

### Hangzhou Yooning Instrument Co.,Ltd.



### **GENERAL CATALOGUE 2023**

Professional manufacturer engaged in sample preteratment for lifesciences---Temperature control baths, Shakers, Mixers, Centrifuges and etc.

## **Enterprise Profile**

Hangzhou Yooning Instrument Co., Ltd. is an ISO9001 certified high-tech enterprise specializing in R&D, production, sales and service of laboratory instruments and life science instruments, located in Hangzhou City, Zhejiang China. Our main products are Dry Bath Incubator (block heater), Centrifuge, Mixer, Shaker, Micro-Spectrophotometer, PCR and etc., which are commonly used in scientific research labs, medical industry, environment, food safety and so on. Yooning has strong distributor network not only in our domestic market, but also overseas countries like Japan, Singapore, Indonesia, India, Italy, Germany, UK, Turkey, Argentina, Brazil, the USA, ect. Yooning Instruments are becoming more and more popular due to good quality and excellent aftersales service.





# Factory photos

#R&D #Showroom





///Warehouse /// Production lines





Production sites





#QC room #Packing room

# **Enterprise Culture**



Values

Quality first, Service-oriented, Integrity Innovation



Mission

Make science experiments easier



Vision

Committed to be a leading supplier in Temperature-control, Mixing.

///Honor

### Qualification certification



National High-Tech enterprise



CE certified



ISO certified

#### **Patents**





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### NanoOne Microspectrophotometer

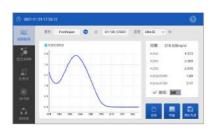
#### · Sample pedestal







#### · Detection result





- Friendly Android operation system, 7-inch touched screen
- Cuvette slot available for bacteria/microbe concentration test
- Measurement without dilution, test result display and read easily
- Long life's Xenon flash lamp,109 flashes.

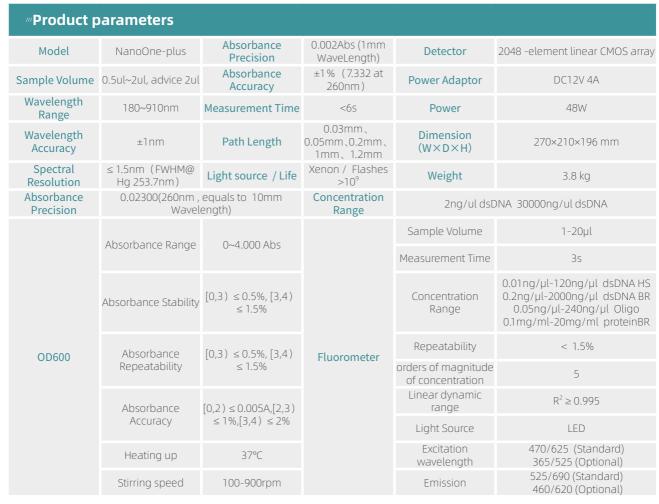
- Reliable and quick data USB output for analysis
- No computer required for measurement and data storage
- Image and excel table can be output
- External printer is optional
- Only 0.5  $\sim$  2 $\mu$ l sample volume requested, which can be recycled after test, ideal for precious samples

| <b>™Product param</b>               | eters                              |                     |  |                     |        |  |
|-------------------------------------|------------------------------------|---------------------|--|---------------------|--------|--|
|                                     |                                    |                     | 204 Stainless starless d                   |                     |        |  |
| Model                               | NanoOne                            | Sample pedestal     | 304 Stainless steel and<br>Quartz fiber    | Measurement<br>Time | < 65   |  |
| Sample Volume                       | 0.5~2.0µl                          | Light Source        | Xenon flash lamp                           | Data Export         | USB    |  |
| Absorbance Accuracy                 | ±1% (7.332 Abs at 260nm)           | Path Length         | 0.05mm、0.2mm、1.0mm                         | Power Adaptor       | 12V 4A |  |
| Wavelength Accuracy                 | ±1nm                               | Detector            | 2048 -element linear silicon<br>CMOS array | Standby Power       | 5W     |  |
| Absorbance Precision                | 0.002Abs                           | Spectral Resolution | ≤ 1.5nm<br>(FWHM @ Hg 253.7nm)             | Weight              | 3.5kg  |  |
| Dimension (W $\times$ D $\times$ H) | 270×210×196 (mm)                   | Operation System    | Android                                    | Power               | 48W    |  |
| Absorbance Range<br>(equaled 10mm)  | 0.02-300A; Cuvette (OD600 ):0~4A   |                     |  |                     |        |  |
| Wavelength                          | 180-910nm; cuvette (OD600):600±8nm |                     |  |                     |        |  |
| Nucleic Acid Range                  | 2~15000ng/ul (ds DNA)              |                     |  |                     |        |  |
| Protein Detection Range             |                                    | BSA 40              | 0mg/ml; IgG 290mg/ml                       |                     |        |  |



### NanoOne-plus MicroSpectrophotometer

- 7-inch touched screen, Android system with friendly UI design
- · Quick detection (only takes time of 2-6s), no dilution needed
- · Auto-detection function is available
- No need to preheat instrument, measurements can be done upon turning on
- Long life's Xenon flash lamp, 109 flashes
- · Good repeatability due to accurate pathlength control
- Heating up to 37°C, stirring speed 100-900rpm for cuevette measurements
- Only 0.5  $\sim$  2 $\mu$ l sample volume requested, which can be recycled after test, ideal for precious samples
- Fluorometer measurement, strong specificity, high sensitivity can make it detect low concentration samples like dsDNA、Oligo、RNA、 protein, down to 0.5pg/µl (dsDNA High Sensitivity)
- · Built-in printer
- easurement results can be exported to U disc in format of Excel、JPG







### FD-100 Fluorometer

#### ///Introduction

Fluorescent Immunoassay technology has strong specificity, high sensitivity and good practicability, which is widely used to measure nucleic acids (dsDNA, Oligo, RNA), proteins (enzymes, receptors, antibodies), hormones, drugs and microorganisms and other low concentration bioactive compounds.

FD-100 fluorometer is based on fluorescence immunoassay technology and the principle that the fluorescence intensity is proportional to the concentration at low concentrations, and to analyze samples qualitatively and quantitatively by detecting fluorescence intensity.



- 7-inch color touch screen, easy to operate
- Only 3s to detect the sample concentration
- The minimum detection concentration can be 0.5pg/ μ L
- Dual channels for detecting two kinds of fluorescence simultaneously
- The response range can reach 5 orders of magnitude
- It works for most reagents
- Store up to 10000 pieces of data, which can be exported through U disk or printer.

| <sup>™</sup> Product parameters |   |                 |  |  |  |  |  |
|---------------------------------|---|-----------------|--|--|--|--|--|
| Model                           | FD-100  | Light Source    | Monochrome LED                                     |  |  |  |  |
| Sample Capacity                 | 1   | Detector        | photodiode   |  |  |  |  |
| Sample Volume                   | 1-20µl  | Display         | touch screen display                               |  |  |  |  |
| Tube Type                       | 0.5ml PCR tube                                      | Programs stored | 10000  |  |  |  |  |
| Channel number                  | 2   | Data Export     | U Disk   |  |  |  |  |
| Measurement Time                | 3s  | Data Format     | CSV PDF  |  |  |  |  |
| Repeatability                   | < 1.5%  | Data Interface  | USB(Type A)*2 USB(Type B)*1                        |  |  |  |  |
| Calibration Method              | 2 or 3 point calibaration                           | Power adapter   | 100-240V@50-60Hz                                   |  |  |  |  |
| Response range                  | Five orders of magnitude                            | Voltage         | DC12V 2A   |  |  |  |  |
| Linearity                       | $R^2 \ge 0.995$                                     | Net. Weight     | 1.0Kg  |  |  |  |  |
| Excitation wavelength           | 470/625 (standard) 365/525 (optional)               | Power           | 4.5W   |  |  |  |  |
| Emission wavelength             | 525/690 (standard) 460/620 (optional)               |                 |  |  |  |  |  |
| Concentration Range             | 0.01ng/µl-120ng/µl dsDN<br>0.05ng/µl-240ng/µl Oligo |                 | g/µl-2000ng/µl dsDNA BR<br>g/ml-20mg/ml protein BR |  |  |  |  |



### PC-32 Mini Gradient Thermal Cycler

#### **///Introduction**

This gradient Thermal Cycler is a mini size designed for thermal cycling and protocol optimization in molecular biology, medical, food, genetic testing and etc.

