

## Grant Block Heater PHMT Microtube Thermoshaker



### Product Overview

The Grant-bio PHMT is a compact benchtop shaking incubator, ideal for all applications requiring heating and shaking in microcentrifuge tubes, within the temperature range of ambient + 5 to 100°C. Combining the mixing operation with the incubation phase produces multiple benefits: reaction process times are reduced; the operator's workload is reduced; the efficiency of many procedures, for example the transformation of bacterial cells, is increased.

PHMT provides ideal heat conditions for your samples. The ingenious block construction, combined with the powerful heating, produces very rapid heating for swift change of application, increased flexibility and increased throughput.

A choice of alternative blocks is available, to meet the needs of many standard laboratory procedures:

- 20 x 1.5ml microtubes
- 20 x 0.5ml plus 12 x 1.5ml microtubes

Comprising three instruments in one, the PHMT is highly versatile in application:

- microtube thermoshaker
- compact benchtop incubator, without shaking
- microtube shaker without temperature control, also suitable for coldroom operation

The Grant-bio PHMT microtube thermoshaker is compact, with a low profile and small footprint.

The quiet motor produces regulated and reproducible rotation throughout the speed range, with uniform amplitude throughout the shaking platform. Shaking may be configured for continuous or timed operation.

The PHMT is extremely easy to operate, with very straightforward set-up of temperature, speed and time, using the two line set-up and status display, which clearly indicates both set and actual values for each of the three parameters.

- variable speed, variable temperature microtube thermoshaker
- variable speed: 250 to 1400 rpm for gentle to vigorous mixing
- 2mm shaking orbit for effective mixing
- soft start
- temperature range: ambient + 5 to 100°C
- timed shaking operation: 1 minute to 96 hours with buzzer and automatic switch-off
- low voltage power supply enables safe cold room operation
- operating ambient temperature range 4°C to 45°C, for use in a cold room or incubator

## Product Specifications

			<b>PHMT</b>
<b>Temperature range</b>		°C	ambient +5 to 100
<b>Stability</b>	@37°C	°C	0.1
<b>Uniformity</b>	@37°C	°C	0.1
<b>Shaking speed</b>		rpm	250 to 1400
<b>Shaking speed resolution</b>		rpm	10
<b>Orbit</b>		mm	2
<b>Timer</b>			1 min to 96 hrs
<b>Timer setting resolution</b>		mins	1
<b>Heat-up rate</b>	RT to 100°C	°C/min	>6
<b>Overall dimensions</b>	w/d/h	mm	205/230/130
<b>Ambient temperature range</b>		°C	4 to 45
<b>Input voltage</b>		V	12
<b>Input type</b>			dc
<b>Input current</b>		A	0.5

## Product Applications

Suitable for applications in many fields, including;

- immunochemistry
- biochemistry – for enzyme analysis

## Product Accessories

One of the following interchangeable microtube blocks is required:

- PSC-20 for 20 x 1.5ml microtubes
- PSC-18 for 20 x 0.5ml plus 12 x 1.5ml microtubes