

- Exceptional temperature uniformity and stability
- Optional external temperature probe
- Holds interchangeable modular blocks

Designed for applications that require repeatable results and superior temperature stability. These multi-purpose units are ideal for incubation and activation of cultures, enzyme reactions, immunoassays, melting/boiling points, and a wide variety of other laboratory procedures. Integral support rod holder with locking knob accepts optional External Temperature Probe Kit. Optional External Temperature Probe Kit monitors actual block or sample temperature. Each of the five models accepts separate interchangeable modular blocks, accommodating various tube sizes from 0.2mL micro-tubes to 50mL centrifuge tubes. Each block has a thermometer well for measuring block temperature. Efficient heating due to close tube-and-block contact for maximum heat retention. Heaters require Talboys modular heating blocks for operation. Modular blocks are sold separately (see pages 83–85).

Operating Features:

Microprocessor Control: PID temperature control, with optional external RTD probe, offers a temperature stability as low as $\pm 0.1^\circ\text{C}$ with a temperature uniformity as low as $\pm 0.1^\circ\text{C}$. Samples are heated to temperature quickly and accurately. Temperature is adjusted in $\pm 0.1^\circ\text{C}$ increments.

LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, and time. Provides repeatable and accurate results every time and is easily visible across lab benches. Shows set-point and actual temperature. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Caution Hot Indicator: Hot warning symbol light is illuminated when the temperature is above 40°C .

Overshoot Protection: If the unit exceeds the set temperature by 10°C the unit will automatically stop heating.

Audible Alarm: In timed mode, alarm will sound when time reaches zero and when unit reaches set-point temperature.

CAUTION! To avoid possible electrical hazard, do not fill well or block opening with water or other fluids. Unit is designed as a dry bath/incubator.

Operating Conditions:

Units can be run in conditions from 18 to 33°C (64 to 91°F), 20% to 80% relative humidity, non-condensing.

Applications:

Denaturing proteins, DNA applications, ELISA and other immunoassay studies.



Ordering Information:

Units include a 92" (234cm) detachable, 3-wire cord and plug (230 volt units are supplied with Euro type plug). Modular blocks are sold separately (see pages 83-85). **5 year limited warranty on parts and labor.**

Optional NIST Traceable Calibration Certificate provided by Troemner's ISO/IEC 17025 accredited laboratory. Multiple data points within the temperature range and time function are reported on the certificate with the associated uncertainties.

Size	Temperature Range	Temperature Stability @ 37°C	Uniformity Within the Block @ 37°C	Uniformity Across Similar Blocks @ 37°C	Heat-Up Time to 100°C
1 block	Ambient $+5^\circ\text{C}$ to 120°C	120 volt units: $\pm 0.1^\circ\text{C}$	120 volt units: $\pm 0.1^\circ\text{C}$	N/A	45 minutes
2 block				$\pm 0.1^\circ\text{C}$	50 minutes
3 block		230 volt units: $\pm 0.2^\circ\text{C}$	230 volt units: $\pm 0.2^\circ\text{C}$	$\pm 0.15^\circ\text{C}$	55 minutes
4 block				$\pm 0.2^\circ\text{C}$	60 minutes
6 block				$\pm 0.3^\circ\text{C}$	65 minutes

Advanced Dry Block Heaters

Advanced Dry Block Heaters				
Block Capacity	Dimensions (L x W x H)	Electrical (50/60 Hz)	Ship Weight	Part Number
1	12.4 x 8 x 3.5" (31.5 x 20.3 x 8.9cm)	120V 0.9 amps 110 watts	5.8lbs (2.6kg)	949500
1	12.4 x 8 x 3.5" (31.5 x 20.3 x 8.9cm)	230V 0.5 amps 110 watts	5.8lbs (2.6kg)	949501
2	15.4 x 8 x 3.5" (39.1 x 20.3 x 8.9cm)	120V 1.7 amps 210 watts	6.4lbs (2.9kg)	949502
2	15.4 x 8 x 3.5" (39.1 x 20.3 x 8.9cm)	230V 0.9 amps 210 watts	6.4lbs (2.9kg)	949503
3	18.4 x 8 x 3.5" (46.7 x 20.3 x 8.9cm)	120V 1.7 amps 210 watts	8.0lbs (3.6kg)	949504
3	18.4 x 8 x 3.5" (46.7 x 20.3 x 8.9cm)	230V 0.9 amps 210 watts	8.0lbs (3.6kg)	949505
4	16.9 x 8 x 3.5" (42.9 x 20.3 x 8.9cm)	120V 2.6 amps 310 watts	8.5lbs (3.9kg)	949506
4	16.9 x 8 x 3.5" (42.9 x 20.3 x 8.9cm)	230V 1.3 amps 310 watts	8.5lbs (3.9kg)	949507
6	20.9 x 8 x 3.5" (53.1 x 20.3 x 8.9cm)	120V 3.4 amps 410 watts	10.0lbs (4.5kg)	949508
6	20.9 x 8 x 3.5" (53.1 x 20.3 x 8.9cm)	230V 1.7 amps 410 watts	10.0lbs (4.5kg)	949509

Advanced Dry Block Heaters with NIST Traceable Certificate				
Block Capacity	Dimensions (L x W x H)	Electrical (50/60 Hz)	Ship Weight	Part Number
1	12.4 x 8 x 3.5" (31.5 x 20.3 x 8.9cm)	120V 0.9 amps 110 watts	5.8lbs (2.6kg)	949700
1	12.4 x 8 x 3.5" (31.5 x 20.3 x 8.9cm)	230V 0.5 amps 110 watts	5.8lbs (2.6kg)	949701
2	15.4 x 8 x 3.5" (39.1 x 20.3 x 8.9cm)	120V 1.7 amps 210 watts	6.4lbs (2.9kg)	949702
2	15.4 x 8 x 3.5" (39.1 x 20.3 x 8.9cm)	230V 0.9 amps 210 watts	6.4lbs (2.9kg)	949703
3	18.4 x 8 x 3.5" (46.7 x 20.3 x 8.9cm)	120V 1.7 amps 210 watts	8.0lbs (3.6kg)	949704
3	18.4 x 8 x 3.5" (46.7 x 20.3 x 8.9cm)	230V 0.9 amps 210 watts	8.0lbs (3.6kg)	949705
4	16.9 x 8 x 3.5" (42.9 x 20.3 x 8.9cm)	120V 2.6 amps 310 watts	8.5lbs (3.9kg)	949706
4	16.9 x 8 x 3.5" (42.9 x 20.3 x 8.9cm)	230V 1.3 amps 310 watts	8.5lbs (3.9kg)	949707
6	20.9 x 8 x 3.5" (53.1 x 20.3 x 8.9cm)	120V 3.4 amps 410 watts	10.0lbs (4.5kg)	949708
6	20.9 x 8 x 3.5" (53.1 x 20.3 x 8.9cm)	230V 1.7 amps 410 watts	10.0lbs (4.5kg)	949709

External Temperature Probe Kit

Enables the unit to read actual block or sample temperature and display that temperature on the control panel. The optional External Temperature Probe Kit includes a stainless steel RTD PT100 probe, 18" (45.7cm) stainless steel support rod, thermometer/temperature probe extension clamp and hook connector. The PT100 RTD probe is designed to fit perfectly in to the thermometer well of each modular block.



Description	Part Number
Optional External Temperature Probe Kit	949520