



# LCB 50 Advance

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: 0,1/0,01/ 0,001°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

Easy and intuitive 4.3-inch touch screen user interface  
All-in-one equipment (Dry block/Liquid bath, blackbody, surface)  
Intuitive operation of the calibration functions  
Trend graph with resolution up to 0.1°C and time selection  
Robust against damage  
Menu adjustable with 10 calibration points for best performance  
Multi-language Spanish, English, German, French, Italian  
RS485 ModBus RTU communication (DB9 connector)  
Touch screen controlled stirrer  
World-class 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 An x La x Al (cm)	250 x 370 x 400 mm
Weight (kg)	10.3 kg Approx.
Supply	100 ... 234 Vac 50/60 Hz
Power Consumption	Approx 1200 W

LIQUID BATH**		DRY BLOCK	
Temperature Stability	±0.01 °C / ± 0.018 °C	Temperature Stability	±0.01 °C / ± 0.018 °F
Uniformity	±0.03 °C / ± 0.054 °F	Uniformity	±0.05 °C / ± 0.09 °F
Accuracy	0.1 °C / 0.18 °F	Insert Dimensions	59.5mm x165mm
Well capacity	0.7 liters	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

### Scoope of delivery

LCB 50 Advance Basic Instrument  
Power Cord EU, USA, Others  
Teflon Magnetic Stirrer / Magnet extractor, / insert extractor. (multifuntion version).  
Manufacturing Traceable Calibration Certificate 3.1 (8 Points)  
PLA lid to hold probes with 6 holes  
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 to hold probes with 6 holes  
RS 485 ModBus RTU communications (software included, PC cable not included).  
Several types of inserts ( See the Dry Block Tecnical Data)  
Teflon magnetic stirrer extractor (dry block version only).