#### ///Features

- · Small footprint, compact design
- High performance axial flow fan with low operation noise
- Adaptive elastic heating lid design to fit the tubes of different heights automatically
- New generation peltier technology, max heating up rate  $5^{\circ}\mathrm{C}$  /sec



- Good temperature uniformity reduce edge effect
- Real-time temperature display
- 800x480 pixel, 4.3 -inch color touch screen
- Automatically power failure recovery
- Auto heated lid: Heated lid be "OFF" automatically when sample temperature less than 30°C or program ends up.

| <b>"Product</b>                     | parameters   |   |                                 |   |                      |
|-------------------------------------|--|---|---------------------------------|---|----------------------|
| Model                               | PC-32  | Cooling Down<br>Rate(Max.)                | 4°C /S                          | Max. Cycles                             | 99                   |
| Capacity                            | 32x0.2ml(microtubes),<br>4x8x 0.2ml (tubes strips) | Gradient<br>Temperature<br>Range          | 30 ~ 100℃                       | Max. Steps                              | 30                   |
| Block<br>Temperature<br>Range       | 4~100°C  | Gradient Set Span                         | Max. 30°C                       | Power failure recovery                  | Yes                  |
| Numbers of<br>Peltier               | 2  | Gradient<br>Temperature<br>Accuracy       | ±0.3°C                          | Pause function                          | Yes                  |
| Temperature<br>Display<br>Accuracy  | 0.1℃   | Gradient<br>Temperature<br>Uniformity     | ±0.3°C                          | 16°C<br>Temperature<br>Holding Function | Infinite duration    |
| Block<br>Temperature<br>Uniformity  | ≤ ±0.25°C  | Temperature<br>Control ways               | Block or Tube                   | Real-time operation status              | Image-text displayed |
| Block<br>Temperature<br>Accuracy    | ±0.2°C   | Timer Increasing /<br>Decreasing          | - 599~599 S for Long PCR        | Size (W $\times$ D $\times$ H)          | 243×172×145 (mm)     |
| Timer                               | 1s~59min59sec/0 Infinite<br>Duration               | Temperature<br>Increasing /<br>Decreasing | -9.9~9.9°C for Touchdown<br>PCR | Net weight                              | 2.3kg                |
| Heating Lid<br>Temperature<br>range | 30°C ~105°C  | LCD display                               | Touch screen display            | Max. Power                              | 225W                 |
| Heating Up<br>Rate(Max.)            | 5°C /s   | Programs stored                           | 200                             | Voltage Range                           | AC110V-220V 50-60Hz  |



### **PC-96 Gradient Thermal Cycler**

#### **#Introduction**

This gradient Thermal Cycler is ideal for thermal cycling and protocol optimization in molecular biology, medical, food, genetic testing and etc



- Excellent amplication due to high quality Semiconductor
- Industrial grade operation system, can work 7x24hs
- 42°C gradient range, ideal for protocol optimization

- Data saved to USB flash memory
- Impact design, small size
- Extremely quiet
- High precise temperature with good uniformity, quick heating up and cooling down benefit from advanced thermoelectric cooling and PID technologies
- 5-inch touch screen,easy to edit,operate,save programs

| <b>™Product parameters</b>      |                            |   |  |                                      |                         |  |  |  |
|---------------------------------|----------------------------|---|--|--------------------------------------|-------------------------|--|--|--|
| Model                           | PC-96                      | Max.Heating Rate                          | 5°C /S   | Programs stored                      | 10000+                  |  |  |  |
| Voltage                         | AC100~240V,<br>50/60Hz     | Max.Cooling Rate                          | 4.5°C /S   | Max.Cycles                           | 99                      |  |  |  |
| Temperature<br>Control ways     | Block or Tube              | Gradient Set Span                         | Max. 42°C  | Max.Steps                            | 30                      |  |  |  |
| Block Temperature<br>Range      | 0~105°C                    | Gradient<br>Temperature<br>Accuracy       | ±0.3°C   | Program Pause<br>Function            | Yes                     |  |  |  |
| Timer                           | 1s~59min59sec/<br>Infinite | Temperature display accuracy              | 0.1°C  | 16°C Temperature<br>Holding Function | Infinite                |  |  |  |
| Block Temperature<br>Accuracy   | ±0.2°C                     | Heating Lid<br>Temperature range          | 30°C ~110°C  | Real-time operation status           | Image-text<br>displayed |  |  |  |
| Block Temperature<br>Uniformity | ±0.25°C                    | Automatically<br>Heating Lid              | Shut off automatically when<br>sample lower than 30°C or<br>program over | Interface Port                       | USB 2.0                 |  |  |  |
| Heating Up Rate (average)       | 4°C                        | Timer Increasing / Decreasing             | - 599~599 S for Long PCR   | Dimension (W $\times$ D $\times$ H)  | 200x300x170<br>(mm)     |  |  |  |
| Cooling down Rate (average)     | 3°C                        | Temperature<br>Increasing /<br>Decreasing | -9.9~9.9°C for Touchdown<br>PCR  | Weight                               | 4.5kg                   |  |  |  |
| Gradient temperature range      | 30-105°C                   | Max. Power                                | 600W   |                                      |                         |  |  |  |
| Capacity                        | 96x0.2ml(PCR plat          | e without/semi skirt), <sup>·</sup>       | 12x8x0.2ml strips, 8x12x0.2m   | l strips, 0.2ml tubes (heigl         | ht 20~23mm)             |  |  |  |



### **PC-96P Gradient Thermal Cycler**

#### ///Introduction

PC-96P is a upgraded generation thermal cycler on basis of our PC-96, the advanced peltier technology brings accurate temperature control, make the cycles reaches up to a million times. It's an ideal thermal cycler for researches of life sciences in most labs.



- Small footprint, compact design
- 6 high precise peltiers
- Good temperature uniformity reduce edge effect
- New generation peltier technology, max heating up rate 6°C /sec
- 1024x768 pixel, 8 -inch color touch screen Automatically power failure recovery
  - Gradient range 42°C

| <b>‴Product para</b>                        | meters                               |  |                |                                      |                         |  |  |
|---|--------------------------------------|--|----------------|--------------------------------------|-------------------------|--|--|
| Model                                       | PC-96P                               | Gradient temperature range   | 30-105°C       | Max. Steps                           | 30                      |  |  |
| Voltage                                     | 100~240V,<br>50/60Hz                 | Gradient Set Span  | Max. 42°C      | Power failure recovery               | Yes                     |  |  |
| Temperature Control ways                    | Block/Tube                           | Gradient Temperature   | ≤±0.3°C        | Pause function                       | Yes                     |  |  |
| Block Temperature                           | 0~105°C                              | Gradient Temperature<br>Accuracy   | ≤±0.3°C        | 16°C Temperature<br>Holding Function | Infinite duration       |  |  |
| Timer                                       | 1s~59min59sec/<br>(0 means infinite) | Numbers of Gradient  | 12             | LCD display                          | Touch screen<br>display |  |  |
| Capacity                                    | 96x0.2ml                             | Heating Lid Temperature range  | 30°C ~110°C    | Operation system                     | Linux                   |  |  |
| Block Temperature<br>Accuracy               | ≤ ±0.2°C                             | Timer Increasing /<br>Decreasing   | -599s ~ 599s   | Touch screen type                    | Capacitive              |  |  |
| Block Temperature<br>Uniformity             | ≤ ±0.25°C                            | Temperature Increasing / Decreasing  | -9.9°C ~ 9.9°C | Communication port                   | USB2.0                  |  |  |
| Heating Up Rate (Max.)                      | 6°C /s                               | Touchdown PCR  | Yes            | Max. Power                           | 700W                    |  |  |
| Cooling down Rate<br>(Max.)                 | 5°C /s                               | Long PCR   | Yes            | Size (W $\times$ D $\times$ H)       | 400x260x228mm           |  |  |
| Adjustable range of heating up/cooling down | 0.1~6°C /s                           | Programs stored  | 10000+         | Net weight                           | 8.5kg                   |  |  |
| Temperature display accuracy                | 0.1°C                                | Max. Cycles  | 99             |                                      |                         |  |  |
| Tubes applied                               | 0.2m                                 | 0.2ml microtubes, 8 x 0.2ml tubes strips , 96 x 0.2ml PCR plate (without/semi-skirted) |                |                                      |                         |  |  |



### T200 Dual-block Thermal Cycler

#### **///Introduction**

T200 is a qualitative thermal cycler with dual blocks which are independent controlled, the advanced peltier technology brings accurate temperature control, and make the cycles reaches up to a million times. It's an ideal thermal cycler for researches of life sciences in most labs.



