

Thermo Shaker

MS-100/MSC-100 thermo shaker

Designed for simultaneous heating, cooling and mixing of small samples, MS-100 and MSC-100 can be supplied with interchangeable blocks for microtubes. Mixing, heating and cooling modes can be used either simultaneously or independently. The main body of the Mixing Block can be used with different kinds of blocks



Features:

1. LCD display. It is easy to set up and use
2. Accurately control and display time, temperature and speed
3. Over-heating protection device ensures safety & reliability
4. Low noise working even under the speed of 1,500rpm
5. Conforms to CE safety standard
6. Peltier design of MSC-100 provides thermal control in a compact unit

Specification:

Model	MS-100	MSC-100
Temperature Control Range	RT+5°C~100°C	0°C~100°C if Ambient temp.≤20°C 4°C~100°C if Ambient temp.≤25°C 10°C~100°C if Ambient temp.≤30°C
Temperature Setting Range	5°C~100°C	0°C~100°C
Timer	1min~99h59min	1min~99h59min
Temp. Control Accuracy	±0.5°C	±0.5°C
Display Accuracy	±0.1°C	±0.1°C
Mixing Speed	200~1500rpm	200~1500rpm
Heating Time(25 to 100°C)	≤15min	≤15min
Cooling Time	----	≤30min (from RT. to RT.-20°C) ≤15min (from 100°C to 20°C)
Mixing Orbit	2mm	2mm
Dimension(mm)	300 x 220 x 170	300 x 220 x 170
Net Weight	7kg	8.5kg

Code	Description
AS-02010-00	MS-100 AC220V or AC120V, 50/60Hz, 150W
AS-02020-00	MSC-100 AC220V or AC120V, 50/60Hz, 250W

Block for MS-100 / MSC-100

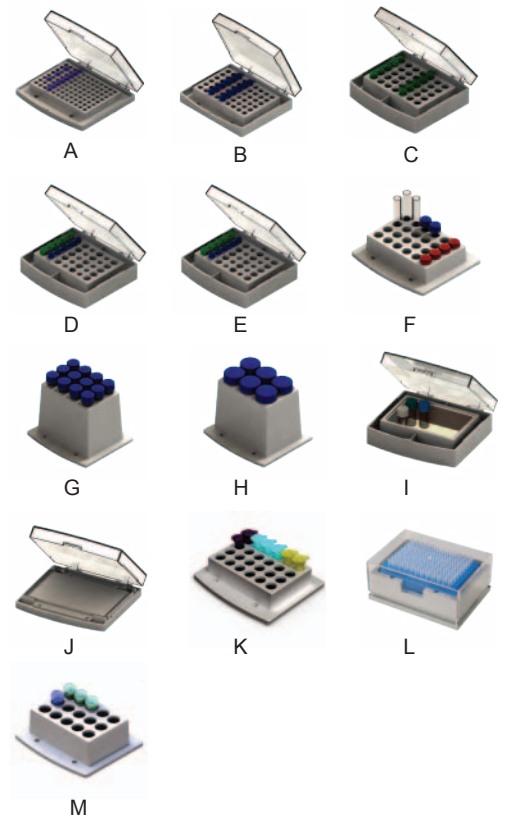
Code	Type	Description	Max.Speed
AS-01051-01	A	96x0.2ml	1500rpm
AS-01051-02	B	54x0.5ml	1500rpm
AS-01051-03	C	35x1.5ml	1500rpm
AS-01051-04	D	35x2.0ml	1500rpm
AS-01051-05	E	15x0.5ml+20x1.5ml	1500rpm
AS-01051-06	F	24xDiameter≤Φ12mm tubes	1200rpm
AS-01051-07	G	12x15ml Falcon	750rpm
AS-01051-08	H	6x50ml Falcon	750rpm
AS-01051-09	I	103x67x30mm Bath Block	1500rpm
AS-01051-10	J	96x0.2ml Microplate	1500rpm
AS-01051-11	K	24x5ml tubes	1200rpm
AS-01051-12	L	96-Deep well plate	800rpm
AS-01051-13	M	15x5ml Eppendorf tubes	1200rpm



MSC-100



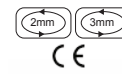
MS-100



TMS-200/TMS-300 Turbo Thermo Shaker Incubator

■ Features:

