granto



Thermoshakers

Thermoshaker with cooling PCMT for microplates and microtubes

Thermoshaker
PHMT for microplates and microtubes

Thermoshaker for microplates
PHMP and PHMP-4 for two or four
PHMP-100 microplates

Thermoshaker for deep well plates
TS-DW for one deep well plate

Thermoshakers

A range of compact, efficient and highly versatile thermoshakers, with excellent temperature uniformity. Ideal for applications requiring heating/cooling and shaking in microplates and microtubes. Suitable for use in cold rooms and incubators (operating temperature range +4°C to 40°C).

By combining the mixing operation with heating/cooling, reaction process times and operator workload are reduced, efficiency and throughout are increased.

Thermoshaker with cooling - for microtubes and PCR plates - PCMT

Thermoshaker - for microtubes and PCR plates - PHMT

Thermoshaker - for microplates - PHMP

Thermoshaker - for deep well plates - TS-DW







PCMT



TS-DW



PHMT



PHMP



PHMP-100



PHMP-4



PCMT

Thermoshaker with cooling

Variable speed and temperature, heating and cooling thermoshaker with a choice of blocks for microtubes and PCR plates.

A multi-use 3 in 1 device with simultaneous or independent heating/cooling and mixing functions.

- Microtube and PCR plate thermoshaker
- Compact benchtop incubator
- Microtube and PCR plate shaker

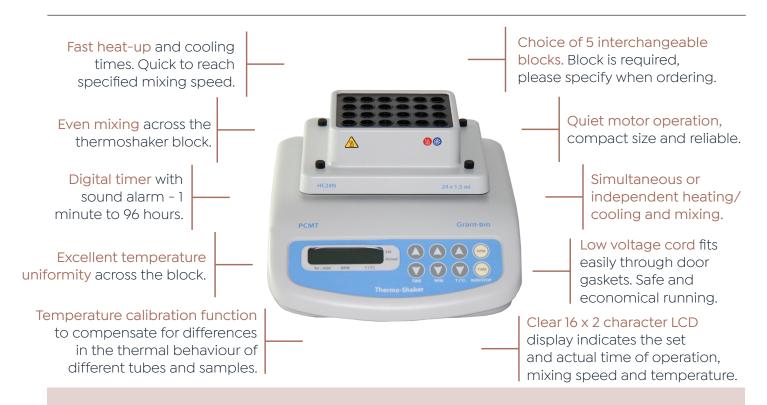
Ambient temperature setting range +4°C to 100°C

Temperature control range ambient -15°C to 100°C

Stability: ±0.01°C

Shaking speed: 250 to 1400rpm

Fast start with three seconds to maximum shaking speed

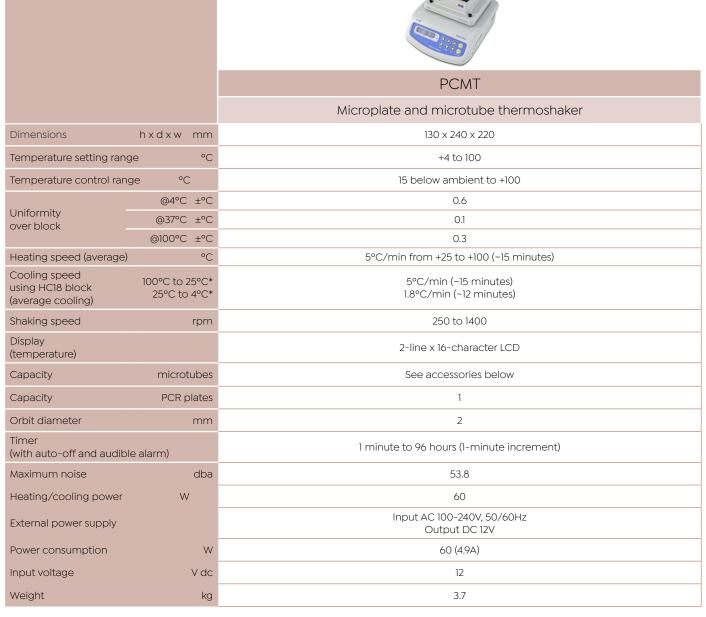


Applications

• Life-science - genetic analyses, 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

