



### Shaker, microplate, heated, PHMP

#### Grant bio

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Applications include; molecular biology - for bacterial cultivation and DNA analysis; cytochemistry - for *in situ* reactions; biochemistry - for enzyme and protein analysis; molecular chemistry - for matrix analysis; immunochemistry; molecular diagnostics; ELISAs.

#### Features

- Variable speed and variable temperature
- Variable speed: 300rpm to 3,000rpm
- 2mm shaking orbit for effective mixing
- Soft start
- Temperature range: ambient +5°C to 60°C
- Timed operation: 1min to 96hr with buzzer and automatic switch-off
- Accommodates two standard depth 96 or 384 well plates
- 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
- Low energy consumption

The PHMP microplate thermoshaker is for use with all types of standard depth 96 and 384 well plate.

Enhanced by a heated lid, the PHMP provides the optimum heating environment for your samples, combined with powerful orbital shaking to produce the maximum yield from your incubations.

Comprising three instruments in one, the PHMP is highly versatile in application: microplate thermoshaker; compact bench top incubator, without shaking; and microplate shaker, without temperature control, for operation in a coldroom.

Good temperature transfer to samples within the wells of microplates is inherently difficult to achieve, as the point of contact between the microplate well and a flat heating plate is very small. The solution lies in the heated lid, with considerable advantages resulting from bi-directional heating: excellent temperature stability; excellent temperature uniformity across the plates for optimum consistency of results, independent of room temperature, and condensation is prevented, which is crucial when handling micro volume samples, particularly at high temperatures.

The PHMP is extremely easy to operate, with very simple set-up of temperature, speed and time, using the two line set up and status display.

Catalogue No	Alt. No	Description
<b>GBI-700-010U</b>	PHMP	Microplate thermoshaker



### Shaker, microplate, PMS-1000

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Suitable for mixing, incubation and cultivation of biological and chemical components in many fields, including microbiology, cell and molecular biology, pharmacology, immunology, medicine, biotechnology.

Specific applications include: Immunoassays; HTS applications; colouration tests; binding of template DNA to silica-coated magnetic beads.

- Ensures the correct optical density in each of the wells
- Achieves maximum yield and quality in the production of plasmid DNA

The PMS-1000 microplate shaker provides reliable, regulated shaking for two or four microplates. With a speed range of 150rpm to 1,000rpm, it can be adjusted to suit the application, gentle shaking to ensure that the well contents are not ejected, or more vigorous agitation for effective aeration across the small surface area of each of the wells. Speed setting is simple, using a graduated dial. Operation may be continuous or timed, with the integral electronic timer ensuring an accurate count-down for repeatability of time sensitive incubations. Timer setting is straightforward, and the LED status display clearly indicates time remaining. Simple screw attachments allow quick and easy fitting of any standard depth 96 well or 384 well plates, holding the plates securely in place. It is robust and reliable, designed for long term operation.

Catalogue No	Alt. No	Description
<b>GBI-750-010Y</b>	PMS-1000	Microplate shaker

#### Accessory

Catalogue No	Alt. No	Description
<b>GBI-750-505E</b>	MPP-4	Platform for four microplates

#### Technical Specification - General

Shaking speed, rpm	150 to 1,000
Orbit diameter, mm	2
Dimensions, external [w x d x h], mm	175 x 185 x 90
Capacity	2 microplates standard, 4 microplates with optional platform MPP-4
Timer	1 min to 24hr in 10s increments
Electrical supply	220-240V 50/60Hz via 12V d.c., 1.2A mains adapter

Please contact Fisher Scientific to discuss your EU compatible product requirements.