

# 01 MS-100/MS-100 Thermo Shaker Incubator

## Description

MS-100/MS-100 thermo shaker incubator designed for simultaneous heating, cooling and mixing of small samples. Both of them can be supplied with interchangeable blocks for microtubes.

## Features

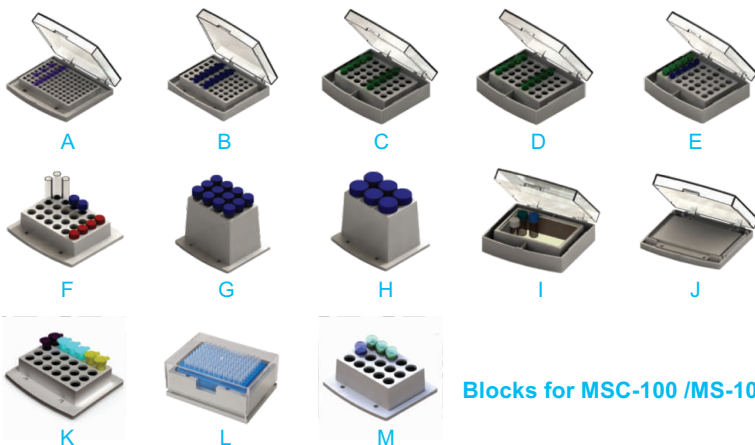
1. LCD display. It is easy to set up and use
2. Accurately control and display time, temperature and speed
3. Over-heating protection device ensures safety & reliability
4. Low noise working even under the speed of 1,500rpm
5. Easy to replace the metal blocks and is very simple to clean and sterilize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



MS-100



MSC-100



Blocks for MSC-100 /MS-100

## Specification

Model	MS-100	MSC-100	TMS-200	TMS-300
Temperature Control Range	RT.+5°C-100°C	0°C~100°C (if Ambient temp.≤20°C) 4°C~100°C (if Ambient temp.≤20°C) 10°C~100°C(if Ambient temp.≤20°C)	RT.+5°C-100°C	RT.+5°C-100°C
Temperature uniformity	≤0.5°C	≤0.5°C	≤0.5°C	≤0.5°C
Timer range	1min~99h59min	1min~99h59min	1min~99h59min	1min~99h59min
Temp. control accuracy	±0.5°C	±0.5°C	±0.25°C(≤37°C) ±0.5°C (≤95°C)	±0.25°C(≤37°C) ±0.5°C (≤95°C)
Display accuracy	±0.1°C	±0.1°C	±0.1°C	±0.1°C
Mixing Speed	200-1500rpm*	200-1500rpm*	300-3000rpm	300-2500rpm
Heating Time (25-100°C)	≤12min	≤15min	≤12min	≤12min
Cooling Time	----	≤30min (from RT. to RT.-20°C) ** ≤5min (from 100°C to 20°C) **	----	----
Mixing Orbit	2mm	2mm	2mm	3mm
Dimensions (mm)	300 x 220 x 170	300 x 220 x 170	230 x 170 x 165	230 x 170 x 165
Weight	7kg	8.5kg	5.5kg	5.5kg

\*Temperature and oscillation speed limit according to the type of block

\*\*Tested in ambient temperature <25°C

# 02 TMS-200/TMS-300 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



TMS-200



TMS-300



Blocks for TMS-200/TMS-300

## Ordering information

No.	Code	Description
01	AS-02010-00	MS-100 Thermo Shaker, AC220V/AC120V, 50/60Hz, 50W
02	AS-02020-00	MSC-100 Thermo Shaker, AC220V/AC120V, 50/60Hz, 250W
03	AS-02050-00	TMS-200 Thermo Shaker, AC100V-240V, 50/60Hz, 150W
04	AS-02060-00	TMS-300 Thermo Shaker, AC100V-240V, 50/60Hz, 150W

## Accessories

MS-100 / MSC-100					
No.	Code	Type	Description	Max. Temp.	Max. speed
01	AS-01051-01	A	96 x 0.2ml tubes	100°C	1500rpm
02	AS-01051-02	B	54 x 0.5 tubes	100°C	1500rpm
03	AS-01051-03	C	35 x 1.5 tubes	100°C	1500rpm
04	AS-01051-04	D	35 x 2.0 tubes	100°C	1500rpm
05	AS-01051-05	E	15 x 0.5ml+20 x 1.5ml tubes	100°C	1500rpm
06	AS-01051-06	F	24 x dimensions≤12mm tubes	100°C	1200rpm
07	AS-01051-07	G	12 x 15ml Falcon	100°C	750rpm
08	AS-01051-08	H	6 x 50ml Falcon	100°C	750rpm
09	AS-01051-09	I	103 x 67 x 30mm Bath Block	100°C	1500rpm
10	AS-01051-10	J	96 x 0.2ml Microplate	100°C	1500rpm
11	AS-01051-11	K	24 x 5ml tubes	100°C	1200rpm
12	AS-01051-12	L	96-Deep well plate	80°C	800rpm
13	AS-01051-13	M	15 x 5ml Eppendorf tubes	100°C	1200rpm
TMS-200 / TMS-300					
No.	Code	Type	Description		Max. speed
01	AS-02051-01	A-200	96 x 0.2ml tubes		1700/1500rpm
02	AS-02051-02	B-200	54 x 0.5ml tubes		1700/1500rpm
03	AS-02051-03	C-200	35 x 1.5ml tubes		1700/1500rpm
04	AS-02051-04	D-200	35 x 2.0ml tubes		1700/1500rpm
05	AS-02051-05	E-200	15 x 0.5ml+20 x 0.5ml tubes		1700/1500rpm
06	AS-02051-06	F-200	24 x dimensions≤12mm tubes		1500/1200rpm
07	AS-02051-07	G-200	32 x 0.2ml+25 x 1.5ml tubes		1700/1500rpm
08	AS-02051-08	H-200	32 x 0.2ml+10 x 0.5ml+15 x 1.5ml tubes		1700/1500rpm
09	AS-02051-09	I-200	103 x 67 x 30mm Bath Block		1500/1200rpm
10	AS-02051-10	J-200	96 x 0.2ml Elisa plate		1700/1500rpm
11	AS-02051-11	K-200	24 x 5ml tubes		1500/1200rpm
12	AS-02031-01	MIX-A	96 x 0.2ml PCR tube holder		3000/2000rpm
13	AS-02031-02	MIX-B	24 x 0.5ml tube holder		3000/2000rpm

In the table fittings of TMS-200/TMS-300 above:

The number in red means Max. speed when this block in TMS-200, and the number in black means Max. speed when this block in TMS-300