

## Thermoshakers



### PCMT (VWR 89498-106) thermoshaker with cooling

**2**  
year warranty

- VERSATILE** › A choice of 5 interchangeable blocks for microtubes and PCR plates
- EFFICIENT** › Fast heat-up and cooling time
- PRECISE** › Excellent temperature stability  $\pm 0.1^{\circ}\text{C}$
- CONVENIENT** › Digital timer with alarm, LCD display, compact, simple to set up and use
- GREAT VALUE** › Excellent specification for the price
- FLEXIBLE** › 3 in 1 thermoshaker, shaker and thermostat



### Specifications

	<p><b>PCMT</b></p> <p>4 kg l: 230 mm w: 205 mm h: 130 mm</p> 
<b>VWR catalog number</b>	<b>89498-106</b>
Temperature setting range	4 to $100^{\circ}\text{C}$
Temperature control range	ambient $-15^{\circ}\text{C}$ to $+100^{\circ}\text{C}$
Temperature uniformity over the block	@ $4^{\circ}\text{C} \pm 0.6^{\circ}\text{C}$ / @ $37^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ / @ $100^{\circ}\text{C} \pm 0.3^{\circ}\text{C}$
Shaking speed	250 to 1400 rpm
Display	LCD screen, simple push buttons for speed, temperature and time
Average heat-up speed (HC15 block)	$5^{\circ}\text{C} / \text{min}$ from 25 to $100^{\circ}\text{C}$
Average cooling speed (HC15 block)	$5^{\circ}\text{C} / \text{min}$ from 100 to $25^{\circ}\text{C}$ (~15 min) $1.8^{\circ}\text{C} / \text{min}$ from 25 to $4^{\circ}\text{C}$ (~8 min)
External power supply	100-240V

### Accessories

**VWR 89498-108**  
Interchangeable block for 20 x 0.5 ml and 12 x 1.5 ml microtubes.



**VWR 89498-112**  
Interchangeable block for 24 x 1.5 ml microtubes.



**VWR 89498-110**  
Interchangeable block for 24 x 2.0 ml microtubes.



**VWR 89498-114**  
Interchangeable block for 20 x 0.2 ml microtubes plus 12 x 1.5 ml microtubes.



**VWR 89498-116**  
Interchangeable block for 96-well unskirted PCR plates (0.2 ml).



### Applications

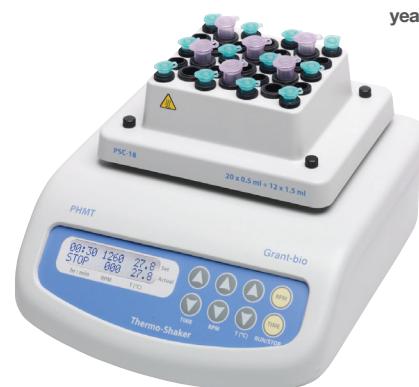
Molecular biology - extraction of DNA, RNA and further sample preparation. Biochemical studies of enzymatic reactions and processes. Extraction of metabolites from cellular material.

## PHMT thermoshaker

2

year warranty

- VERSATILE** › A choice of 5 interchangeable blocks for microtubes and PCR plates
- EFFICIENT** › Fast heat-up
- PRECISE** › Excellent temperature stability  $\pm 0.1^{\circ}\text{C}$
- CONVENIENT** › Digital timer with alarm, LCD display, compact, simple to set up and use
- GREAT VALUE** › Excellent specification for the price
- FLEXIBLE** › 3 in 1 thermoshaker, shaker, incubator