- Small footprint, compact design
- Two independent controlled blocks
- 3 high precise peltiers for each block
- Good temperature uniformity reduce edge effect
- New generation peltier technology, max heating up rate 6°C /sec
- 1024x768 pixel, 8 -inch color touch screen Automatically power failure recovery
- Gradient range 30°C

| <b>∞Product par</b>                         | ameters                                  |                                     |                |                                      |                      |
|---|--|-------------------------------------|----------------|--------------------------------------|----------------------|
| r roudet part                               | ameter5                                  | - P. I                              |                |                                      |                      |
| Model                                       | T200                                     | Temperature display accuracy        | 0.1℃           | Max. Cycles                          | 99                   |
| Voltage                                     | 100~240V, 50/60Hz                        | Gradient temperature range          | 30-105°C       | Max. Steps                           | 30                   |
| Tubes applied                               | 0.2ml microtubes, 8 x 0.2ml tubes strips | Gradient Set Span                   | Max. 30°C      | Power failure recovery               | Yes                  |
| Temperature Control ways                    | Block/Tube                               | Gradient Temperature                | ≤±0.3°C        | Pause function                       | Yes                  |
| Block Temperature                           | 4~105°C                                  | Gradient Temperature<br>Accuracy    | ≤±0.3°C        | 16°C Temperature<br>Holding Function | Infinite duration    |
| Timer                                       | 1s~59min59sec/<br>(0 means infinite)     | Numbers of Gradient                 | 12             | LCD display                          | Touch screen display |
| Capacity                                    | Double 48×0.2ml                          | Heating Lid<br>Temperature range    | 30°C ~110°C    | Operation system                     | Linux                |
| Block Temperature<br>Accuracy               | ≤ ±0.2°C                                 | Timer Increasing /<br>Decreasing    | -599s ~ 599s   | Touch screen type                    | Capacitive           |
| Block Temperature<br>Uniformity             | ≤ ±0.25°C                                | Temperature Increasing / Decreasing | -9.9°C ~ 9.9°C | Communication port                   | USB2.0               |
| Heating Up Rate<br>(Max.)                   | 6°C /s                                   | Touchdown PCR                       | Yes            | Max. Power                           | 800W                 |
| Cooling down Rate<br>(Max.)                 | 5°C /s                                   | Long PCR                            | Yes            | Size (W $\times$ D $\times$ H)       | 400x260x228mm        |
| Adjustable range of heating up/cooling down | 0.1~6 °C /s                              | Programs stored                     | 10000+         | Net weight                           | 9kg                  |



### **SH-6 Sample Homogenizer**

#### **#Introduction**

SH-6 sample Homogenizer is a small size lab instrument, suit for various of samples grinding. Touch screen display, easy to operate: High speed, brings high efficiency. Commonly used for sample pretreatments in industries of biology, chemistry, pharmacology, minerals, medicine, etc.



#### ///Features

- Enhanced motor, high quality bearing, touch screen
- High efficiency grinding, stable working, low noise
- Extensive speed range, custom and preset programs
- Transparent lid with protection, easy to use
- Double-position operation

| <b>∞Product parameters</b> |                        |                                   |                              |  |  |  |  |
|----------------------------|------------------------|-----------------------------------|------------------------------|--|--|--|--|
| Model                      | SH-6                   | Deceleration time                 | 2s                           |  |  |  |  |
| Speed range                | 2450rpm-4450rpm        | Grinding method                   | Dry, Wet                     |  |  |  |  |
| Sample capacity            | 6*2ml /2*5ml           | Adapter material                  | POM/Nylon                    |  |  |  |  |
| Feed size                  | According to tube size | Safety security                   | Immediate stop once lid open |  |  |  |  |
| Final fineness             | ~5µm                   | Voltage                           | AC100-240V 50/60Hz           |  |  |  |  |
| Grinding beads diameter    | 0.1-5mm                | Prower                            | 250W                         |  |  |  |  |
| Acceleration time          | 2s                     | Dimension $(W \times D \times H)$ | 351mmX215mmX202mm            |  |  |  |  |

| <b>"Accessories</b>                               |         |           |          |          |  |
|---|---------|-----------|----------|----------|--|
| Adapter type                                      | Picture | Tube type | Capacity | Material |  |
| For 5ml tubes                                     |         |           | 1        | PC       |  |
| For 2ml tubes                                     | 669     |           | 3        | PC       |  |
| Notes: Tube adapters should be used symmetrically |         |           |          |          |  |



# Grinder-96 High-throughput Homogenizer

#### ///Introduction

Grinder-96 homogenizes a broad variety of biological samples due to high frequency vertical vibration, which is controlled by frequency converter. Various adaptors for options accommodating tubes from 2ml to 50ml, commonly used for sample pretreatments in industries of biology, microbiology, medical analysis and etc. Touch screen and UI design are user-friendly and easy-to-operate, it will be a good assistant in a laboratory.



- Touch screen
- Applied to various samples
- Replaceable tube adaptors

- Maintenance free, low noise
- Reinforced motor with strengthened main shaft
- Adjustable frequency, editable program

| <b>∞Product parameters</b> |   |                              |                                      |  |  |  |  |
|----------------------------|---|------------------------------|--------------------------------------|--|--|--|--|
| Model                      | Grinder-96  | Acceleration Time            | Within 2 sec                         |  |  |  |  |
| Frequency Range            | 30HZ-70Hz   | Deceleration Time            | Within 2 sec                         |  |  |  |  |
| Feed size                  | According to tube size  | Tube Holder Materials        | PTFE / Alloy steel / Aluminiun alloy |  |  |  |  |
| Final Fineness             | ~5µm  | Safety Guard                 | Emergency stop button                |  |  |  |  |
| Grinding beads diameter    | 0.1-30mm  | Voltage                      | AC100-120V/AC200-240V50/60Hz         |  |  |  |  |
| Noise Level                | <55db   | Size $(W \times D \times H)$ | 460x410x520 (mm)                     |  |  |  |  |
| Grinding method            | wet grinding, dry grinding, cold grinding<br>(no refrigerated function) | Weight                       | 52kg                                 |  |  |  |  |
| Grinding beads material    | Alloy steel, chrome steel, zirconia,<br>tungsten carbide, quartz sand   | Prower                       | 450W                                 |  |  |  |  |
| Capacity                   | 32×2ml/24×2ml/48×2ml/64×2ml/96×2ml/24×5ml/8×15ml/4×25ml//2×50ml         |                              |                                      |  |  |  |  |



#### Optional accessories

| No. | Name                   | Material  | Picture                                 | Tube type | Max.<br>tubes Qty | Sample<br>Feed size | Sample<br>Vol.per<br>tube | Beads size | Beads Qty<br>per tube |
|-----|------------------------|-----------|---|-----------|-------------------|---------------------|---------------------------|------------|-----------------------|
| 1   | 24x2ml<br>Tube adapter | Plastic   |   |           | 24                | 1mm                 | 0.2-0.5ml                 | 3mm        | 2-3                   |
| 2   | 32x2ml<br>Tube adapter | Plastic   |   |           | 32                | 1mm                 | 0.2-0.5ml                 | 3mm        | 2-3                   |
| 3   | 48x2ml<br>Tube adapter | Plastic   |   |           | 48                | 1mm                 | 0.2-0.5ml                 | 3mm        | 2-3                   |
| 4   | 64x2ml<br>Tube adapter | Plastic   |   |           | 64                | 1mm                 | 0.2-0.5ml                 | 3mm        | 2-3                   |
| 5   | 96x2ml<br>Tube adapter | Plastic   |   |           | 96                | 1mm                 | 0.2-0.5ml                 | 3mm        | 2-3                   |
| 6   | 24X5ml<br>Tube adapter | Plastic   |   |           | 24                | 2mm                 | 0.5-2.0ml                 | 5mm        | 2-3                   |
| 7   | 8X15ml<br>Tube adapter | Plastic   |   | I         | 8                 | 5mm                 | 2.0-4.0ml                 | 10mm       | 1                     |
| 8   | 4X25ml<br>Tube adapter | Plastic   |   | T         | 4                 | 6mm                 | 4.0-10.0ml                | 15mm       | 1                     |
| 9   | 2X50ml<br>Tube adapter | Plastic   | 0.0                                     | T         | 2                 | 8mm                 | 8.0-20.0ml                | 20mm       | 1                     |
| 10  | 24x2ml<br>Tube adapter | Al. alloy | 000000000000000000000000000000000000000 |           | 24                | 1mm                 | 0.2-0.5ml                 | 3mm        | 2-3                   |
| 11  | 32x2ml<br>Tube adapter | Al. alloy | 000000000000000000000000000000000000000 |           | 32                | 1mm                 | 0.2-0.5ml                 | 3mm        | 2-3                   |
| 12  | 48x2ml<br>Tube adapter | Al. alloy | 2223                                    |           | 48                | 1mm                 | 0.2-0.5ml                 | 3mm        | 2-3                   |



### BM-2100 Ball Mill

#### ///Introduction

This BM-2100 ball mill is designed with various optional accessories for modern laboratory applications, friendly UI design and preset programs can help users save a lot time. It can process small amount as well as large batch samples of plants, animal tissue and small quantity samples in dry or wet condition. High speed vibration provides an excellent mixing and homogenizing to samples in only a few seconds. This mill can work well in researches of biology, chemistry, pharmacology, Minerals, Medicine and etc.



