

Grant-Bio PHMP Thermoshaker for Microplates

Three devices in one:

- A thermoshaker;
- A compact benchtop incubator without shaking;
- A microplate shaker in cold or ambient temperatures.

- For 96 or 384 well microplates
- With heated lid for optimised heating
- Speed: 250 to 1200 rpm / 2 mm orbit
- Adjustable temperature up to 60 °C
- Soft start of shaking
- Timer from 1 min. to 96 h with buzzer and automatic switch-off
- For 2 or 4 microplates
- Low energy consumption
- Can be used in a cold room or incubator

Temp. range (°C)	amb +5 to 60
Stability (°C)	+/- 0.1
Uniformity (°C)	+/- 0.2
Speed (rpm)	250 to 1200
Speed resolution	10 rpm
Orbit (mm)	2
Timer	1 min to 96 h
Timer resolution	1 mn
Ambient t° (°C)	4 to 40
Voltage input (V)	12
Power input	CD
Amperage input (A)	0.5

- Applications: molecular biology: for microbial culture and DNA analysis, cytochemistry (for in situ reactions), molecular chemistry (for matrix analysis), immunochemistry, molecular diagnostics, Elisa tests



Cat. No.	Microplate capacity	Dimensions (mm)	€
144211	2	265 x 250 x 125	N/A -
144532	4	380 x 390 x 140	N/A -

Multi-therm shaker with heating and cooling for microplates

- 2 models: Heat/Cool or Heat only
- Temperature control from 0 to 100 °C
- Supplied without block, interchangeable blocks for tubes from 0.2 to 50 ml
- Modest footprint
- Applications: reverse transcription, gentle thawing of biological samples, DNA or protein denaturation, lipid extractions, yeast or bacterial cultures, enzymatic digestions



Temp. Range (Cat. No. 060936)	Ambient -20 °C to 100 °C
Temp. Range (Cat. No. 060937)	Ambient + 5 °C to 100 °C
Temperature Increment	5 °C / minute
Temperature decrease	2.5 °C/minute (Cat. No.060936 only)
Temp. Accuracy	+/- 1.0 °C
Shaking speed	200 to 1500 rpm
Orbit movement	Horizontal Circular 2 mm
Dimensions / Weight	210 x 290 x 210 mm / 8 kg
Power supply	230 V, 50-60 Hz

Cat. No.	Description	€
060936	Multi-therm shaker with heating + cooling for microplates	N/A -
060937	Multi-therm shaker with heating for microplates	N/A -

Blocks

Cat. No.	Capacity	€
060938	96 tubes 0.2 ml or one PCR plate	N/A -
060939	54 tubes 0.5 ml	N/A -
060940	15 tubes 0.5 ml and 20 tubes 1.5 ml	N/A -
060941	35 tubes 1.5 ml	N/A -
060942	35 tubes 2.0 ml	N/A -
060943	24 tubes 12 mm (200 to 1200 rpm / ambient - 10 ° to 100 °C)	N/A -
060944	12 tubes 15 ml (200 to 750 rpm / ambient - 10 ° to 100 °C)	N/A -
060945	6 tubes 50 ml (200 to 750 rpm / ambient - 10 ° to 100 °C)	1099.36 -
062538	1 microplate	N/A -
062539	1 Deepwell plate	N/A -
062540	24 tubes 2 ml HPLC flask type 12 x 32 mm	N/A -
062541	Liquids or beads (block size 101 x 66 x 25 mm)	N/A -

