

MSC-3000 / MS-3000

Thermo Shaker Incubator



Product Introduction

MSC-3000 / MS-3000 is an upgrade of the existing thermo shaker incubator operation mode. Different from the common instrument parameter setting through membrane keys, MSC-3000 / MS-3000 uses 4.3-inch color LCD screen combined with the 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 block replacement method, only need to flip the block handle to quickly replace. In addition, 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.

Features

■ Stable Performance and Long Service Life

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

■ Excellent Performance, Precise Temperature Control

1. Full power heating or other heating rate gears can be chosen to prevent the experiment from failing due to uneven temperature changes
2. Optional thermo lid accessories can effectively improve the temperature uniformity in the test tube
3. Optional full power cooling and other cooling rate gears

■ Multiple Block Choices, Faster Loading and Unloading

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

■ Open Design, More Comprehensive Program Settings

1. Various heating methods can be chosen according to the experimental needs
2. Shaking method can be set according to requirements, and both forward and reverse rotation can be set
3. Program continuous operation function, multiple programs are connected to each other, no need to set repeatedly
4. 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

1. 4.3-inch color LCD screen display, intuitive and easy to operate
2. Power failure self-recovery function, the device can automatically resume operation according to the originally set procedure after power failure recovery
3. Various standard sample blocks are available, and the blocks can be automatically identified

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Suitable Block: MateB Series

According to different needs, Allsheng has designed their own blocks for consumables such as 0.2 mL to 50 mL centrifuge tubes, MTP, DWP, 96 / 384 PCR plates and so on.

All blocks are equipped with a convenient replacement mechanism, making block replacement quick and easy. No tools required, just press the handle on the rear of the block to remove the block in seconds. In addition, the thermal insulation block considers the user's safety and effectively prevents burning fingers.



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Optional Performance Component: ThermoLid

When incubating test tubes, PCR plates, etc., condensation will form on the tube walls and caps. Allsheng new generation of temperature control and mixing instrument with ThermoLid technology that reliably prevents condensation inside the tube, allowing consistent sample concentrations over the incubation time.

Thermo Lid



Effectively prevent reagent evaporation, improve the uniformity of concentrations

Installation and Wiring



Magnet port, easy and fast installation; stable data transmission to ensure thermo lid performance

Height Adjustment



Compatible with various specifications of centrifuge tubes; can be used for up to 5 mL centrifuge tubes

1. ThermoLid has height-adjustable technology, which makes the thermal lid fit on the top of the sample tube and closely contact with the sample, providing more precise temperature control, enabling better heat transfer anywhere in the sample tube, and improving temperature uniformity for safe sample heating
2. Links with automatic identification and user-friendly operation
3. Obtain constant reaction conditions for best results
4. ThermoLid can be used with various blocks that load tubes below 5 mL, such as 0.5 mL, 1.5 mL, 5 mL and 96 PCR plates.

Specification

| Model | MSC-3000 | MS-3000 |
|---|--|--|
| Type | heating / cooling / mixing | heating / mixing |
| Temp. control range | 0 °C ~ 105 °C | RT. +5 °C~105 °C |
| Time setting | 99 h 59 min / 99 min 59 s | 99 h 59 min / 99 min 59 s |
| Temp. control accuracy @20 °C~50 °C | ±0.5 °C | ±0.5 °C |
| Temp. uniformity @20 °C~50 °C | ±0.5 °C | ±0.5 °C |
| Display accuracy | 0.1 °C | 0.1 °C |
| Heating time 20 °C ~ 100 °C | ≤ 15 min | ≤15 min |
| 100 °C ~ 20 °C | ≤ 15 min | ---- |
| Cooling time 25 °C ~ 4 °C [1] | ≤ 20 min | ---- |
| 20 °C ~ 0 °C [2] | ≤ 20 min | ---- |
| Heating rate gear [3] | 5 gears can be set | 5 gears can be set |
| Cooling rate gear [4] | 4 gears can be set | ---- |
| Speed [5] | 100 - 3000 rpm | 100 - 3000 rpm |
| Mixing orbit | 3 mm | 3 mm |
| Program number | 50 | 50 |
| A single program can be divided into number | 5 | 5 |
| Cycle number | 99 | 99 |
| Block identification function | Yes | Yes |
| Display | 4.3 inch touch screen | 4.3 inch touch screen |
| Port | USB (program related); 4-pin plug (thermo lid related) | USB (program related); 4-pin plug (thermo lid related) |
| Thermo lid | Yes (optional) | Yes (optional) |
| Thermo lid Temp. range | RT. +5 °C~110 °C | RT. +5 °C~110 °C |
| Maximum power | 200 W | 200 W |
| Net weight (including blocks) | ≤ 10 Kg | ≤ 9 Kg |
| Dimension (W×D×H) mm | 220×318×154 | 220×318×154 |