- · Enhanced motor, high quality bearing
- Touch screen, custom and preset programs
- High efficiency grinding, maintenance-free

- Safe security with protective hood
- Double-position operation
- Various accessories/adapters for option

| <b>™Product parame</b>  | ters  |                                     |                               |  |  |  |
|-------------------------|---|-------------------------------------|-------------------------------|--|--|--|
| Model                   | BM-2100   | Deceleration                        | 2s                            |  |  |  |
| Speed                   | 180rpm-2100rpm  | Grinding method                     | Dry or Wet                    |  |  |  |
| Sample batch            | 2 batches   | Tube adapter material               | POM/ Nylon/Al Alloy           |  |  |  |
| Feed size               | According to tubes size   | Custom grinding tube material       | Teflon/Stainless steel        |  |  |  |
| Final fineness          | ~5µm  | Votalge                             | AC100-120V/AC200-240V 50/60Hz |  |  |  |
| Grinding beads diameter | 0.1-30mm  | Dimension ( $W \times D \times H$ ) | 530mmX350mmX311mm             |  |  |  |
| Acceleration            | 2s  | Weight                              | 40kg                          |  |  |  |
| Prower                  | 450W  |                                     |                               |  |  |  |
| Sample capacity         | 96x2ml/64x2ml/48x2ml/16x2ml/10x5ml<br>Custom grinding tubes:2x15ml /2x25ml / 2x35ml /2x50ml<br>Standard tubes: 8x50ml |                                     |                               |  |  |  |



| <b>///</b> O | ptional Ac             | dapters |                                   |           |                     |                            |                        |                       |
|--------------|------------------------|---------|-----------------------------------|-----------|---------------------|----------------------------|------------------------|-----------------------|
| No.          | Name                   | Picture | Max. tubes<br>Qty                 | Tube type | Sample max.<br>size | Sample<br>Vol. per<br>tube | Grinding beads<br>type | Beads Qty<br>per tube |
| 1            | 8x2ml<br>Tube adapter  | 40      | 8 (1 adapter)<br>16 (2 adapters)  |           | 1mm                 | 0.2-0.5ml                  | 3mm                    | 2-3                   |
| 2            | 24x2ml<br>Tube adapter | End.    | 24 (1 adapter)<br>48 (2 adapters) |           | 1mm                 | 0.2-0.5ml                  | 3mm                    | 2-3                   |
| 3            | 32x2ml<br>Tube adapter |         | 32 (1 adapter)<br>64 (2 adapters) |           | 1mm                 | 0.2-0.5ml                  | 3mm                    | 2-3                   |
| 4            | 48x2ml<br>Tube adapter |         | 48 (1 adapter)<br>96 (2 adapters) |           | 1mm                 | 0.2-0.5ml                  | 3mm                    | 2-3                   |
| 5            | 5x5ml<br>Tube adapter  |         | 5 (1 adapter)<br>10 (2 adapters)  |           | 2mm                 | 0.5-2.0ml                  | 5mm                    | 2-3                   |
| 6            | 4X50ml<br>Tube adapter | ***     | 4 (1 adapter)<br>8 (2 adapters)   |           | 8mm                 | 8.0-20.0ml                 | 5mm                    | 10                    |

Notes: Max. speed 1200rpm for adapters 4X50ml. Stainless steel tubes should be used symmetrically.

#### Sample Vol. per Sample max. size Grinding beads Beads Qty Max. tubes Tube type Picture No. Name Qty type per tube tube 15ml stainless 2 5mm 2.0-4.0ml 10mm 1 grinding tube steel 25ml stainless 6mm 4.0-10.0ml 15mm 1 grinding tube steel 35ml stainless 15mm or 3 2 6.0-15.0ml 1 6mm grinding tube 20mm steel

Notes: Stainless steel tubes should be used symmetrically.

stainless

steel

Knob spanner

50ml grinding tube

**Optional Adapters** 



2

Tube opener

8mm

8.0-20.0ml



20mm

1



### **Mini Dry Bath Incubator**

#### ///Introduction

Mini Dry Bath Incubator is controlled by PID, applied to vehicle power supply due to small palm-size and light weight. Widely used in rapid inspection kit or small labs

#### **#Features**

- Display with timer and temperature
- DC 12V, built-in over temperature protect
- Automatic failure detection with buzzer alarm
- Easy to change blocks
- 9 Stored programs, each contains 3 segments







Various blocks



Over-temperature protect



High precision



LCD display

| "Product p                            | arameters  |                  |                |                                   |                     |            |               |  |
|---------------------------------------|------------|------------------|----------------|-----------------------------------|---------------------|------------|---------------|--|
| Model                                 | MiniH-100D | MiniH-100L       | MiniC-100      | Model                             | MiniH-100D          | MiniH-100L | MiniC-100     |  |
| Temperature<br>Control Range          | RT+5°C     | ~100°C           | RT-25°C ~100°C | Max.Temperature                   |                     |            |               |  |
| Temperature Set<br>Range              | 0°C ~      | 0°C ~100°C       |                | Max.Power                         | 48W                 | 60W        | 120W          |  |
| Heating Up<br>Rate(20°C to<br>100°C ) | ≤15m       |                  |                |                                   |                     |            | ≤ 30m 100-    |  |
| Temperature<br>Control Accuracy       |            | ±0.3°C           |                | Cooling Down<br>Rate              | Natural cooling     |            | 25°C          |  |
| Temperature<br>Stability @40°C        |            | ±0.3°C           |                |                                   |                     |            | ≤ 30m RT 20°C |  |
| Temperature<br>Stability @100°C       | ±0.3°C     |                  |                | Weight                            | ≤1kg                |            | ≤ 1.5kg       |  |
| Display Accuracy                      | 0.1℃       |                  |                | Dimension $(W \times D \times H)$ | 110X153X98 110X153X |            | K137 (mm)     |  |
| Timer                                 | 1-99h,1-   | 99m,1-99s,0: int | finite time    | Heating Lid                       | No                  | Yes        | No            |  |





//M1



∞M2



∞M3



//M4



//M5



‴M6



///M7



//M8

| <b>"Option</b> | "Optional Blocks      |               |      |  |               |  |  |  |  |  |  |  |
|----------------|-----------------------|---------------|------|--|---------------|--|--|--|--|--|--|--|
| Туре           | Tube Type             | Type Capacity | Туре | Tube Type  | Type Capacity |  |  |  |  |  |  |  |
| M1             | 0.2mltube (φ6.1×17)   | 32            | M5   | Cuvette  | 8             |  |  |  |  |  |  |  |
| M2             | 0.5ml tube (φ8×23)    | 24            | M6   | 15ml tube (Working without lid) (\$\phi16.9\times98\$) | 6             |  |  |  |  |  |  |  |
| М3             | 1.5ml tube (φ10.8×31) | 15            | M7   | 50ml tube (Working without lid) (φ29.5×90)             | 2             |  |  |  |  |  |  |  |
| M4             | 2.0ml tube (φ10.8×31) | 15            | M8   | 5ml tube (Working without lid) (φ13.5×30)              | 12            |  |  |  |  |  |  |  |



### **G100 Dry Bath Incubator**





Various blocks



Over-temperature protection



High precision



Time

#### ///Introduction

G100 is a dry block heater controlled by microcomputer. It can be widely used in sample preservation and reaction, DNA amplification and pre-denaturation of electrophoresis, serum coagulation, etc. in fields of medicine, chemical industry, food safety, quality control and environment.

