

Dry Block Heaters



Dry Block Heaters
2 Block Dry Block Heaters with Lid

Dry Block Heaters



Multi-purpose Dry Block Heaters are ideal for applications that require temperature stability. The close tube-to-block contact enables maximum heat retention, resulting in efficient heating. High-wattage, constant-temp. analog models are an economical option, while digital models offer exceptional temp. uniformity & stability for applications that require repeatable results. Units hold optional interchangeable modular blocks with over 40 options.

- Delivering Exceptional Temperature Stability and Uniformity
- Accurate and Fast Sample Heating with PID Microprocessor Temperature Control (Digital Models)
- Digital Models can be Calibrated to an External Temperature Device

Dry Block Heaters

- 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 0.2 mL micro-tubes to 50 mL 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 OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 73–75).

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 , 20% to 80% relative humidity, non-condensing.



Applications:

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

Ordering Information:

Units include a detachable, 3-wire cord and plug. Modular blocks are sold separately (see pages 73-75).

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	230 volt units: $\pm 0.2^\circ\text{C}$	230 volt units: $\pm 0.2^\circ\text{C}$	N/A	45 minutes
2 block				$\pm 0.1^\circ\text{C}$	50 minutes
4 block				$\pm 0.2^\circ\text{C}$	60 minutes
6 block				$\pm 0.3^\circ\text{C}$	65 minutes

Dry Block Heaters

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Advanced Dry Block Heaters

Block Capacity	Dimensions (L × W × H)	Model	Item Number
1	31.5 × 20.3 × 8.9 cm	HB1DG	30392061
2	39.1 × 20.3 × 8.9 cm	HB2DG	30392082
4	42.9 × 20.3 × 8.9 cm	HB4DG	30392089
6	53.1 × 20.3 × 8.9 cm	HB6DG	30392096

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, 45.7 cm 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	Item Number
Optional External Temperature Probe Kit	30400246



Dry Block Heaters

- Multi-purpose use
- Holds interchangeable modular blocks
- Analog controls

High wattage, constant-temperature Dry Block Heaters are economical, versatile and compact. 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. Each of the five models accept separate interchangeable modular blocks, accommodating various sample enclosures such as micro-tubes, centrifuge tubes, vials, microplates, and PCR strips or tubes. Each block has a thermometer well for measuring block temperature. Anodized aluminum modular blocks provide superior temperature stability and heat transfer. Heaters require OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 73-75).



Operating Features:

High wattage, constant-temperature Dry Block Heaters are economical, versatile and compact.

Microprocessor Control: PID temperature controller maintains precise temperature control. Samples are heated to temperature quickly and accurately.

Adjustment Knobs: Dual temperature control knobs with dial markings from 1 to 10 for low temperature and high temperature adjustments. Low range knob adjusts from ambient to 100°C and high range knob adjusts from 75°C to 150°C.

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, 20% to 80% relative humidity, non-condensing.

Applications:

Coagulation and RH Studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Modular blocks are sold separately (see pages 73-75).

Size	Temperature Range	Uniformity Within the Block @ 37°C	Temperature Stability @ 37°C	Uniformity Across Similar Blocks @ 37°C	Heat-Up Time to 100°C
1 block	Low Range: Ambient +5°C to 100°C High Range: 75°C to 150°C	230 volt units: ± 0.2°C	230 volt units: ± 1.5°C	N/A	45 minutes
2 block			230 volt units: ± 2.0°C	± 0.1°C	50 minutes
4 block			230 volt units: ± 2.5°C	± 0.2°C	70 minutes
6 block			± 0.3°C	75 minutes	

Dry Block Heaters

Dry Block Heaters

Standard Dry Block Heaters

Block Capacity	Dimensions (L × W × H)	Model	Item Number
1	31.5 × 20.3 × 8.9 cm	HB1AL	30392047
2	39.1 × 20.3 × 8.9 cm	HB2AL	30392054
4	42.9 × 20.3 × 8.9 cm	HB4AL	30392068
6	53.1 × 20.3 × 8.9 cm	HB6AL	30392075

2 Block Dry Block Heaters with Lid



Multi-purpose Dry Block Heaters are ideal for applications that require temperature stability. The close tube-to-block contact enables maximum heat retention, resulting in efficient heating. High-wattage, constant-temp. Digital models offer exceptional temp. uniformity & stability for applications that require repeatable results. Units hold optional interchangeable modular blocks with over 40 options.