PCMT

Technical specifications



PCMT

Options and accessories

HC18	Interchangeable block for: 20 x 0.5ml microtubes plus 12 x 1.5ml microtubes
HC24N	Interchangeable block for: 24 x 1.5ml microtubes
HC24	Interchangeable block for: 24 x 2.0ml microtubes
HC32	Interchangeable block for: 20 x 0.2ml microtubes plus 12 x 1.5ml microtubes
HC96	Interchangeable block for: 96-well microplates (0.2ml)

PHMT

Thermoshaker for microtubes and PCR plates

Variable speed and temperature thermoshaker combining three devices in one for maximum versatility and efficiency.

- · Microtube and microplate thermoshaker
- Compact benchtop incubator
- · Microtube and microplate shaker in cold or ambient temperatures

Temperature setting range +25°C to 100°C

Temperature control range +5°C above ambient to 100°C

Shaking speed: 250 to 1400rpm

Capacity for up to 24 or up to 32 mixed sized microtubes or PCR 96-well plate

Fast start with three seconds to maximum shaking speed

Mixing and incubation phases are combined reducing reactions process times

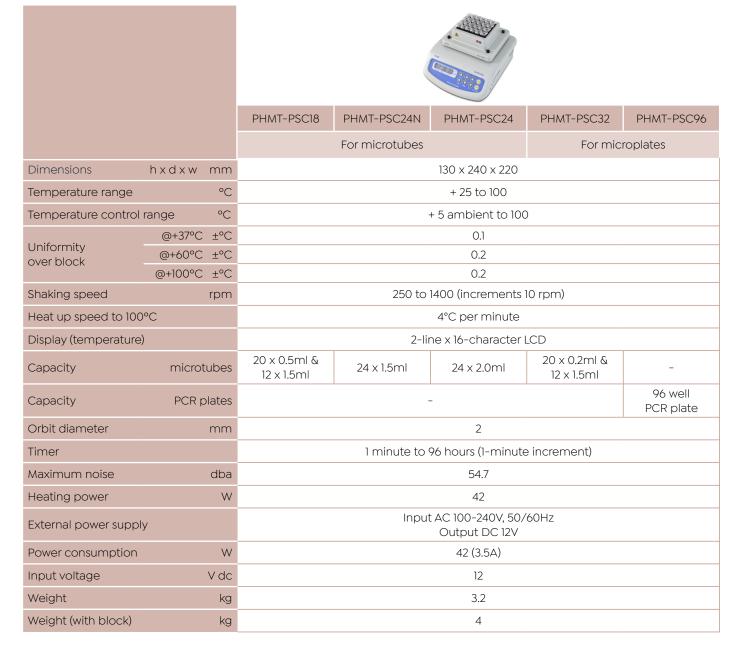


Applications

• Life-science - genetic analyses, 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

PHMT

Technical specifications



PCMT

Options and accessories

PSC18	Additional/spare block: 20 x 0.5ml microtubes plus 12 x 1.5ml microtubes
PSC24N	Additional/spare block: 24 x 1.5ml microtubes
PSC24	Additional/spare block: 24 x 2.0ml microtubes
PSC32	Additional/spare block: 20 x 0.2ml microtubes plus 12 x 1.5ml microtubes
PSC96	Additional/spare block: 96-well PCR plate.

TS-DW

Deep well plate thermoshaker

A thermoshaker designed for shaking and heating of deep well plates. Operates as three independent devices.

- Incubator
- Plate shaker
- Thermoshaker

Temperature setting range +25°C to 100°C

Temperature control range ambient +5°C to 100°C

Shaking speed: 250 to 1400rpm

Profiled platform to fit perfectly with your block, allowing maximum heat transfer