- · LED display with timer
- High precision temperature
- Built-in over-temperature protect
- Small size with transparent lid
- Various blocks can protect samples from contamination

| <b>™Product parameters</b>   |                         |                                     |                           |
|------------------------------|-------------------------|-------------------------------------|---------------------------|
| Model                        | G100                    | Temperature Accuracy                | ±0.3°C                    |
| Heating Up Rate              | ≤ 10m ( 20°C to 100°C ) | Timer                               | 1m-99h59m/0:infinite time |
| Temperature Stability @40°C  | ±0.3°C                  | Max.Temperature                     | 105°C                     |
| Temperature Stability @100°C | ±0.3°C                  | Power                               | 150W                      |
| Display Accuracy             | 0.1°C                   | Weight                              | 1.5kg                     |
| Temperature Control Range    | RT+5°C ~105°C           | Dimension (W $\times$ D $\times$ H) | 160*176*121 (mm)          |
| Temperature Set Range        | 0°C ~105°C              |                                     |                           |

| //Op | otional Blocks      |      |                     | ∞C1        | #C2        | ∞ <b>C3</b> | ∞C4 |
|------|---------------------|------|---------------------|------------|------------|-------------|-----|
| Туре | Capacity            | Туре | Capacity            |            |            |             |     |
| C1   | 96×0.2ml (φ6.1×17)  | C5   | 18×5.0ml (φ13.5×30) |            |            |             |     |
| C2   | 58×0.5ml (φ8×23)    | C6   | 24×0.5ml+30×1.5ml   | <b>∞C5</b> | <b>∞C6</b> | ∞ <b>C7</b> |     |
| C3   | 39×1.5ml (φ10.8×31) | C7   | 58×6mm (φ6.5×31)    |            |            |             |     |
| C4   | 39×2.0ml (ф10.8×31) |      |                     |            |            |             |     |



### GH-100 / GC-100 Dry Bath Incubator

#### ///Introduction

GH-100/GC-100 is a microprocessor-controlled device with LCD, can control the temperature precisely, which greatly shortens the experimental time and improves the efficiency. It can be widely used in samples cultivation, preservation and reaction. It has multi-purpose functions such as heating and custom programs to meet the needs of different users.



- 5 stored-programs, each can run seperately, also can be linked and cycled
- A variety of alloy aluminum blocks easy to change
- · Fast heating speed, precise and stable
- · Controlled by PID, high accuracy and good conformity
- LCD display with timer and temperature
- Temperature calibration
- Buzzer alarm after program over



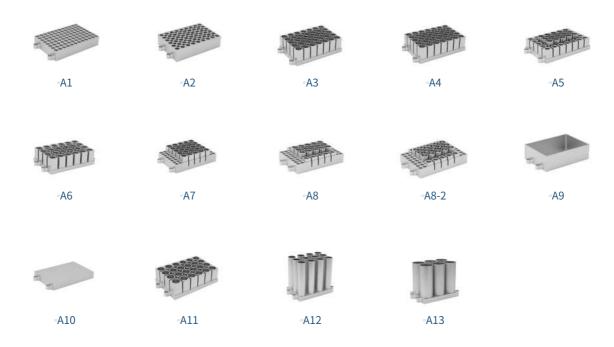






| <b> </b>                  |                                 |                |                   |                          |   |  |  |  |  |  |  |
|---------------------------|---------------------------------|----------------|-------------------|--------------------------|---|--|--|--|--|--|--|
| Model                     | GH-100 GC-100                   |                | Model             | GH-100                   | GC-100  |  |  |  |  |  |  |
| Temperature control mode  | Heating membrane Semi-conductor |                | Heating Up Rate   | ≤ 15min( 20°C to 100°C ) |   |  |  |  |  |  |  |
| Temperature control range | RT+5°C ~100°C                   | RT-30°C ~100°C | Max.Temperature   | 100°C                    |   |  |  |  |  |  |  |
| Temperature Set<br>Range  | 5° C~100° C                     | -10°C ~100°C   |                   |                          | ≤ 30min 100-25°C  |  |  |  |  |  |  |
| Temperature<br>accuracy   | ±0.                             | 3°C            | Cooling Down Rate |                          | ≤ 30min Cooling<br>down 30degrees<br>from room<br>temperature(test<br>under RT26°C) |  |  |  |  |  |  |
| Temperature<br>Stability  | ±0.                             | 3°℃            | Power             | 150W                     | 130W  |  |  |  |  |  |  |
| Timer                     | 1m-99h59m/0: infinite time      |                | Weight            | 2.8kg                    | 4.3kg   |  |  |  |  |  |  |
| Display accuracy          | Display accuracy 0.1°C          |                |                   | 220x300x                 | 170 (mm)  |  |  |  |  |  |  |





### Optional lids







<sup>™</sup>L-B 145×105×62.5



"L-C 145×105×122.5

| Item | Model | Compliance to |
|------|-------|---------------|
| Lid  | L-A   | A1-A9         |
| Lid  | L-B   | A10-A11       |
| Lid  | L-C   | A12-A14       |

### HC-100/HH-100/GH/GC-100 Series blocks

| /// <b>(</b> | Optional Blocks                 |                         |      |                                     |                         |      |                                |                         |
|--------------|---------------------------------|-------------------------|------|-------------------------------------|-------------------------|------|--------------------------------|-------------------------|
| Туре         | Capacity                        | Max.<br>Tempe<br>rature | Туре | Capacity                            | Max.<br>Tempe<br>rature | Туре | Capacity                       | Max.<br>Tempe<br>rature |
| A1           | 96×0.2ml PCR plate<br>(φ6.7×16) | 100°C                   | A6   | 24×φ12mm ×30 tubes                  | 100°C                   | A10  | 96×0.2ml Elisa(Flat<br>bottom) | 100°C                   |
| A2           | 54×0.5ml tubes (φ8×23)          | 100°C                   | A7   | 32×0.2ml+25×1.5ml tubes             | 100°C                   | A11  | 24×5ml (φ13.5×30)              | 100°C                   |
| А3           | 35×1.5ml tubes<br>(φ10.8×31)    | 100°C                   | A8   | 32×0.2ml+10×0.5ml+15×1.5ml<br>tubes | 100°C                   | A12  | 12×15ml (φ16.9×98)             | 100°C                   |
| A4           | 35×2.0ml tubes<br>(φ10.8×31)    | 100°C                   | A8-2 | 32×0.2ml+10×0.5ml+15×2.0ml<br>tubes | 100°C                   | A13  | 6×50ml (φ29.5×90)              | 100°C                   |
| A5           | 20×0.5ml+15×1.5ml tubes         | 100°C                   | A9   | 103×67×30( water tank )             | 100°C                   | A14  | 12×10ml (φ15.9×65)             | 100°C                   |



### DC-100/DH-100 Heated Lid Dry Bath Incubator



#### ///Introduction

DC-100/DH-100 is a Dry Bath Incubator with heated lid controlled by a microcomputer, excellent temperature control due to advanced semiconductor technology (Peltier-Based), which can work as a thermal cycler. DH-100 can heat, DC-100 can heat and cool, they can be used for sample preservation and rection, DNA amplification and protein denaturation treatment, and etc.

#### ///Features

• DC-100 : Heat & Cool with heated lid, programmable thermal

cycler programs are available

TFT TFT display

Good Temperature uniformity

• Impact design, small size

• Heated lid function can be on/off according to needs

• High precise and good uniformity in temperature, fast heating and cooling rate



• 5 inch touch screen display temperature and time, easy to edit, heating lid temperature can be individually set/displayed

• DH-100: Heat with heated lid

| <b>‴Product par</b>                | ameters                |                                       |                                |                           |        |  |
|------------------------------------|------------------------|---------------------------------------|--------------------------------|---------------------------|--------|--|
| Model                              | DC-100                 | DH-100                                | Model                          | DC-100                    | DH-100 |  |
| Voltage                            | AC100~230V,<br>50/60Hz | AC100~120V/<br>AC100~240V,<br>50/60Hz | Display Accuracy               | 0.1                       | °С     |  |
| Block Temperature<br>Setting Range | R.T30° ~105C           | R.T. +5°C ~105°C                      | Heating Up Rate<br>(R.T. 25°C) | 37°C -100°C ≤ 7°C /min    |        |  |
| Temperature Set<br>Range           | -10°C ~105°C           | 0°C ~105°C                            | Cooling Rate                   | 100°C -37°C≤ 7°C /<br>min |        |  |
| Lid Temperature<br>Setting Range   | R.T. +5°C              | Z~110°C                               | Max.Steps                      | 10                        |        |  |
| Timer                              | 1s~99min59sec (        | 0 means infinite)                     | Max.Cycles                     | 99                        |        |  |
| Block Temperature<br>Accuracy      | ±0.5°C                 |                                       | Max.Power                      | 300W 180W                 |        |  |
| Lid Temperature<br>Accuracy        | ±1.                    | 0°C                                   | Dimension (W×D×H)              | 200x315x175 (mm)          |        |  |
| Block Temperature<br>Uniformity    | ±0.3°C (@37°C)         |                                       | Weight                         | 3.3kg                     | 2.8kg  |  |

| <sup>™</sup> Optional Blocks |                       |  |  |  |  |  |  |  |
|------------------------------|-----------------------|--|--|--|--|--|--|--|
| Туре                         | Capacity              |  |  |  |  |  |  |  |
| R1                           | 96×0.2ml (φ5.37×10.5) |  |  |  |  |  |  |  |
| R2                           | 54×0.5ml (φ8×20.3)    |  |  |  |  |  |  |  |
| R3                           | 35×1.5ml (φ10.8×30.5) |  |  |  |  |  |  |  |
| R4                           | 35×2.0ml (φ10.8×32)   |  |  |  |  |  |  |  |





### **GA150 Dry Bath Incubator**

















#### **#Introduction**

GA150 digital dry bath is controlled by microcomputer, widely used in preservation and reaction of the samples, DNA amplification and pre-denaturation of electrophoresis, serum coagulation, etc.

