

ALLSHENG

# THERMO SHAKER INCUBATOR FOR TUBES



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HANGZHOU ALLSHENG INSTRUMENTS CO., LTD.

### MS-3000 / MSC-3000 Thermo Shaker Incubator For Tubes

MS-3000/MS-3000 thermo shaker incubator is a comprehensive upgrade to the existing instruments. Different from the common setting of instrument parameters through poly domes, it uses a 4.3-inch color LCD screen combined with a graphical operation interface to give users a better experience. Various program editing options, such as shaking start time, cycle steps, heating rate, etc., help to find the best experimental conditions.

Convenient module replacement method, only need to flip the module handle to quickly replace the module. In addition, new thermo lid accessories with a magnetic port design can effectively improve the temperature uniformity in the test tube, avoid changes in the concentration of reagents in the test tube caused by liquid evaporation and condensation, and ensure the stability of the reaction conditions.

MS-3000/MS-3000 will also be able to expand the 4G module, which can monitor and record the operating status of the instrument in real time through the mobile APP, providing a new way for data recording and traceability.



### Features

#### Stable performance and long service life

- Microprocessor control, good temperature control linearity, accurate shaking speed, small fluctuation
- DC brushless motor drive, long service life, maintenance-free
- Built-in over-temperature protection device, more reliable to use

#### Excellent performance, precise temperature control

- Full power heating can be selected, and the highest 3 °C/min heating method can also be selected to prevent the experiment from failing due to uneven temperature changes
- Optional thermo lid accessories, effectively improve the temperature uniformity in the test tube
- Optional full power cooling, or up to 1 °C/min cooling

#### Multiple block choices, faster loading and unloading

- Various blocks are available, and can be customized
- New designed method of block loading and unloading, blocks can be replaced without tools

#### Open design, more comprehensive program settings

- Various heating methods, you can choose the appropriate method according to the experimental needs
- The shaking method can be set according to requirements, and both forward and reverse rotation can be set
- Program continuous operation function, multiple programs are connected to each other, no need to set repeatedly
- MSC-3000 low-temperature storage function, the program is completed, and the samples can be automatically stored in low-temperature

#### Smarter and easier to use

- 4.3-inch color LCD screen display, intuitive and easy to operate
- Power failure self-recovery function, the device can automatically resume operation according to the original set procedure after power failure recovery
- Various standard sample blocks are available, and the blocks can be automatically identified
- The instrument will be equipped with a mobile phone APP for realtime monitoring of instrument status

### Specification

Model	MS-3000	MSC-3000
Display	4.3 inch touch screen (capacitive type)	4.3 inch touch screen (capacitive type)
Temperature control range	RT +5°C ~105°C	0°C ~105°C
Temperature uniformity	≤0.5°C	≤0.5°C
Timer range	1min~99h59min	1min~99h59min
Temperature control accuracy	±0.5°C (@30-50°C)	±0.5°C (@30-50°C)
Display accuracy	±0.1°C	±0.1°C
Shaking speed	200~3000rpm	200~3000rpm
Heating time (25 -100°C)	≤15min (RT 20°C ~30°C)	≤15min (RT 20°C ~30°C)
Refrigeration time (detected at 25°C ambient temperature)	-----	≤20min (Ambient temperature ≤20°C: 20°C~0°C) ≤20min (Ambient temperature ≤25°C: RT ~4°C) ≤20min (Ambient temperature ≤30°C: RT ~10°C)
Heating rate gear	Max; 3°C/min; 2°C/min; 1°C/min; 0.1°C/min	Max; 3°C/min; 2°C/min; 1°C/min; 0.1°C/min
Cooling rate gear	Max; 1°C/min; 0.5°C/min; 0.1°C/min	-----
Program number	50	50
External port	USB: program related, printer; 7 Pin socket: thermo lid	USB: program related, printer; 7 Pin socket: thermo lid
Shaking amplitude	3mm	3mm
Dimension (mm)	318x154x220	318x154x220
Weight	10kg	10kg