1. Thermo shaker for microplates, tubes, and glass vials
2. Fast shaking and mixing up to 3,000rpm
3. Perfectly controlled 3-dimensional mixing prevents spilling and lid wetting
4. 2 programmable soft keys, integrated vortex and short mix functions
5. Very small, light, efficient and quiet
6. Adapter plates:
 - Microplates: - 96-, 384-, 1536-well microplates/deepwell plates/PCR plates
 - Holder: - 0.2ml PCR tubes holder, 0.5ml tubes holder, 1.5/2.0ml tubes holder
- 15ml Micro tubes holder, 50ml Micro tubes holder
 - Block: -10 types Aluminum blocks for user choosing



■ Specification:

Model	TMS-200	TMS-300
Mixing Frequency	300~3000rpm	300~1700rpm
Mixing Orbit	2mm	3mm
Speed Setting Resolution	10rpm increment	10rpm increment
Mixing Accuracy	±25rpm	±25rpm
Temp. Display Accuracy	±0.1°C	±0.1°C
Mixing Speed	200~1500rpm	200~1500rpm
Heating Time(25 to 100°C)	≤12min	≤12min
Temperature Accuracy	±0.25°C at 37°C ±0.5°C at 95°C	±0.25°C at 37°C ±0.5°C at 95°C
Temperature Control Range	RT+5°C~100°C	RT+5°C~100°C
Time Setting	1min~99h59min	1min~99h59min
Time Setting Resolution	1min	1min
Short-Mix Function	Yes	Yes
Continuous Working	Yes	Yes
Programs Stored	2	2
Individual Program capacity	3 steps	3 steps
Operation Voltage	24V DC 150W	24V DC 150W
Power Supply	AC100~240V	AC100~240V
Dimension(mm)	230 x170 x 165	230 x170 x 165
Net Weight	5.5kg	5.5kg

■ Block for TMS-200 / TMS-300

Code	Type	Description
AS-02051-01	A-200	96x0.2ml
AS-02051-02	B-200	54x0.5ml
AS-02051-03	C-200	35x1.5ml
AS-02051-04	D-200	35x2.0ml
AS-02051-05	E-200	15x1.5ml+20x0.5ml
AS-02051-06	F-200	24xDiameter≤Φ12mm tubes
AS-02051-07	G-200	32x0.2ml+25x1.5ml
AS-02051-08	H-200	32x0.2ml+10x0.5ml+15x1.5ml
AS-02051-09	I-200	103x67x30mm Bath Block
AS-02051-10	J-200	96x0.2ml Microplate
AS-02031-01	MIX-A	0.2ml PCR Tube Holder
AS-02031-02	MIX-B	0.5ml Tube Holder
AS-02031-03	MIX-C	1.5/2.0ml Tube Holder
AS-02031-04	MIX-D	8 x 15ml Tube Holder
AS-02031-05	MIX-E	3 x 50ml Tube Holder

Code	Description
AS-02050-00	TMS-200 AC100~240V, 50/60Hz, 150W
AS-02060-00	TMS-300 AC100~240V, 50/60Hz, 150W



Tube Holders



Blocks

Thermo Shaker

MB100-2A/MB100-4A Thermo Shaker for Microplates MK100-2A/MK100-4A Incubator for Microplates

The MB100-2A/MB100-4A and the MK100-2A/MK100-4A are designed for shaking 1-4 standard 96-well plates in the thermostat mode. These machines used the multi-principle, which allows they can be used as 2 independent devices:

1. Incubator for lasting incubation without shaking of micro-quantities (insect, plant cell cultures, etc.) in immunoplates (MK100-2A/MK100-4A)
2. Microplate thermo-shaker for immunochemistry and molecular diagnostics, especially when requires good result reproducibility and precise method regulation are particularly high (MB100-2A/MB100-4A).

A distinctive feature for the MB100-2A/MB100-4A and MK100-2A/MK100-4A is two-side heating of microtest plates that allows achieving exact correspondence of the set and actual temperature in wells of the microtest plates.