#### **#Features**

- LED display with timer
- Automatic fault detection with buzzer alarm
- Temperature calibration function
- Various blocks, easy to clean and disinfect
- Built-in over-high temperature protection





High precision

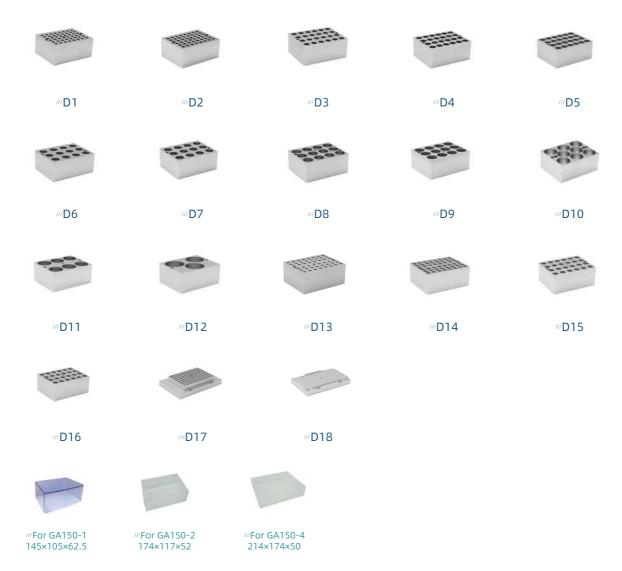


Over-temperature protect



| <b>™Product param</b>           | eters                  |              |         |         |                                   |                            |              |        |                     |
|---------------------------------|------------------------|--------------|---------|---------|-----------------------------------|----------------------------|--------------|--------|---------------------|
| Model                           | GA150-1                | GA150-<br>1A | GA150-2 | GA150-4 | Model                             | GA150-1                    | GA150-<br>1A | GA150- | GA150-4             |
| Temperature Control<br>Range    |                        | RT+5°C       | ~150°C  |         | Display accuracy                  | 0.1℃                       |              |        |                     |
| Heating Up Rate                 | ≤ 10m (20°C to 100°C ) |              |         |         | Timer                             | 1m-99h59m/0: infinite time |              |        |                     |
| Heating op Rate                 | ≤ 30m (20°C to 150°C ) |              |         | Timei   | THE STATES THE CHIEF              |                            |              |        |                     |
| Temperature Stability<br>@40°C  |                        | ±0.          | 3°C     |         | Max.Temperature                   | 150℃                       |              |        |                     |
| Temperature Stability<br>@100°C |                        | ±0.          | 5°C     |         | Power                             | 200W                       | 40           | DW     | 600W                |
| Temperature Stability<br>@120°C |                        | ±1           | °C      |         | Dimension $(W \times D \times H)$ | 220*20                     | 50*100 (r    | nm)    | 220*360*100<br>(mm) |





Important Notes:D17/D18 are used in GA150-1A

| ‴Op  | tional Blocks   |          |                              |      |                        |          |                              |
|------|-----------------|----------|------------------------------|------|------------------------|----------|------------------------------|
| Туре | Tube diameter   | Capacity | size $(W \times D \times H)$ | Туре | Tube diameter          | Capacity | size $(W \times D \times H)$ |
| D1   | 6mm (φ6.5×47)   | 48       | 96.5×76.5×50 (mm)            | D10  | 26mm (φ26.5×47)        | 8        | 96.5×76.5×50 (mm)            |
| D2   | 7mm (φ7.5×47)   | 48       | 96.5×76.5×50 (mm)            | D11  | 28mm (φ28.5×47)        | 6        | 96.5×76.5×50 (mm)            |
| D3   | 10mm (φ10.5×47) | 24       | 96.5×76.5×50 (mm)            | D12  | 38mm (φ38.5×47)        | 3        | 96.5×76.5×50 (mm)            |
| D4   | 12mm (φ12.5×47) | 24       | 96.5×76.5×50 (mm)            | D13  | 0.2ml tubes(φ6.1×17)   | 48       | 96.5×76.5×50 (mm)            |
| D5   | 13mm (φ13.5×47) | 24       | 96.5×76.5×50 (mm)            | D14  | 0.5ml tubes (φ8×23)    | 48       | 96.5×76.5×50 (mm)            |
| D6   | 15mm (φ15.5×47) | 12       | 96.5×76.5×50 (mm)            | D15  | 1.5ml tubes( φ10.8×31) | 24       | 96.5×76.5×50 (mm)            |
| D7   | 16mm (φ16.5×47) | 12       | 96.5×76.5×50 (mm)            | D16  | 2ml tubes (φ10.8×31)   | 24       | 96.5×76.5×50 (mm)            |
| D8   | 19mm (φ19.5×47) | 12       | 96.5×76.5×50 (mm)            | D17  | 0.2ml (φ6.7×16)        | 96       | 96.5×153×33.5 (mm)           |
| D9   | 20mm (φ20.5×47) | 12       | 96.5×76.5×50 (mm)            | D18  | Flat                   | 96 Elisa | 96.5×153×22.5 (mm)           |



### **Water Bath series**









///WH-10

#### **#Introduction**

Water Bath is a multi-function thermostat water tank controlled by PID. It's an indispensable tool in the fields of pharmaceutical, biochemistry, scientific research, environmental protection and etc.



TFT Display



Overheat protection



Various Tubes



- High quality water tank: Wearproof and corrosion-resistant stainless steel coated by Teflon
- With large-diameter drain valve for quickly discharge
- 10 programs stored for fast operation
- Controlled by PID, high precision and tiny fluctuation
- Big size TFT display
- Built-in liquid level sensor with buzzer alarm
- Good uniformity due to a big heating plate fixed under the tank bottom

| <b> </b>                                |                       |                     |                  |                  |  |  |
|---|-----------------------|---------------------|------------------|------------------|--|--|
| Mode                                    | WH-2 WH-3A WH-5 WH-10 |                     |                  |                  |  |  |
| Voltage                                 |                       | AC100~120V/AC20     | 00~240V 50~60Hz  |                  |  |  |
| Temprature Control Range                | RT. +5~100°C          | RT. +5°C ~99°C      | RT. +5           | ~100°C           |  |  |
| Temperature Set Range                   | 0°C ~100°C            | 0°C ~99°C           | 0°C ~            | -100°C           |  |  |
| Timer                                   | 1m~99h59m             |                     |                  |                  |  |  |
| Temp.Accuracy                           | ±0.3°C                |                     |                  |                  |  |  |
| Uniformity                              |                       | ±0.3°C (            | (37°C)           |                  |  |  |
| Capacity                                | 2L                    | 2Lx3                | 5L               | 10L              |  |  |
| Power                                   | 250W                  | 750W                | 550W             | 1000W            |  |  |
| Tank Dimension( $W \times D \times H$ ) | 135x150x150 (mm)      | 3 ×135x150x150 (mm) | 155x300x150 (mm) | 240x300x150 (mm) |  |  |
| $Dimension(W\times D\times H)$          | 205x253x204 (mm)      | 625x253x204 (mm)    | 205x395x210 (mm) | 290x395x210 (mm) |  |  |
| Weight                                  | 2                     | 2 5.5 3.5           |                  | 8.75             |  |  |
| Drain Method                            | Manual                | Drain pump          | Manual           | Drain outlet     |  |  |
| Liquid level alarm                      | Yes                   | Yes                 | Yes              | Yes              |  |  |



### WF80-2 Microplate Incubator

#### ///Introduction

This incubator is designed for microplates, controlled by PID with timer and incubation. Compatible with different plates like ELISA 96 /384 wells plates, cell culture plates (24 /48 /96 wells).