### Order Information

Code	Description			
AS-02090-00	MS-3000 Thermo Shaker Incubator for Tubes			
AS-02080-00	MSC-3000 Thermo Shaker Incubator for Tubes			
Code	Type	Description	Max. Temp.	Max. speed
AS-02081-01	MateB 0.5mL	24X0.5mL tubes	105°C	200~2000rpm
AS-02081-02	MateB 1.5mL	24X1.5 mL tubes	105°C	200~3000rpm
AS-02081-03	MateB 2.0mL	24X2.0 mL tubes	105°C	200~2000rpm
AS-02081-04	MateB 0.5mL+1.5mL	15x0.5mL+ 20X1.5mL tubes	105°C	200~2000rpm
AS-02081-05	MateB 5.0mL	8X5mL tubes	100°C	200~1200rpm
AS-02081-06	MateB 12mm	24XØ12 mm tubes	105°C	200~2000rpm
AS-02081-07	MateB Cryo	24 x 1.5ml/2.0ml Cryopreservation tubes	105°C	200~2000rpm
AS-02081-08	MateB 15mL	8X15mL tubes (Both flat bottom and cone bottom can be used)	100°C	200~1000rpm
AS-02081-09	MateB 50mL	4X50mL tubes (Both flat bottom and cone bottom can be used)	100°C	200~1000rpm
AS-02081-10	MateB Lid	Block lid	---	---
AS-02081-11	MateB Plate-1	96x0.2mL microplate	105°C	200~3000rpm
AS-02081-12	MateB Plate-2	96x2 mL deepwell plate	105°C	200~1500rpm
AS-02081-13	MateB PCR 96	96x0.2mL PCR plate	105°C	200~2000rpm
AS-02081-14	MateB PCR 384	384 PCR plate	105°C	200~3000rpm
AS-02081-15	MateB DWP 500	96/500 µL deepwell plate	105°C	200~1500rpm
AS-02081-16	MateB DWP 1000	96/1000 µL deepwell plate	105°C	200~1500rpm
AS-02081-26	ThermoLid	Thermo lid	---	---



### MS-100/MSC-100 Thermo Shaker Incubator For Tubes

MS-100/MSC-100 thermo shaker incubator for tubes adopts DC brushless motor and microcomputer control technology, and combines the two functions of constant temperature and shaking, which greatly shortens the time of experimental operation and improves work efficiency. It is an ideal automation tool for sample incubation, catalysis, shaking and preservation. MSC-100 thermo shaker incubator for tubes also has multi-mode functions such as heating, cooling, and shaking to meet the needs of different users.



- LCD** LCD displays time and speed; it's easy to accurately set and reproduce experimental conditions.
- Power Failure Self-recovery** Power failure self-recovery function, the device can automatically resume operation according to the original set procedure after power failure recovery. The experimental conditions are consistent and the experimental results are stable.
- Accurate Temp. Control** Microprocessor control, good temperature control linearity, temperature control accuracy of  $\pm 0.5^{\circ}\text{C}$ . Accurate temperature control improves experiment repeatability.
- 2mm** 2mm amplitude circular shaking, coordinating the shaking speed of the instrument, forms a 2D mix and has an excellent sample shaking ability.
- CE** Multiple safety protection functions, complying with CE safety standards, safe and reliable.
- Block Customization** Various standard sample blocks are available, which is easy to be replaced. The blocks with special specifications can be customized to meet the special needs of users.

### TMS-200/TMS-300 Thermo Shaker Incubator

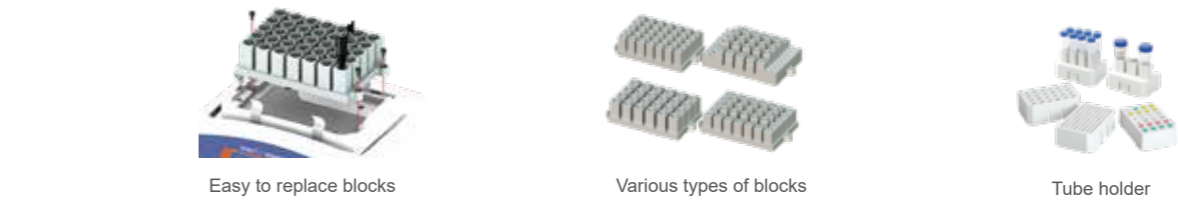
TMS-200/TMS-300 thermo shaker incubator has small size and fast shaking speed, integrating shaking and incubation functions and intelligent operation concept. It can not only mix various microtubes, PCR plates, deep well plates and microwell plates and other common laboratory consumables, but also has the function of heating and incubating various blocks.