## Specifications

	<p><b>PHMT-PSC18</b></p> <p>4 kg l: 230 mm w: 205 mm h: 130 mm</p>	<p><b>PHMT-PSC24N</b></p> <p>4 kg l: 230 mm w: 205 mm h: 130 mm</p>	<p><b>PHMT-PSC24</b></p> <p>4 kg l: 230 mm w: 205 mm h: 130 mm</p>	<p><b>PHMT-PSC32</b></p> <p>4 kg l: 230 mm w: 205 mm h: 130 mm</p>	<p><b>PHMT-PSC96</b></p> <p>4 kg l: 230 mm w: 205 mm h: 130 mm</p>
	<b>97025-570</b>	<b>89498-096</b>	<b>89498-094</b>	<b>89402-938</b>	<b>89402-940</b>
Capacity	Includes PSC18 block for 20 x 0.5 ml and 12 x 1.5 ml microtubes				
Temperature setting range	25 to 100°C				
Temperature control range	ambient +5°C to 100°C				
Temperature uniformity over the block	@ 37°C $\pm 0.1^{\circ}\text{C}$ / @ 60°C $\pm 0.2^{\circ}\text{C}$ / @ 100°C $\pm 0.2^{\circ}\text{C}$				
Shaking speed	250 to 1400 rpm				
Display	LCD screen, simple push buttons for speed, temperature and time				
Average heat-up speed	4°C / min from ambient to 100°C				
Maximum noise	54.7 dBA				
External power supply	100-240V				

Note: unit and blocks are available separately if required, see website for more details

## Applications

Life-science - molecular biology, extraction of DNA, RNA and further sample preparation, biochemical studies of enzymatic reactions and processes, extraction of metabolites from cellular material, incubation, agitation, digestion of samples/standards for peptide mapping

## PHMP thermoshaker for 2 or 4 microplates




# 2

year warranty

- PRECISE** › Patented dual heating for excellent temperature uniformity across the platform
- EFFICIENT** › Fast heat-up
- CONVENIENT** › Continuous or timed operation, with alarm buzzer and automatic switch-off facility
- VERSATILE** › 3 in 1 - microplate thermoshaker, incubator without shaking, shaker for cold room or ambient temperatures
- SIMPLE** › Easy to operate



### Specifications

	<b>PHMP</b> 7 kg l: 250 mm w: 265 mm h: 125 mm 	<b>PHMP-4</b> 9 kg l: 390 mm w: 380 mm h: 140 mm 
	<b>97025-552</b>	<b>97025-554</b>
VWR catalog number		
Capacity	2 microplates	4 microplates
Temperature setting range	25 to 60°C	
Temperature control range	ambient +5°C to 60°C	
Temperature uniformity	@ 37°C ±0.25°C	
Temperature stability	±0.1°C	
Shaking speed	250 to 1200 rpm	
Timer	1 min to 96 hrs with automatic switch-off	
Display	LCD screen, simple push buttons for speed, temperature and time	
Average heat-up speed	12 min from 25 to 37°C 35 mins from 37 to 60°C	
Maximum height of microplates	18 mm	
External power supply	100-240V	

### Applications

Cytochemistry - for in situ reactions. Biochemistry - for enzyme and protein analysis, incubation for biomarker and protein binding assays. Immunochemistry - for immunofermentative reaction, ELISA incubation. Molecular biology (for microbial cell cultivation and DNA analysis)

## FTA-1 (VWR 89402-922) aspirator


**2**

year warranty

- CONVENIENT** › Small, compact and easy to use, personal tool for independent use away from in-line lab vacuum supply.  
Fits a standard 200 µl tip
- VERSATILE** › Tube holder accommodates two tubes or optional 8 channel adapter
- FLEXIBLE** › Slim power cord allows unit to be used inside workstations and incubators
- EFFICIENT** › 99.9% efficient hydrophobic microbiological filter eliminates risk of contamination from trap flask



### Specifications

	<p><b>FTA-1</b></p> <p>1.7 kg l: 210 mm w: 160 mm h: 340 mm</p> 
VWR catalog number	89402-922
Vacuum	-500 mbar
Trap flask volume	1L
External power supply	100-240V

### Accessories (full range available on website)

#### MA-8

VWR 89402-924

8 channel adaptor kit, includes tube adaptor, 8 channel aspiration tip and 8 channel tip holder.



#### MA-8T

VWR 89402-926

8 channel aspiration tip.

### Applications

- Aspiration/removal of alcohol/buffer remaining quantities from microtest tube walls during DNA/RNA purification and other macromolecule reprecipitation techniques.
- For routine operations of cells washing from culture medium and resuspension in buffer.