

**CLB31 Advanced Portable Low Temperature Calibration Bath °F and °C**  
**CLB51 Advanced Portable High Temperature Calibration Bath °F and °C**

**FEATURES**

- Fast response time
- Attached handle and screw-top calibration tank lid make carrying easy and spill-free
- High Temperature stability up to  $\pm 0.01^{\circ}\text{C}$
- Lower Temperature uniformity of  $\pm 0.05^{\circ}\text{C}$
- Adjustable speed magnetic stirrer for easy control and good circulation
- Internal Pt100 sensor for reference temperature measurements
- Temperature chamber with basket for temperature sensors to be calibrated
- Advanced 4.3 inch color touch screen PID temperature controller
- Recorder functions
- Programs and trend graphs
- Communications: Ethernet and two USB ports
- Advanced functions: Trends, Programs (Ramps), Data Logging, 10 point Calibration, Alarms, Events.



**CLB31**

SPECIFICATIONS		
	CLB31	CLB51
	Low Temp User Selectable Scale	High Temp User Selectable Scale
Temperature Range:	-35° to 165°C <sup>1</sup> / -31° to 329°F	30° to 225°C / 86° to 437°F
Temperature Stability:	$\pm 0.01^{\circ}\text{C}$ / $\pm 0.02^{\circ}\text{F}$	
Temperature Uniformity:	$\pm 0.05^{\circ}\text{C}$ / $\pm 0.02^{\circ}\text{F}$	
Screen Resolution:	0.1°C / 0.01°C / 0.001°C/°F	
Accuracy:	$\pm 0.1^{\circ}\text{C}$ / $\pm 0.18^{\circ}\text{F}$	
Heating Time:	-5° to 100°C: 25 min. 23° to 212°F: 25 min.	25° to 220°C: 42 min. 77° to 428°F: 42 min.
Cooling Time:	25° to -25°C: 30 min. 77° to -13°F: 30 min.	220° to 100°C: 35 min. 428° to 212°F: 35 min.
Immersion Depth:	190 mm / 7.48 inch	
Well Diameter:	60 mm / 2.36 inch	
Well Capacity:	0.7 liters	
Tank Dimensions:	60 x 190 mm / 2.36 x 7.48 in	
Dimensions W x D x H:	280 x 370 x 490 mm, 11.02 x 14.56 x 19.29 in	
Weight:	15.2 kg / 33.51 lbs.	11.4 kg / 25.13 lbs.
Power Supply:	88 to 264 Vac, 45 to 65 Hz	
Power Consumption:	310 W MAX	320 W MAX
Power Connection:	North American, optional European - Add E Suffix.	
Optional:	<b>12457-01</b> - External Control Option. Includes FAN DIN 6 connector (Male). (12457-07 Probe not included).	

**ADVANCED CONTROLLER**

**CLB31:** -35° to 165°C / -31° to 329°F

**CLB51:** 30° to 225°C / 86° to 437°F

Palmer Wahl's line of advanced portable calibration baths offer high performance in a portable package for on-site temperature calibrations. They are also well suited in the laboratory for demanding temperature calibration tasks. They feature a touch-screen controller for easy access to the numerous functions available.

All units feature a 60mm diameter calibration well with a 190mm depth. The adjustable magnetic stirrer is controlled by a front panel potentiometer giving the user easy control of the stirrer speed. This allows for good circulation within the bath's calibration well to achieve high performance with high stability and excellent uniformity.

**APPLICATIONS**

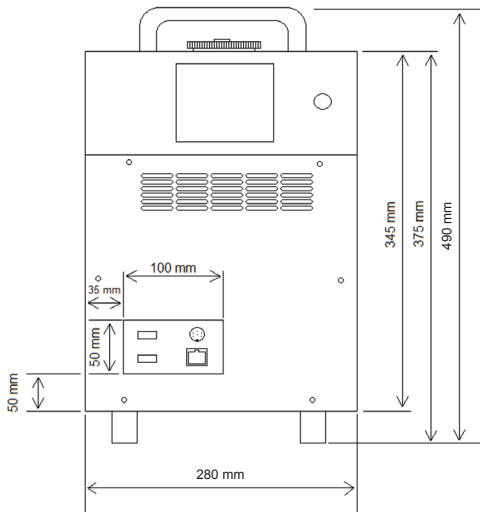
- Calibration Laboratories
- Testing Labs
- Universities / R&D
- Chemical / Pharmaceutical
- Food Industry

<sup>1</sup> Minimum Temperature is 52°C Below Ambient, Absolute Minimum -35°C

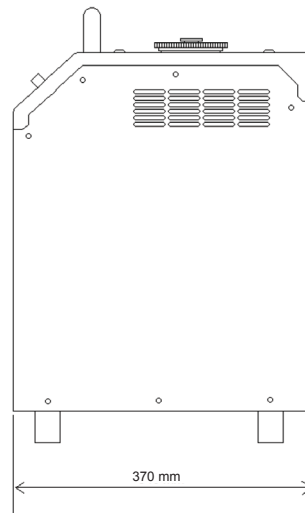
Specifications subject to change without notice.



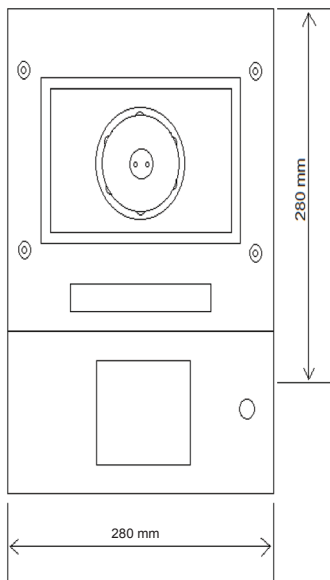
**CLB31 / CLB51 Front view**



**CLB31 / CLB51 Side view**



**CLB31 / CLB51 Upper view**



### INCLUDED IN DELIVERY

**CLB31:** -35° to 165°C / -31° to 329°F - Advanced Portable Low Temperature Calibration Bath, User Selectable Scale

**CLB51:** 30° to 225°C / 86° to 437°F - Advanced Portable High Temperature Calibration Bath, User Selectable Scale

Stainless Steel Transport Cover

Sensor Basket

Magnetic Stirrer Capsule

Liquid Removal Syringe

Power Cord (1.5m) (North American plug is standard, European plug on "E" models)

Certificate of Conformance

User Manual (available online at [palmerwahl.com/downloads](http://palmerwahl.com/downloads))

### OPTIONAL ACCESSORIES

**12457-01** - External Control Option. Includes FAN DIN 6 connector, (Male) (12457-07 Probe not included)

**12457-02** - Hermetic Methacrylate lid with 6 positions to hold probes, 1/8" G female thread, eliminates condensation in the oil and prevents entry and exit of vapors

**12457-04** - Trolley Transport Case for CLB31/CLB51, with high density foam, wheels and handle

**12457-05** - Silicone Oil - 10cSt or 50cSt, 7 liters, -35° to 160°C (Recommended for CLB30/CLB31)

**12457-06** - Silicone Oil - 10cSt or 50cSt, 7 liters, 30° to 225°C (Recommended for CLB50/CLB51)

**12457-07** - External Control PT100 Probe, 1/8" OD x 12" L, 1 meter cable.

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