- LCD** LCD displays time and speed; it's easy to accurately set and reproduce experimental conditions.
- Power Failure Self-recovery** Power failure self-recovery function, the device can automatically resume operation according to the original set procedure after power failure recovery. The experimental conditions are consistent and the experimental results are stable.
- Accurate Temp. Control** Unique patented technology and shakeproof technology support accurate and efficient mixing and temperature control, with programmable functions to improve experiment repeatability.
- 2mm and 3mm** 2mm and 3mm amplitude circular shaking, coordinating the shaking speed of the instrument, forms a 2D mix and has a more excellent sample shaking ability.
- CE** Multiple safety protection functions, complying with CE safety standards, safe and reliable.
- Block Customization** Various standard sample blocks are available, which is easy to be replaced. The blocks with special specifications can be customized to meet the special needs of users.

#### MS-100 / MSC-100 Block

Code	Type	Description	Max. Temp.	Max. speed
AS-01051-01	A	96x0.2ml tubes	100°C	1500rpm
AS-01051-02	B	54x0.5ml tubes	100°C	1500rpm
AS-01051-03	C	35x1.5ml tubes	100°C	1500rpm
AS-01051-04	D	35x2.0ml tubes	100°C	1500rpm
AS-01051-05	E	15x0.5ml+20x1.5ml tubes	100°C	1500rpm
AS-01051-06	F	24x diameter≤12mm tubes	100°C	1200rpm
AS-01051-07	G	12x15ml Falcon	100°C	750rpm
AS-01051-08	H	6x50ml Falcon	100°C	750rpm
AS-01051-09	I	103x67x30mm bath block	100°C	1500rpm
AS-01051-10	J	96x0.2ml microplate	100°C	1500rpm
AS-01051-11	K	24x5ml tubes	100°C	1200rpm
AS-01051-12	L	Deep-well plate	80°C	800rpm
AS-01051-13	M	15x5ml Eppendorf tubes	100°C	1200rpm
AS-01051-14	N	24x2ml tubes	100°C	1200rpm
AS-01051-15	O	24x1.5ml tubes	100°C	1200rpm
AS-01051-16	P	96x1000μL deep-well plate	100°C	1200rpm
AS-01051-17	Q	MTPs deep-well plate	100°C	1200rpm



#### TMS-200 / TMS-300 Block

Code	Type	Description	Max. Speed rpm	Code	Type	Description	Max. Speed rpm
AS-02051-01	A-200	96x0.2ml tubes	1700/1500	AS-02051-09	I-200	103x67x30mm bath block	1500/1200
AS-02051-02	B-200	54x0.5ml tubes	1700/1500	AS-02051-10	J-200	96x0.2ml Elisa plate	1700/1500
AS-02051-03	C-200	35x1.5ml tubes	1700/1500	AS-02051-11	K-200	24x5ml tubes	1500/1200
AS-02051-04	D-200	35x2.0ml tubes	1700/1500	AS-02031-01	MIX-A	96x0.2ml PCR tube holder	3000/2000
AS-02051-05	E-200	15x1.5ml+20x0.5ml tubes	1700/1500	AS-02031-02	MIX-B	24x0.5ml tube holder	3000/2000
AS-02051-06	F-200	24xdiameter≤12mm tubes	1500/1200	AS-02031-03	MIX-C	24x1.5/2.0ml tube holder	3000/2000
AS-02051-07	G-200	32x0.2ml+25x1.5ml tubes	1700/1500	AS-02031-04	MIX-D	8x15ml tube holder	1100/900
AS-02051-08	H-200	32x0.2ml+10x0.5ml+15x1.5ml tubes	1700/1500	AS-02031-05	MIX-E	3x50ml tube holder	1100/900

In the table fitting 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.

### MTV-100 Multi-Tube Vortex



**Various Accessories**

It's suitable for commonly used 10mm-30mm test tubes. Special specification blocks can be designed and customized to meet the special needs of users. The maximum load-bearing capacity can reach 4.5kg.

