



LCB 50 Basic

Multifunction temperature calibrator LCB 50 is an equipment suitable for all conditions and applications, covering different kind of industries. The LCB 50 multifunction is the most advanced equipment in its class. Designed to work in a few minutes, as a dry block and liquid bath. Thanks to the wide variety of inserts available, it allows you to calibrate any probe or thermocouple. The LCB 50 has a temperature range of 30 ... 255 °C (86 ... 491 F), stability of 0.01°C (0.018 F) accuracy of 0.1°C (0.18 F).



APPLICATIONS

Calibration Laboratories

Testing Labs

Universities / R & D

Chemical / Pharmaceutical Industry

Suitable use in the food industry

Easy maintenance and service

HIGHLIGHTS

Fast Response Time

Temperature range 30 ... 255 °C (86 ... 491 F)

All in one: Dry block and liquid bath

Easy change between the calibration functions

Immersion Depth: 190 mm

Resolution: 0.1 °C / F

Stability: 0.01°C / 0.018 F

Accuracy: 0.1°C / 0.18 F

Uniformity: 0.03°C / 0.054 F

Portable unit

3 Years Warranty



General Information

User interface with doble display resolution 0.1

All in one equipment (Dry Block/ Liquid Bath)

Intuitive operation of the calibration functions

Robust against damage

Menu adjustable with 10 calibration points for best performance

Communication RS485 Modbus RTU (connector DB9)

Stirrer speed controlled by potentiometer

Top level performance



Technical Data

Operating Temperature Range(°C)	30 ... 255 °C / 86 ... 491 F
Accuracy	0.1 °C / 32.18 F
Resolution	0.1 °C / F
Reference temperature sensor	Internal
Calibration Volume	Ø 60mm x 190 mm
Warm-Up time	From 30 to 220°C / From 86 to 428 F: 28 Minutes
Cooling time	From 220 to 100 °C /From 428 to 12 F: 30 Minutes
Housing and assembly	Portable
Dimensions W x L x H (mm)	250 x 370 x 400 mm
Weight (kg)	10.3 kg approx.
Supply	100 ... 234 Vac 50/60 Hz
Power Consumption	Approx. 600 W

LIQUID BATH**

Temperature Stability	±0.01 °C /± 0.018 C
Uniformity	±0.03 °C / ± 0.054 F
Accuracy	0.1 °C / 0.18 F
Well capacity	0.6 liters

DRY BLOCK

Temperature Stability	±0.01 °C / ± 0.018 F
Uniformity	±0.05 °C / ± 0.09 F
Insert Dimensions	59.5mm x165mm
Optional Inserts	
	1 x Ø 3,5 /1 x Ø 6,5/ 1 x Ø 8,5/ 1 x Ø 10,5 mm
	2 x Ø 3,5 /2x Ø 4,5/ 2 x Ø 6,5/ 2 x Ø 8,5/ 2 x Ø 10,5 mm
	3 x Ø 3,5 /3x Ø 6,5/ 3 x Ø 8,5/3 x Ø 10,5 mm
	2 x Ø 3,5 /1x Ø 4,5/ 1 x Ø 5,0/1 x Ø 5,5/1 x Ø 6,5/ 1 x Ø 8,5
	/1x Ø 9,0/ 1 x Ø 9,5/1 x Ø 10,5 mm
	Insert tub calibration bath with basket and stirrer
	Infrared calibration insert with external reference sensor Ø 3 mm***
	Surface calibration insert Temp range 50 to 220 °C / 122 to 428 F

**For using it silicone oil of 20 cSt 7...220 °C / 44.6...428 F // 50 cSt 50...270 °C / 122...518 F

*** Blackbody insert operating temp. range 30 ... 250°C / 86 ... 482 F

Scope of delivery

Basic Instrument LCB 50 Basic
 Power Cord EU, USA, Others
 Teflon Magnetic Stirrer / Magnet extractor, insert extractor (multifunction version).
 Manufacturing Traceable Calibration Certificate 3.1 (5 Points)

Instruction Manual

Drain Pump

3 Years of Warranty against factory defects

Optional

Multifunction Dry Block/ Liquid Bath
 Trolley transport case with wheels and handle.
 ENAC (ISO 17025) Calibration Certificate
 PLA lid with 6 inserts
 RS 485 ModBus RTU communications (software included, PC cable not included).
 Several types of inserts (See the Dry Block Technical Data)
 Teflon Magnetic Stirrer