[1] Indicates detection at AT. ≤ 25 °C

[2] Indicates detection at AT. ≤ 20 °C

[3] 5 gears including: MAX, 3 °C/min, 2 °C/min, 1 °C/min, 0.1 °C/min

[4] 4 gears including: MAX, 1 °C/min, 0.5 °C/min, 0.1 °C/min

[5] The maximum speed varies according to the block used

Ordering Information

| Code | Description |
|-------------|--|
| AS-02080-00 | MSC-3000 thermo shaker incubator (heating and cooling type), AC 100-240 V, 200 W |
| AS-02090-00 | MS-3000 thermo shaker incubator (heating type), AC 100-240 V, 200 W |

Suitable Blocks

| Code | Type | Description | Max. speed | Max. Temp. | Thermo lid available |
|-------------|---------------------|--|------------|------------|----------------------|
| AS-02081-01 | MateB 0.5 mL | 24×0.5 mL tube | 2000 rpm | 105 °C | ✓ |
| AS-02081-02 | MateB 1.5 mL | 24×1.5 mL tube | 2000 rpm | 105 °C | ✓ |
| AS-02081-03 | MateB 2.0 mL | 24×2.0 mL tube | 2000 rpm | 105 °C | ✓ |
| AS-02081-04 | MateB 0.5 mL+1.5 mL | 15×0.5 mL+20×1.5 mL tube | 2000 rpm | 105 °C | ✓ |
| AS-02081-05 | MateB 5.0 mL | 8×5 mL tube | 1000 rpm | 105 °C | ✓ |
| AS-02081-06 | MateB 12 mm | 24×Φ12 mm tube | 2000 rpm | 105 °C | - |
| AS-02081-08 | MateB Cryo | 24x1.5 mL / 2.0 mL cryovial | 2000 rpm | 105 °C | - |
| AS-02081-09 | MateB 15 mL | 8×15 mL tube | 1000 rpm | 105 °C | - |
| AS-02081-10 | MateB 50 mL | 4×50 mL tube | 1000 rpm | 105 °C | - |
| AS-02081-11 | MateB Plate-1 | 96x0.2 mL microplate | 3000 rpm | 105 °C | ✓ |
| AS-02081-12 | MateB Plate-2 | 96x2 mL deepwell plate | 1000 rpm | 105 °C | - |
| AS-02081-13 | MateB PCR 96 | 96x0.2 mL PCR plate | 2000 rpm | 105 °C | ✓ |
| AS-02081-14 | MateB PCR 384 | 384-well PCR plate | 3000 rpm | 105 °C | ✓ |
| AS-02081-15 | MateB DWP 500 | 96 / 500 µL deepwell plate | 1600 rpm | 105 °C | ✓ |
| AS-02081-16 | MateB DWP 1000 | 96 / 1,000 µL deepwell plate | 1600 rpm | 105 °C | ✓ |
| AS-02081-17 | MateB L-Lid | L-Lid transparent lid (low) is suitable for MateB 0.5 mL, 1.5 mL, 2.0 mL, 5 mL, Plate-1, Plate-2, PCR96 and PCR384 | | | |
| AS-02081-18 | MateB H-Lid | H-Lid transparent lid (high) is suitable for MateB DWP 500 / 1000 | | | |
| AS-02081-26 | ThermoLid | Thermo lid | - | - | - |