- Delivering Exceptional Temperature Stability and Uniformity
- Heated Lid Model Reduces Condensation on Lids to Maintain Sample Integrity
- Calibrate to an External Temperature Device with Temperature Calibration Mode

Dry Block Heaters

2 Block Dry Block Heater with Lid

- Exceptional uniformity, stability, and regulation of temperature
- Heated lid reduces condensation on sample lids
- Optional external temperature probe

OHAUS Digital Dry Block Heater with Heated Lid are designed for applications that require repeatable results and superior temperature stability. These multi-purpose units are ideal for isothermal incubation, enzyme reactions, immunoassays, nucleic acid denaturation 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. Block heater accepts one microplate block or two separate interchangeable modular blocks, accommodating various tube sizes from 0.2 mL micro-tubes to test tubes or vials up to 85 mm in height. Each block has a thermometer well for measuring block temperature. Efficient heating due to close tube-and-block contact with a low density design for exceptional temperature uniformity. The heated lid helps to regulate the temperature and reduce the amount of condensation on sample lids. Heaters require OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 73-75).

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 environments from 18 to 33°C (64 to 91°F), 20% to 80% relative humidity, non-condensing.

Applications:

Isothermal incubation, enzyme reactions, immunoassays and nucleic acid denaturation and a wide variety of other laboratory procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. For optional temperature probe kits see page 68. Modular blocks sold separately (see pages 73-75).

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
2 block	Ambient $+5^{\circ}\text{C}$ to 100°C	230 volt units: $\pm 0.2^{\circ}\text{C}$	230 volt units: $\pm 0.2^{\circ}\text{C}$	$\pm 0.2^{\circ}\text{C}$	50 minutes

Block Capacity	Dimensions (L x W x H)	Model	Item Number
2	$39.1 \times 20.3 \times 17.8$ cm	HB2DGHL	30392103

Modular Blocks & Accessories

Modular blocks are constructed from a solid anodized aluminum block*. The close contact of tubes-to-block walls allow for maximum heat retention. Each block has a thermometer well for measuring block temperature.

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

Single block dimensions (L × W × H): 9.5 × 7.6 × 5.1 cm

Double block dimensions (L × W × H): 15.2 × 9.5 × 5.7 cm

Microcentrifuge Tube Blocks

Single block

Brand/Sample Type	No. of Wells	Well Dia.	Well Depth	Item Number
0.5 mL Tube	30	7.9 mm	27.6 mm	30400157
1.5 mL Tube	20	11.1 mm	39.1 mm	30400159
1.5 mL Eppendorf™ Tube	20	11.5 mm	36.9 mm	30400162
2 mL Eppendorf™ Tube	20	11.5 mm	38.1 mm	30400191
2 mL Corning™ Tube	20	10.9 mm	38.1 mm	30400192

Titer Plate Block

Double block

Fits 2/4/6 block Dry Block Heaters. Ideal for 96-well or 384-well titer plates. Recessed well for better stability, flat surface good for flat and round bottom plates.

Sample Type	Well Depth	Item Number
Titer Plate	13.5 mm	30400164

Conical-Bottom Centrifuge Tube Blocks

Single/Sample Type	No. of Wells	Well Dia.	Well Depth	Item Number
15 mL Tube	12	17.1 mm	44.5 mm	30400172
50 mL Tube	5	29.0 mm	47.6 mm	30400168

Standard Test Tube Blocks

Single/Sample Type	No. of Wells	Well Dia.	Well Depth	Item Number
6 mm Tube	30	8.3 mm	48.4 mm	30400158
10 mm Tube	24	10.7 mm	48.4 mm	30400151
12/13 mm Tube	20	13.9 mm	48.4 mm	30400152
12/13 mm Tube	16	13.9 mm	48.4 mm	30400165
15/16 mm Tube	12	17.5 mm	48.4 mm	30400153
17/18 mm Tube	12	19.1 mm	48.4 mm	30400195
20 mm Tube	8	21.0 mm	48.4 mm	30400154
25 mm Tube	6	26.2 mm	48.4 mm	30400155
35 mm Tube	4	35.0 mm	47.6 mm	30400167



* Block color subject to change

Modular Blocks* & Accessories

Combination Blocks

Single block

These blocks have been designed for variable sized samples.

