



English

Product Datasheet

Stock No: 193-8701

Dry-well temperature calibrator



Introduction

The serious dry-block heat sources allow users to check the accuracy of the thermometers and sensors as a system, on site, without the need for heavy, expensive equipment. The dryblocks are high accuracy, portable heat sources that are extremely easy to use. Simply plug in, switch on and set the dry-block to the temperature that you wish to test, insert your probe into the correct size well and record the reading of your thermometer and probe to the displayed temperature of the dry-block and the difference is the error of your instrument. For optimum accuracy and UKAS traceability use a reference thermometer to make comparison measurements.

The serious dry-blocks are controlled by a closed loop microprocessor based digital PID temperature controller system incorporating a heater and precision platinum RTD sensor housed in the aluminium block. Fan cooling allows rapid changes in block temperature upon demand. The required temperature may be adjusted in 0.1°C increments across the range of the instrument using the buttons on the front panel.

These units are ideal for use in a variety of industrial and process applications.

Each unit is supplied with a traceable certification of calibration showing actual test data, which can be used as part of quality assurance programmes.

Environmental Conditions

Although the instrument has been designed for optimum durability and trouble-free operation, it must be handled with caution. The instrument should not be operated in an excessively dusty or dirty environment. Maintenance and cleaning recommendations can be found in the Maintenance section of this manual.

The instrument operates safely under the following conditions:

- temperature range: 5-35°C (41-95°F)
- ambient relative humidity: 15-80%
- pressure: 75kPa–106kPa
- mains voltage within $\pm 10\%$ of nominal
- vibrations in the calibration environment should be minimized

General Specifications

Temperature Range	+ 33 to 300°C(at 20°C ambient)
Accuracy	0.8°C ; Temp ≤ 100°C (± 1.6°F; Temp ≤ 212°F)
	± 1.6°C; 100°C < Temp ≤ 200°C (± 3.2°F; 212°F < Temp ≤ 392°F)
	± 2.8°C; 200°C < Temp ≤ 300°C (± 5.6°F; 392°F < Temp ≤ 572°F)
Stability	± 0.1°C; Temp ≤ 100°C (± 0.2°F; Temp ≤ 212°F)
	± 0.2°C; 100°C < Temp ≤ 200°C (± 0.4°F; 212°F < Temp ≤ 392°F)
	± 0.4°C; 200°C < Temp ≤ 300°C (± 0.8°F; 392°F < Temp ≤ 572°F)
Resolution	0.1°C/0.1°F
Heating Time	30 minutes to max
Cooling Time	30 minutes to 100°C(122°F)
Aperture Diameter	Φ 4.2mm Φ 6.8mm Φ 5mm Φ 3.5mm
Power	220VAC(± 10%), 1.25A/110VAC(± 10%), 2.5A
Size	180x114x233mm
Weight	3kg

Accessories: Box, AC power cable.