- LCD display, friendly design
- · Heated lid ensures temperature uniformity
- Controlled by PID, stable temperature

- Buzzer alarm when program ends up
- Safe to use

| <b>™Product parameters</b> |                         |                                     |                            |
|----------------------------|-------------------------|-------------------------------------|----------------------------|
| Model                      | WF80-2                  | Timer                               | 1m-99h59m/0: infinite time |
| Temperature Control Range  | RT +5~80°C              | Capacity                            | 2 plates                   |
| Temperature Set Range      | 5°C ~80°C               | Voltage                             | AC100-230V 50-60Hz         |
| Temperature Accuracy       | ±0.3°C                  | Max.Power                           | 150W                       |
| Temperature Uniformity     | ±0.3°C                  | Weight                              | 4.0kg                      |
| Heating Up Rate            | < 15min( 20°C to 80°C ) | Dimension (W $\times$ D $\times$ H) | 280x278x150 (mm)           |



### HC-100 / HH-100 Thermo Shaker Incubator

#### **#Introduction**

This thermo mixer (HH-100) /cooling thermo shaker (HC-100) is designed for a variety of molecular biology applications that require consistent and precise results. Due to the combination of DC brushless motor and semiconductor cooling technology, it greatly shortens the time of experiment and improves the efficiency. It is an ideal device for sample incubation, catalysis, mixing and preservation.





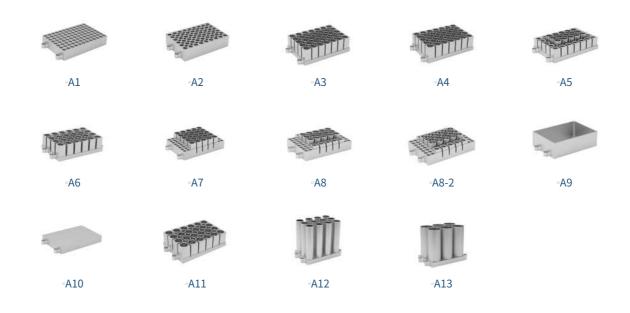






| <b>™Product parameters</b>      |                     |                  |  |  |          |  |  |
|---------------------------------|---------------------|------------------|--|--|----------|--|--|
| Model                           | HC-100              | HH-100           | Model  | HC-100   | HH-100   |  |  |
| Temperature Control<br>Modes    | Semi-conductor      | Heating membrane | Amplitude  | 2mm (Horizontal rotation)                                      |          |  |  |
| Temperature Control<br>Range    | RT-20°C ~100°C      | RT+5°C ~100°C    | Timer  | 1m-99h59m/0: infinite time                                     |          |  |  |
| Temperature Set<br>Range        | 0°C ~100°C 5~100° C |                  | Heating Up Rate  | <15min(25°C ~100°C )   |          |  |  |
| Temperature<br>Accuracy         | ±0.                 | 3°C              | Cooling Down Rate (  | Rate ( by time)<br>≤ 25min (Cool down<br>from 30 °C to 10 °C ) |          |  |  |
| Temperature<br>Stability @40°C  | ±0.                 | 3°C              | by time)   | ≥ 7°C /min ( 100°C to 20°C )                                   |          |  |  |
| Temperature<br>Stability @100°C | ±0.3℃               |                  | Max.Power  | 150W   | 180W     |  |  |
| Display Accuracy                | 0.1℃                |                  | $\begin{array}{c} \text{Dimension} \\ (W \times D \times H) \end{array}$ | 220x300x   | 170 (mm) |  |  |
| Speed Range                     | 300~1500 rpm        | 300~2000 rpm     | Weight   | 7.9 kg   | 8.3kg    |  |  |





#### Optional lids



145×105×42.5





"L-B 145×105×62.5



"L-C 145×105×122.5

# ItemModelCompliance toLidL-AA1-A9LidL-BA10-A11LidL-CA12-A14

Notes: Block A1+0.2ml tubes/8×0.2ml strips , choose L-A Block A1+skirted pcr plate, choose L-B

### HC-100/HH-100/GH/GC-100 Series blocks

| /// <b>C</b> | #Optional Blocks                 |                         |               |      |                                  |                         |               |  |
|--------------|----------------------------------|-------------------------|---------------|------|----------------------------------|-------------------------|---------------|--|
| Туре         | Capacity                         | Max.<br>Tempe<br>rature | Max.<br>Speed | Туре | Capacity                         | Max.<br>Tempe<br>rature | Max.<br>Speed |  |
| A1           | 96×0.2ml PCR plate(φ6.7×16)      | 100°C                   | 2000rpm       | A8-2 | 32×0.2ml+10×0.5ml+15×2.0ml tubes | 100°C                   | 2000rpm       |  |
| A2           | 54×0.5ml tubes (φ8×23)           | 100°C                   | 2000rpm       | A9   | 103×67×30( water tank )          | 100°C                   | 2000rpm       |  |
| А3           | 35×1.5ml tubes (φ10.8×31)        | 100°C                   | 2000rpm       | A10  | 96×0.2ml Elisa(Flat bottom)      | 100°C                   | 2000rpm       |  |
| A4           | 35×2.0ml tubes (φ10.8×31)        | 100°C                   | 2000rpm       | A11  | 24×5ml (φ10.8×31)                | 100°C                   | 2000rpm       |  |
| A5           | 20×0.5ml+15×1.5ml tubes          | 100°C                   | 2000rpm       | A12  | 12×15ml (φ16.9×98)               | 100°C                   | 700rpm        |  |
| A6           | 24×φ12mm tubes                   | 100°C                   | 2000rpm       | A13  | 6×50ml (φ29.5×90)                | 100°C                   | 700rpm        |  |
| A7           | 32×0.2ml+25×1.5ml tubes          | 100°C                   | 2000rpm       | A14  | 12×10ml (φ15.9×65)               | 100°C                   | 700rpm        |  |
| A8           | 32×0.2ml+10×0.5ml+15×1.5ml tubes | 100°C                   | 2000rpm       |      |                                  |                         |               |  |



### **MIX-S Mini Vortex Mixer**

#### ///Introduction

When you look for a basic, fixed speed vortex mixer with a small footprint for your limited bench space, look no further than our MIX-S. Despite its small size, the MIX-S has a stable base to remain in place when in use. When you press your tube down on the top cup, the 3500rpm and small 4mm orbit create a 'vibratory' motion to quickly and efficiently mix most tube sizes







#### "Features"

- Small and light
- Suitable for vortex shaking micro tubes and centrifuge tubes
- High speed with 3500rpm
- External 12V voltage adapter, easy to carry
- Rubber suction feet, makes vibration stable and reliable



Touch



Max. capacity 50ml



Suitable for various tubes

| <sup>™</sup> Product parameters |                              |              |       |                                |                        |  |
|---------------------------------|------------------------------|--------------|-------|--------------------------------|------------------------|--|
| Model                           | MIX-S                        | Max.Capacity | 50ml  | Power                          | 12W                    |  |
| Speed                           | 3500rpm                      | Motor Power  | 5W    | $Dimension(W\times D\times H)$ | 98.5 x101 x 66<br>(mm) |  |
| Amplitude                       | 4mm ( Horizontal vibration ) | Voltage      | DC12V | Net.Weight                     | 0.55kg                 |  |



### MIX-2500 Mini Vortex Mixer

#### **///Introduction**

MIX-2500 is a high efficiency benchtop mixer, mixing with two operation modes "Touch" and "Continuous" vortex for samples like tissues, cells, bacterial liquid, chemical reagents, etc. It is compatible with 0.2-50ml test tubes and small vessels less than 108mm in diameter for life science, physical and chemical analysis fields.



#### *™*Feature

- Multifunction and shockproof, suitable for high-speed mixing
- Touch and continuous mixing
- Adjustable speed with 0-2800rpm
- Reliable and durable, easy to exchange optional platforms for tubes



Adjustable speed



Near silence



Optional platforms

| <b> </b>         |                      |               |                               |                                  |                         |  |
|------------------|----------------------|---------------|-------------------------------|----------------------------------|-------------------------|--|
| Model            | MIX-2500             | Running Modes | Contious/ Touch<br>vortex     | Power                            | 60W                     |  |
| Operation        | Touch/Continuous     | Speed         | 0 ~2800rpm                    | $Dimension(W \times D \times H)$ | 134 x 156 x 150<br>(mm) |  |
| Orbital Diameter | 3.6mm                | Timer         | /                             | Net.Weight                       | 2.4kg                   |  |
| Shaking Way      | Horizontal vibration | Voltage       | AC 220V / AC 110V,<br>50/60Hz | Optional accessories             | Refer to list below     |  |

| <b>"Op</b> " | <sup>™</sup> Optional Accessories:  |  |  |  |  |
|--------------|---|--|--|--|--|
| Type         | Accessories   |  |  |  |  |
| X1           | Rubber cup used with X2, for tubs and small vessels less than 30mm in diameter    |  |  |  |  |
| X2           | Plastic round tray, used with all other accessories                               |  |  |  |  |
| Х3           | Rubber dimpled mat used with X2,for tubes or vessels less than 108mm in diameter. |  |  |  |  |
| X4           | Foam Block used with X2,for 0.2ml test tube, Φ5mm*96                              |  |  |  |  |
| X5           | Foam Block used with X2, for 0.5ml test tube, Φ6.6mm*37                           |  |  |  |  |
| Х6           | Foam Block used with X2, for 1.5/2.0ml test tube, Φ9.8mm*24                       |  |  |  |  |
| X7           | Foam Block used with X2, for 15ml test tube, Φ14mm*8                              |  |  |  |  |
| X8           | Foam Block used with X2, for 50ml test tube, Φ26.2mm*4                            |  |  |  |  |
| Х9           | Microplate tray for various micro plates  |  |  |  |  |
| X11          | Foam Block used with X2, for 0.2ml*16+0.5ml*12+1.5/2.0ml*12 test tube             |  |  |  |  |
| X12          | Foam Block used with X2, for 5ml/7ml*10 test tube                                 |  |  |  |  |





### **VM-100 Rotating Mixer**

#### ///Introduction

VM-100 is a test tube rotator with adjustable rotation speed, hovering and shaking functions. It provides efficient and gentle mixing, keeping biological samples in suspension. It is applied to prevent blood clotting, latex diagnosis, immunoprecipitation, etc., which is ideal for laboratory research fields such as molecular biology, biochemistry, clinical, histochemistry, etc.