Sample Type		No. of Wells	Well Dia.	Well Depth	Item Number
Test Tube Combination	6 mm	6	8.3 mm	48.4 mm	30400156
	12/13 mm	5	13.8 mm	48.4 mm	
	25 mm	3	26.2 mm	48.4 mm	
Centrifuge Tube Combination	1.5 mL	4	11.1 mm	39.1 mm	30400193
	15 mL	3	17.1 mm	44.5 mm	
	50 mL	2	29.0 mm	47.6 mm	
Micro-Tube Combination	0.5 mL	6	7.9 mm	27.6 mm	30400194
	1.5 mL	10	11.1 mm	39.1 mm	
	2 mL	5	11.5 mm	38.1 mm	

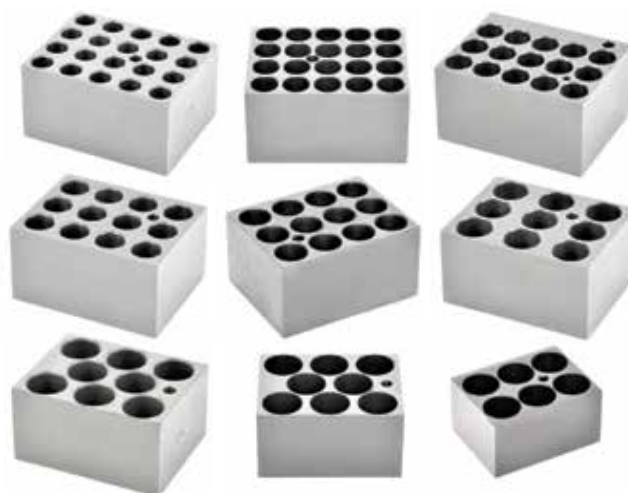


Vial Blocks

Single block

Designed for sample/serum and scintillation vials.

Sample Type	No. of Wells	Well Dia.	Well Depth	Item Number
12 mm Vial	20	12.7 mm	30 mm	30400182
15 mm Vial	20	15.8 mm	35 mm	30400183
16 mm Vial	15	16.4 mm	45 mm	30400190
17 mm Vial	12	17.8 mm	45 mm	30400184
19 mm Vial	12	19.7 mm	45 mm	30400185
21 mm Vial	9	21.7 mm	45 mm	30400186
23 mm Vial	8	23.8 mm	45 mm	30400187
25 mm Vial	8	25.8 mm	45 mm	30400188
28 mm Vial	6	28.8 mm	45 mm	30400189



PCR—Plate, Tube, Strip Blocks

Single and double block

Tapered tube wells for 0.2 mL tubes. Spaced for easy access and removal.

Sample Type	Block Size	No. of Wells	Well Dia.	Well Depth	Item Number
96-well PCR Plate	Double	96	6.4 mm	15.5 mm	30400171
10 × 8 Tube Strips	Single	80	6.4 mm	15.5 mm	30400169
Individual Tubes	Single	64	6.4 mm	20.2 mm	30400170



Cuvette Block

Single block

Two parallel slots fit 6 cuvettes in each slot, side-by-side.

Sample Type	No. of Wells	Well Depth	Item Number
(12) 12.5 mm Cuvettes	2	25.4 mm	30400161



* Block color subject to change

Accessories

Modular Blocks* & Accessories

Solid Blocks

Single and double block

For use as a low-temperature hotplate, slide drying, or for custom drilling to make a custom block.

Block Size	Dimensions (L × W × H)	Item Number
Single	9.5 × 7.6 × 5.1 cm	30400160
Double	15.2 × 9.5 × 5.7 cm	30400166



Stainless Steel Sand Baths

Ideal for irregular vessels. Stainless steel construction for superior corrosion resistance. Designed to hold sand, stainless steel shot or non-volatile fluids.

For Unit	Dimensions (L × W × H)	Item Number
1 Block Dry Block Heater	9.5 × 7.6 × 6.4 cm	30400173
2 Block Dry Block Heater	9.5 × 14.9 × 6.4 cm	30400174
4 Block Dry Block Heater	14.7 × 19.1 × 6.4 cm	30400175
6 Block Dry Block Heater	14.7 × 28.7 × 6.4 cm	30400176

Accessories	Item Number
Sand, 0.45 kg	30400177
Stainless Steel Shot, 0.45 kg	30400178



Low Temperature Covers

Plexiglass cover reduces air flow for additional temperature stability in low-temperature applications. Two sides are open 6.4 mm.

Block Size	Dimensions (L × W × H)	Item Number
2 Block Cover	16.5 × 16.5 × 4.1 cm	30400179
4 Block Cover	21.6 × 21.6 × 4.1 cm	30400180
6 Block Cover	31.8 × 21.6 × 4.1 cm	30400181



* Block color subject to change