**Operating Mode**

The programmable pulsing mode allows the user to adjust the pulse-on and pulse-off time between 1 to 59s, and the setting accuracy is 1s. The pulsing mode can enhance the mixing effect.

**3.6mm**

3.6mm amplitude circular shaking with excellent sample mixing ability.

**CE**

Multiple safety protection functions, complying with CE safety standards, safe and reliable.

### MTV-100 Block

Code	Type	Description	Dimension (mm)	Code	Type	Description	Dimension (mm)
AS-02041-01	MTV-B01	50xφ 10mm tube racks	245x132x45	AS-02041-05	MTV-B05	50xφ 25mm tube racks	245x132x45
AS-02041-02	MTV-B02	50xφ 12mm tube racks	245x132x45	AS-02041-06	MTV-B06	50xφ 29mm tube racks	245x132x45
AS-02041-03	MTV-B03	50xφ 13mm tube racks	245x132x45	AS-02041-00	MTV-B00	Tray pad set	305x178.5x25
AS-02041-04	MTV-B04	50xφ 16mm tube racks	245x132x45				

### Specification

Model	MS-100	MSC-100	TMS-200	TMS-300	MTV-100
Temp. control range	RT +5°C ~100°C	0°C~100°C (Ambient temperatures≤20°C) 4°C~100°C (Ambient temperatures≤25°C) 10°C~100°C (Ambient temperatures≤30°C)	RT +5°C ~100°C	RT +5°C ~100°C	----
Temp. uniformity	≤0.5°C	≤0.5°C	≤0.5°C	≤0.5°C	----
Timer range	1min~99h59min	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	----
Shaking speed	200~1500rpm	200~1500rpm	300~3000rpm	300~2000rpm	500~2500rpm
Heating time (25-100°C)	≤15min	≤15min	≤12min	≤12min	----
Refrigeration time (detected at 25°C ambient temperature)	----	≤20min (Decrease from RT to RT-20°C) ≤15min (Decrease from 100°C to 20°C)	----	----	----
Mixing orbit	2mm	2mm	2mm	3mm	3.6mm
Dimension(mm)	300x220x170	300x220x170	230x170x165	230x170x165	426x250x480
Weight	7kg	8.5kg	5.5kg	5.5kg	21.5kg

### MX100-4A Microplate Shaker

The microplate shaker is driven by a DC brushless motor, which is mainly used for microplate (96-well/384-well plate), cell culture plate (24-well plate, 48-well plate, 96-well plate, etc.) and 1.5/2.0ml centrifuge test tube and other solutions to mix and shake.



**LED**

LED displays time and speed; it's easy to accurately set and reproduce experimental conditions.

**Power Failure Self-recovery**

Power failure self-recovery function, the device can automatically resume operation according to the original set procedure after power failure recovery.

**Tube Rack**

Optional 2.0/1.5ml centrifuge tube rack, which can mix up to 80 centrifuge tubes at the same time.

**3mm**

3mm amplitude circular shaking has an excellent sample shaking ability.

**CE**

Multiple safety protection functions, complying with CE safety standards, safe and reliable.

### Specification

Mixing orbit	3mm
Shaking speed setting accuracy	10rpm
Shaking speed	200-1500 rpm @ standard microplate 200-1000 rpm @ deep well plate or tube holder
Timer range	1min~99h59min
Input power	AC220V
Dimension (mm)	290x270x120
Weight	6.5kg

### Order Information

Code	Description
AS-04040-00	MX100-4A microplate shaker
AS-02041-01	20x1.5ml tube holder (optional)
AS-02041-02	20x0.5ml tube holder (optional)

### Order Information

Code	Description
AS-02010-00	MS-100 thermo shaker incubator, with a block; AC220V/AC120V, 50/60Hz, 150W
AS-02020-00	MSC-100 thermo shaker incubator, with a block; AC220V/AC120V, 50/60Hz, 250W
AS-02050-00	TMS-200 thermo shaker incubator; AC100-240V, 50/60Hz, 150W
AS-02060-00	TMS-300 thermo shaker incubator; AC100-240V, 50/60Hz, 150W
AS-02040-00	MTV-100 multi-tube vortex; AC100-240V, 1.5A

### MB100-2A/MB100-4A Thermo Shaker Incubator For Plates

MB100-2A/MB100-4A, MK100-2A/MK100-4A are designed for 1-4 standard 96 well plates in the thermostat mode. MB100-2A/MB100-4A has a shaking function, which MK100-2A/MK100-4A hasn't.

