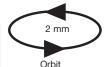
Thermoshaker PHMP, PHMP-100 and PHMP-4 for microplates

Excellent temperature uniformity across the platform/microplate (patented bi-directional heating of microplates) combined with variable speed and variable temperature produces the ideal thermoshaker for microplate incubations.

Can be used with all types of standard depth microplates and offers three devices in one for maximum versatility and efficiency:

- A microplate thermoshaker
- A compact benchtop incubator without shaking
- A microplate shaker in cold or ambient temperatures
 - Temperature setting range: +25°C to 100°C
 - Stability ±0.1°C, uniformity ±0.2°C due to the bi-directional heating system (platform and lid)
 - Shaking speed: 250 to 1200 rpm
 - Rapid heat-up
 - Continuous or timed operation, with alarm buzzer and automatic switch-off facility
 - Choice of three models with capacity for two or four microplates
 - Patented dual heating of microplates







Model shown PHMP thermoshaker for two microplates

The **PHMP-4** has the same functionality as the PHMP but can accommodate four microplates



The powerful, reliable motor and sturdy construction combine to provide years of consistent operation

Low voltage cord easily fits through door gaskets, allowing use in incubators, refrigerators and workstations

The heated lid completely covers the heating platform to provide bi-directional heating (patented) and a controlled microenvironment. This produces excellent temperature stability and uniformity, whilst preventing condensation

Display of both set and actual temperature and shaking speed

Very easy to operate, with simple set-up of temperature, shaking speed and time via push buttons and the 2-line LCD status display

Soft start/stop protects samples



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)

Thermoshakers – models and specifications				
		2-plate thermoshaker	2-plate thermoshaker	4-plate thermoshaker
		PHMP	PHMP-100	PHMP-4
		h: 125mm d: 250mm w: 265mm weight: 6.1kg	h: 125mm d: 260mm w: 270mm weight: 5.9kg	h: 140mm d: 390mm w: 380mm weight: 8.8kg
Temperature setting range	°C	+25 to 60	+25 to 100	+25 to 60
Temperature control range	°C	ambient +5 to 60	ambient +5 to 100	ambient +5 to 60
Temperature uniformity @ 37°C	±°C	0.25		
Temperature stability	±°C	0.1		
Temperature display		2 line x 16 character LCD		
Average heat up speed	°C	12 minutes from 25 to 37 35 minutes from 25 to 60 60 minutes from 25 to 100 (PHMP-100 only)		
Capacity		2 microplates	2 microplates	4 microplates
Shaking speed	rpm	250 to 1200		
Speed setting resolution	rpm	increment 10		
Orbit diameter	mm	2		
Timer (with auto-off and audible alarm)		1 min to 96 hrs (1 min increment)		
Max. height of microplates	mm	18		
External power supply		Input AC 120-230V, 50/60Hz Output DC 12V		
Input voltage	V dc	12		
Power consumption	W	40 (3.3A)	60 (5A)	50 (4.15A)



Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.