■ Features:

1. LCD display. It is easy to set up and use
2. Heating plates above and below the microplates
3. Incubation up to 70°C in 0.1°C steps
4. Shakes and incubates two or four microplates simultaneously
5. Beep-signal and stop of shaking motion after program completion
6. Excellent temperature accuracy and uniformity across the plate

■ The devices can be used in:

1. Cytochemistry — for in situ reactions
2. Immunochemistry — for immunofluorescent reactions
3. Biochemistry — for enzyme and protein analysis
4. Molecular chemistry — for matrix analysis

■ Specification:

Model	MB100-2A	MK100-2A	MB100-4A	MK100-4A
Temperature Control Range	RT+5°C~70°C	RT+5°C~70°C	RT+5°C~70°C	RT+5°C~70°C
Temperature Setting Range	5°C~70°C	5°C~70°C	5°C~70°C	5°C~70°C
Timer	1min~99h59min	1min~99h59min	1min~99h59min	1min~99h59min
Temp. Control Accuracy	±0.5°C	±0.5°C	±0.5°C	±0.5°C
Display Accuracy	±0.1°C	±0.1°C	±0.1°C	±0.1°C
Shaking Speed	100~1200rpm	---	100~1500rpm	---
Heating Time(20 to 70°C)	≤25min	≤25min	≤25min	≤25min
Platform Capacity	2 plates	2 plates	4 plates	4 plates
Mixing Orbit	2mm	---	2mm	---
Dimension(mm)	280 x 270 x 150	280 x 270 x 150	320 x 350 x 185	320 x 350 x 185
Net Weight	6.5kg	4kg	9kg	8kg

Code	Description	Code	Description
AS-03030-00	MB100-2A AC100 ~240V, 50/60Hz, 150W	AS-03020-00	MB100-4A AC220V or AC120V, 50/60Hz, 300W
AS-01140-00	MK100-2A AC100~ 240V, 50/60Hz, 150W	AS-01060-00	MK100-4A AC220V or AC120V, 50/60Hz, 200W



MB100-2A
MK100-2A



MB100-4A
MK100-4A

MX100-4A Shaker

■ Features:

1. Variable speed from 200rpm to 1,500rpm
2. DC brushless motor for gentle and powerful vibration
3. Orbital of 3mm for efficient mixing in small sample vessels
4. Continuous or timing operation
5. Optional rack for 1.5ml centrifuge tube
6. Simple spring holders for easy and quick plate installation

■ Specification:

Mixing Orbit	3mm
Speed Setting Resolution	10rpm increment
Speed	200~1500 rpm Standard 200~1000 rpm Deep well
Timer	1min~99h59min
Power Supply	AC220V or AC120V
Dimension(mm)	290 x270 x 120
Net Weight	6.5kg

Code	Description
AS-04040-00	MX100-4A AC220V/AC120V, 2A
AS-02041-01	20 x 1.5ml tubes fittings (Optional)
AS-02041-02	20 x 0.5ml tubes fittings (Optional)



MTV-100 Multi-Tube Vortexer

■ Features:

Pulsing Mode:

Programmable pulsing mode allows users to adjust the pulse-on and pulse-off times between 1~59 seconds in 1 second intervals. This feature enhances the vortex action by creating a more vigorous mix

Microprocessor Control:

The variable speed microprocessor control provides consistent uniform mixing action

LCD Display:

Independent LCD displays for speed and time allow operator to view both settings

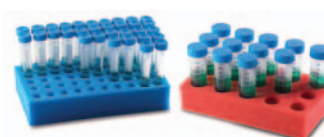
Applications:

Suspensions, high throughput testing in clinical, environmental, and chemistry labs

■ Specification:

Mixing Orbit	3.6mm
Speed Range	500~2500rpm
Timer	1min~99h59min
Speed Accuracy	±25rpm
Maximum Weight Capacity	4.5kg
Tray Dimension(L X W)	31 x 18cm
Overall Dimension(Lx W xH)	426 x 250 x 480mm

Code	Description
AS-02040-00	MTV-100 AC100~240V, 1.5A



Foam Test Tube Racks

Code	Type	Tube Capacity	Dimension (mm)
AS-02041-01	MTV-B01	50 x Φ10mm	245x132x45
AS-02041-02	MTV-B02	50 x Φ12mm	245x132x45
AS-02041-03	MTV-B03	50 x Φ13mm	245x132x45
AS-02041-04	MTV-B04	50 x Φ16mm/15ml	245x132x45
AS-02041-05	MTV-B05	50 x Φ25mm	245x132x45
AS-02041-06	MTV-B06	50 x Φ29mm/50ml	245x132x45
AS-02041-00	MTV-B00	Tray pad set (upper & lower)	305x178.5x25