A distinctive feature of MB100-2A/MB100-4A and MK100-2A/MK100-4A is two-side heating of microplates, so that each well of the microplate can be evenly heated.

There are two main applications of these instruments:

- As an incubator for culturing insects, animal and plant cells in microplates (no shaking required) (MK100-2A/MK100-4A)
- As a constant temperature shaker for microplates in immunohistochemistry and molecular diagnostic tests (MB100-2A/MB100-4A)



MB100-4A  
MK100-4A

- LCD** LCD displays the setting and actual temperature, time and shaking speed; it's easy to accurately set and reproduce experimental conditions.
- Thermo Lid** Two-side heating of microplates allows each well of the microplate to be faster and more evenly heated.
- Efficient Accurate** Exclusive patented technology and shake proof technology support accurate and efficient mixing and temperature control, with programmable functions to improve experiment repeatability.



MB100-2A  
MK100-2A

**2mm** 2mm amplitude circular shaking, coordinating the shaking speed of the instrument, forms a 2D mix and has an excellent sample shaking ability.

**CE** Multiple safety protection functions, complying with CE safety standards, safe and reliable.

#### Specification

Model	MB100-2A	MK100-2A	MB100-4A	MK100-4A
Temp. control range	RT +5°C~70°C	RT +5°C~70°C	RT +5°C~70°C	RT +5°C~70°C
Timer range	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)	≤20min	≤20min	≤20min	≤20min
Capacity	2 microplates	2 microplates	4 microplates/deepwell plates	4 microplates/deepwell plates
Mixing orbit	2mm	----	2mm	----
Dimension (mm)	280x270x150	280x270x150	320x350x185	320x350x185
Weight	6.5kg	4kg	9kg	8kg

#### Order Information

Code	Description	Code	Description
AS-03030-00	MB100-2A; AC100-240V, 50/60Hz, 150W	AS-03020-00	MB100-4A; AC120/220V, 50/60Hz, 300W
AS-01140-00	MK100-2A; AC100-240V, 50/60Hz, 150W	AS-01060-00	MK100-4A; AC120/220V, 50/60Hz, 200W

### OS-200/OS-100 Orbital Shaker

OS-200 orbital shaker appearance is compact and concise. Adopting DC brushless motor technology and microcomputer control technology, it has various functions and is suitable for the fields of biotechnology, microbiology and medical analysis.



OS-200

- 20mm** The shaking mode rotates horizontally, and the amplitude is 20mm and 10mm. Coordinating the shaking of the instrument, the sample mixing ability is excellent.
- CE** Multiple safety protection functions, complying with CE safety standards, safe and reliable.
- Accessories** A variety of standard load platforms are available for users to choose freely.

- Application Field** Suitable for a variety of shaking work in different fields, often used in the fields of biotechnology, microbiology and medical analysis. It's with low-voltage power supply, suitable for freezer.
- Timer Function** With timer function, the time can be set arbitrarily within the range of 1min~100 hours, which is convenient for accurate setting and reproducing experimental conditions.
- Efficient** DC brushless motor drive, long service life and maintenance-free.



OS-100

#### Specification

Model	OS-200	OS-100
Shaking speed	50~250rpm	50~300rpm
Orbit	20mm	10mm
Timer range	1min~99h59min	1min~99h59min
Load capacity	See below table	See below table
Max. capacity	2.5kg	3.0kg
Moter	DC brushless	DC brushless
Dimension (LxWxH)mm	280x270x110	280x270x110
Ambient Temp.	4~45°C	4~45°C

#### OS-200/OS-100 Accessories

Code	Description
AS-04021-01	PP-1 universal platform, with non-slip rubber mat, suitable for various containers
AS-04021-02	PP12-100 platform with clamps for flasks, 12x100/150ml
AS-04021-03	PP06-250 platform with clamps for flasks, 6x250/300ml
AS-04021-04	UP-1 universal platform with adjustable bars for different types of flasks, bottles
AS-04021-05	MP-1 platform with springs



PP-1



PP12-100



MP-1



PP06-250



UP-1