

PTB157 Ultra-Low Temperature calibrator

Product features

The PTB 157 is a new ultra-low temperature calibrator, using high efficiency Peltier element to cover a wide temperature range from -70 C to 150 C. The new block technology allow for fast heating/cooling whilst maintaining high accuracy and stability. The rugged construction and the light weight make it the ideal tool for on-site or on-board calibration. The new PTB157 comes in two models: PTB157 TS temperature source and PTB157 TC temperature calibrator with input for reference sensor and sensor under test.

- Temperature range -70 to 150 °C
- High Accuracy 0.07 °C
- Dual Input for reference sensor and sensor under test
- Interchangeable multi-hole inserts
- Automatic switch test function
- Automatic Ramp



Automatic switch test

Set your automatic ramp (slope) with up to 0.1C per minute rate. The PTB 157 will store for you the contact open and closed. No need for any additional mustimeter. Maximise your time and perform other tasks while the PTB will do the job for you.

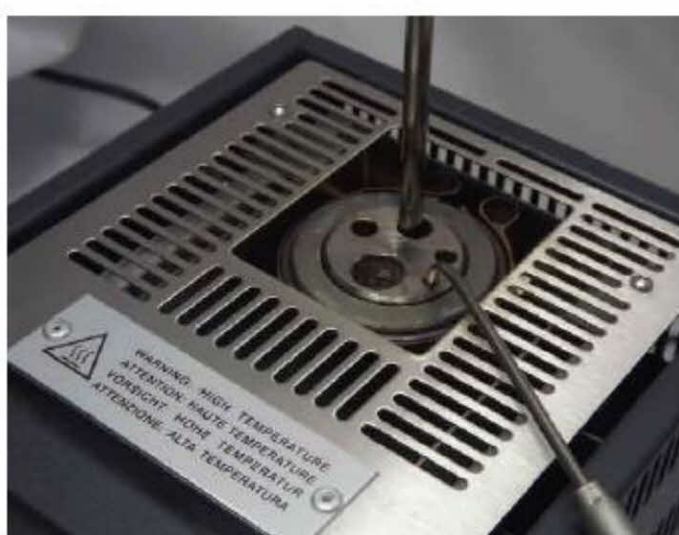


TC version with dual electrical input

Dual electrical input for reference sensor and unit under test. Eliminate the need to carry an additional thermometer on site



Special Angled SRS Reference sensor



The TC version is equipped with an built-in high accuracy reference input to be used in conjunction with our SRS (semi standard PRT)- This feature allows the PTB-TC to perform calibration with an higher degree of accuracy.- It also eliminates most of the error due to Stem conduction and different load

A special 90C angled external reference sensor is designed to accommodate calibration of sensors with transmitter head- It provide maximum clearance to the top of the calibrator-

Our SRS external reference sensors are especially designed to improve the performance of our PTB series- The size and length of the external reference sensors have been chosen to provide best performance on the T series- A special linearization/ calibration with the built-in reference input provide maximum reading accuracy as good as 0.07 Deg C (T150-TC) and

Technical Specifications

Model	PTB 157
Temperature Range	
Temperature Range (@ 0°C ambient)	-63 to 150 °C
Temperature Range (@23°C ambient)	-50 to 150° C
Accuracy with (internal reference sensor)	±0.15°C
Accuracy with external reference sensor (TC version only) 12 months, relative to external reference sensor	±0.07°C
Stability	±0.02 °C
Axial Uniformity (lower 40 mm)	±0.08°C
Radial Uniformity (hole to hole)	±0.02 °C
Calibration Volume	
Insert Diameter	35 mm
Block Depth	135 mm
Standard insert supplied	1 insert with 3.5, 4.5,5.5, 6.5, 8.5.10,5 mm pockets
Display	
Range	-70 to 150 C
Type	Led dual line
Resolution	0.1°C/0.01C user selectable
Temperature unit	°C/°F
Heating time (including stabilization time)	Ambient to 150 C in 30 minutes
Cooling Time (including stabilization Time)	Ambien to -50 C in 60 minutes
Inputs	
Switch test:	With automatic log of switch open and switch closed
Thermocouple Inputs (TC version only)	
Type	K, N, R,S,T,J,E
Accuracy (Include CJC error)	± 1 °C
Display Resolution	0.1 or 0.01 °C
RTD'S input and Reference Input (TC version only)	
Type	PT100 IEC 3/4 wires
Accuracy	± 0.3 °C
Display Resolution	0.1 or 0.01 °C
Other	
Digital Interface	RS232 as standard, optional USB converter
Mains	115 or 230 VAC, 50/60 Hz
Power	300 VA
Weight	8 KG
Dimension	160x340x330 mm

Ordering Information

PTB157-TS Temperature Calibrator, -70 to 150C,
TS version

PTB157-TC Temperature Calibrator, -70 to 150C,
TC version

Included:

- Calibrator
- Standard Insert
- Calibration certificate
- Power Cord
- Insert removal tool
- Switch test lead
- Instruction Manual

Transport cases (optional)

PTB-CAS-01 Vinyl Case with pockets and
shoulder strap