Space saving

Mixing and incubation are combined to reduce reaction process times



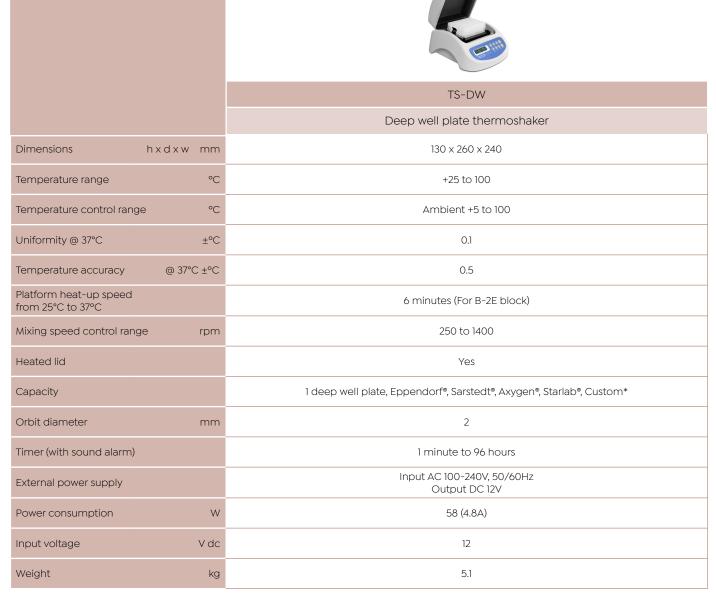
^{*} Note: Must be ordered separately. Custom platform may be available with a sample.

Applications

• Life-science applications, molecular biology, cell biology lab, cell lysis, DNA isolation and purification, sample preparation for PCR, pellet re-suspension, or any other method where you have many samples that need mixing in deep well plates.

TS-DW

Technical specifications



^{*} Note: Must be ordered separately. Custom platform may be available with a sample.

TS-DW

Options and accessories

B-2A	Block for one deep well plate Axygen® 96/2200 µ l
B-2E	Block for one deep-well plate Eppendorf® 96/1000 µ l
B-2S	Block for one deep well plate Sarstedt® Megablock 96/2200 µ l
B-2SL	Block for one deep well plate Starlab® 96/1200 µ l

PHMP series

Thermoshaker for microplates

Excellent temperature uniformity across the platform/microplate. Combined with variable speed and variable temperature produces the ideal thermoshaker for multi-use, 1-4 microplate incubations.

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

- Microplate thermoshaker
- · Compact benchtop incubator without shaking
- Microplate shaker in cold or ambient temperatures

The heated lid completely covers the heating platform to provide bi-directional heating and a controlled micro-environment. This produces great temperature stability and uniformity, whilst preventing condensation.

Display of both set and actual temperature and shaking speed.

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



Product highlights

- Temperature setting range +25°C to 100°C
- Stability: ±0.1°C
- Bi-directional heating system (platform and lid
- Shaking speed: 250 to 1200rpm
- Rapid heat-up speed
- Continuous or timed operation, with alarm buzzer and automatic switch-off facility
- Choice of three models with capacity for two or four microplates
- Temperature calibration function



Applications

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

PHMP series

Technical specifications







		PRMP-100	
	PHMP	PHMP-100	PHMP-4
	2-plate thermoshaker	2-plate thermoshaker	4-plate thermoshaker
Dimensions h x d x w mm	125 × 260 × 270		140 x 390 x 380
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
Stability ±°C	0.1		
Uniformity @+37°C ±°C	0.25	0.2	0.25
Display	2-line x 16-character LCD		
Shaking speed rpm	250 to 1200		
Speed setting resolution rpm	Increment 10		
Average heat up °C	12 minutes from 25 to 37 35 minutes from 37 to 60 60 minutes from 25 to 100 (PHMP-100 ONLY)		
Maximum height of mm microplates	18		
Capacity	2 microplates		4 microplates
Orbit diameter mm	2		
Timer (with auto-off and audible alarm)	1 minute to 96 hours / non-stop (1-minute increment)		
External power supply	Input AC 100-240V, 50/60Hz Output DC 12V		
Power consumption W	40 (3.3A)	60 (5A)	50 (4.15A)
Input voltage V dc	12		
Weight kg	6.1	5.9	8.8

Contact us today

Grant Instruments (Cambridge) Ltd

w. www.grantinstruments.com

29 Station Road, Shepreth,

t. +44 (0) 1763 260 811 Cambridgeshire, SG8 6GB

- e. salesdesk@grantinstruments.com in grant-instruments-cambridge-ltd
- GrantInstruments