interface

Technical Data:

Order-Code: **PULSAR-35CU**

Temperature range: Ambient temperatur up to +600°C

Resolution of display: 0.01 / 0.1°C (display switchable °C/°F/K)

Stability of regulated temperature: $\pm 0.05\%$ °C at 450°C

Mean heating time: 20°C per minute

Mean cooling time: 25°C per minute

Uniformity (at 450°C): radial $\pm 0.15\%$ °C; axial $\pm 0.35\%$ °C

Accuracy of internal temperature measurement: $\pm 0.3\%$ °C

Internal reference probe: RTD Pt100 (3-wire)

Ventilation: internal, electronical driven/regulated

Interface: RS232

RAMP function: 0.1°C per minute

Dry block: diameter 35 mm, depth 190 mm, material: copper

Test wells: 1 hole diameter 35 mm x depth 185 mm

Insert included: 1 insert with 5 drillings 3.5 / 5.0 / 6.5 / 8.5 / 12.5 mm; **Optional:** inserts with 1 to 9 drillings 3.5...20 mm as per customers request, or blank insert, or insert with BLACK BODY and external reference probe.

Power supply: 230 VAC (optional: version for 115 VAC)

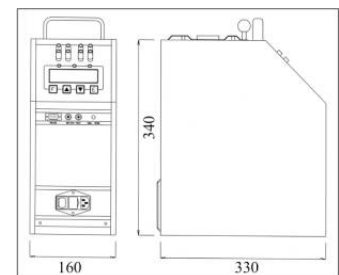
Power consumption: 800 VA

Housing: metal

Dimension: 160 x 340 x 330 mm

Weight: 10.1 kg net (shipping weight: 18.2 kg)

NOTE: the stated accuracy is valid for ambient temperature +10...+40°C and is guaranteed for one year.



Version PULSAR-35Cu-2I:

With data acquisition card and two input devices to measure resistance thermometer probes and thermocouples.

Details - see next page.

Order-Code: **PULSAR-35CU-2I**

Accessories:



Soft bag

Order-Code:

TEMPKAL-TASCHE



Alu Case

Order-Code:

TEMPKAL-KOFFER



Windows-PC Software AQ2sp

incl. RS232 cable

Order-Code: **599.0.000.0003.0**

With the software **AQ2sp** it is possible to remote-control the calibrator via PC. Automatic or manual calibration of one or more test items, stress tests, thermostat tests, printing of calibration certificates.

Further Accessories:

- Inserts with customer specific drillings
- Blank insert
- BLACK BODY insert for infrared thermometer
- External Reference Probes

Version PULSAR-35Cu-2I:

Instrument version with 2 measuring inputs, both suitable for resistance thermometers Pt 100 (2-, 3- or 4-wire) or Pt 100 as well as thermocouples (incl. cold junction compensation) types B, E, J, K, N, R, S and T. The signals of up to two external temperature sensors can be displayed additionally.



Order-Code: PULSAR-35CU-2I

Accuracy of the two measuring inputs at version LR-Cal PULSAR-35Cu-2I:

Accuracy (max. deviation) of the optional measuring inputs at version "-2I":

Resistance thermometer:			
Pt 100 + PT 1000	at -40°C: $\pm 0.09^\circ\text{C}$	at 0°C: $\pm 0.08^\circ\text{C}$	at +150°C: $\pm 0.11^\circ\text{C}$
	at +300°C: $\pm 0.14^\circ\text{C}$	at +450°C: $\pm 0.30^\circ\text{C}$	at +600°C: $\pm 0.40^\circ\text{C}$
Thermocouples:			
Type B	at +950°C: $\pm 0.97^\circ\text{C}$	at 1050°C: $\pm 1.03^\circ\text{C}$	at +1200°C: $\pm 1.12^\circ\text{C}$
Type E	at -40°C: $\pm 0.42^\circ\text{C}$	at 0°C: $\pm 0.40^\circ\text{C}$	at +350°C: $\pm 0.61^\circ\text{C}$
Type J	at +200°C: $\pm 0.52^\circ\text{C}$	at +450°C: $\pm 0.67^\circ\text{C}$	at +700°C: $\pm 0.82^\circ\text{C}$
Types K + N + R + S	at +400°C: $\pm 0.64^\circ\text{C}$	at +700°C: $\pm 0.82^\circ\text{C}$	at +1000°C: $\pm 1.00^\circ\text{C}$
Type T	at -40°C: $\pm 0.42^\circ\text{C}$	at 0°C: $\pm 0.40^\circ\text{C}$	at +350°C: $\pm 0.61^\circ\text{C}$