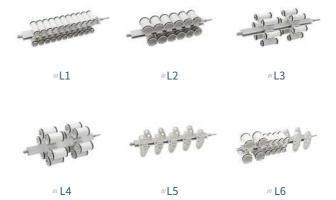




- Suitable for all test tubes of any 1.5ml~50ml
- Free combination of test tube clamps
- 2 additional programmable settings (6 segments editable per self-program)
- 10 different built-in programs (rotation and vibration)
- Adjustable speed and time of vibration at any angle
- For use in cold storage or incubators

| Product parameters |                 |                                      |                    |  |  |  |
|--------------------|-----------------|--------------------------------------|--------------------|--|--|--|
| Model              | VM-100          | Voltage                              | DC12V              |  |  |  |
| Speed              | 1rpm ~99rpm     | Power                                | 12W                |  |  |  |
| Operation mode     | Circular motion | Dimensions (W $\times$ D $\times$ H) | 440 x135 x280 (mm) |  |  |  |
| Timer              | 1min~99h59m     | Net weight                           | 2 kg               |  |  |  |

| <b>™Optional accessories</b> |          |      |                            |  |  |
|------------------------------|----------|------|----------------------------|--|--|
| Туре                         | Capacity | Туре | Capacity                   |  |  |
| L1                           | 15ml*22  | L4   | 50ml*12                    |  |  |
| L2                           | 50ml*12  | L5   | 1.5/2.0ml*36               |  |  |
| L3                           | 15ml*12  | L6   | 50ml*4+15ml*8+1.5/2.0ml*16 |  |  |





### **HX-3000 Vortex Mixer**

#### ///Introduction

HX-3000 is a high efficiency and versatile desktop mixer which is suitable for various mixing and vortex. It is compatible with various lab microtubes, such as PCR plat, deep-hole plate and microplate. The combination of mixing and intelligent operation makes the operation simple, safe and convenient.













///HX-A1

///HX-A2

///HX-A3

///HX-A4

///HX-A5

#### "Features

- Five preset buttons on faceplate for quick operation
- Stored programs for multi-purpose use
- Maintenance-free brushless motor
- Maintenance-nee brusiness motor

• Quick and controllable mixture improves experiments repeatibity and uniformity









| Product parameters  |                            |                                     |                       |  |  |  |
|---------------------|----------------------------|-------------------------------------|-----------------------|--|--|--|
| Model               | HX-3000                    | Noise                               | <50dB                 |  |  |  |
| Speed               | 200~3000rpm                | Weight                              | 7.9kg                 |  |  |  |
| Vortex (Max.) Speed | 3500rpm                    | Dimension ( $W \times D \times H$ ) | 220x300x170 (mm)      |  |  |  |
| Timer               | 1m-99h59m/0: infinite time | Voltage                             | AC100 ~ 230V, 50~60Hz |  |  |  |
| Amplitude           | 3mm                        | Power                               | 60W                   |  |  |  |

| <b>∞Optional tube rack</b> |   |        |   |  |  |
|----------------------------|---|--------|---|--|--|
| HX-A1                      | 96x0.2ml tube rack, suitable for 0.2ml PCR tube, PCR tube strip, 96-hole PCR plate (with Semi-skirt and no skirt) | HX-A4  | 8x10/15ml +3x5/7ml tube rack                        |  |  |
| HX-A2                      | 24x0.5ml tube rack  | HX-A5  | 6x50ml tube rack                                    |  |  |
| HX-A3                      | 24x1.5/2.0ml tube rack  | Notes: | 384-hole PCR plate, microplate and deep-well plates |  |  |



### HD-2500 Multi-tube Vortex Mixer

#### ///Introduction

HD-2500 is a good choice for mix up to 100 samples at the same time. A variety of accessories are available for broad range of applications required in many labs.



Pulse/short mixing/Continuous mixing



Compatible with different test tubes



- 100 samples at the same time
- LCD display speed/timer/microprocessor control
- The maximum speed up to 2500rpm
- Maintenance free brushless motor

| <b>∞Product parameters</b> |                               |                                |                           |                                     |                     |  |  |
|----------------------------|-------------------------------|--------------------------------|---------------------------|-------------------------------------|---------------------|--|--|
| Model                      | HD-2500                       | Intermittent Interval<br>Timer | 1 ~ 995                   | Power                               | 75W                 |  |  |
| Speed Range                | 500 ~ 2500rpm                 | Intermittent Running<br>Timer  | 1~ 9995                   | Dimension ( $W \times D \times H$ ) | 426x246x474<br>(mm) |  |  |
| Speed Control<br>Accuracy  | ±1rpm                         | Maximum Load                   | 4.5kg                     | Weight                              | 17kg                |  |  |
| Amplitude                  | 3.6mm                         | Top Fixing Panel Size (W×D)    | 310×205mm                 |                                     |                     |  |  |
| Time                       | 1m-99h59m/0:<br>infinite time | Voltage                        | AC 100 ~ 230V,<br>50/60Hz |                                     |                     |  |  |

| <b>"Optional accessories</b> |         |   |          |                   |      |         |   |          |                      |  |
|------------------------------|---------|---|----------|-------------------|------|---------|---|----------|----------------------|--|
| Туре                         | Picture | Specifications                                  | Capacity | Dimension<br>(mm) | Туре | Picture | Specifications                              | Capacity | Dimension<br>(mm)    |  |
| S1                           | minima. | Φ10mm - Φ12mm<br>(1.5/2.0ml centrifuge<br>tube) | 50       | 245×132×45<br>mm  | S6   |         | Tray mat (Upper)                            |          | 305×204×50<br>mm     |  |
| S2                           |         | Ф11mm - Ф13mm<br>(5ml centrifuge<br>tube)       | 50       | 245×132×45<br>mm  | S7   |         | Tray mat (lower)                            |          | 305×188.5×25<br>mm   |  |
| S3                           | Milliuw | Ф14mm - Ф17mm<br>(15ml centrifuge<br>tube)      | 50       | 245×132×45<br>mm  | S8   |         | Ф36mm - Ф40mm<br>(100ml centrifuge<br>tube) | 10       | 245×152×45<br>mm     |  |
| S4                           | (FIFTH) | Ф22mm - Ф26mm<br>(20ml centrifuge<br>tube)      | 15       | 245×132×45<br>mm  | S9   |         | Plastic rack for<br>17mm tubes              | 96       | 296.5×202.5×50<br>mm |  |
| S5                           | FFILL   | Φ25mm - Φ29mm<br>(50ml centrifuge<br>tube)      | 15       | 245×132×45<br>mm  | S10  | 4000000 | Plastic rack for 26mm tubes                 | 48       | 280×214×53<br>mm     |  |



### **WZ-4 Microplate Shaker**



#### **#Introduction**

This shaker is designed for plates like Elisa plate(96/384 microplate), cell culture plate(24/48/96 plate), providing adjustable speed for a broad range of applications in immunoassay or dyeing experiments. Safe for use in cool rooms and incubators.

- LCD display, easy to use
- Equipped with high quality power adapter
- Unique design with four rubbers buffer at corners providing stable shake
- Controlled by PID, precise speed, stable and quiet









| <b>™Product parameters</b> |                            |                                     |                    |  |  |  |  |  |  |
|----------------------------|----------------------------|-------------------------------------|--------------------|--|--|--|--|--|--|
| Model                      | WZ-4                       | Weight                              | 5.6kg              |  |  |  |  |  |  |
| Speed Range                | 200~1500rpm                | Voltage                             | AC100-230V 50-60Hz |  |  |  |  |  |  |
| Timer                      | 1m-99h59m/0: infinite time | Max.Power                           | 45W                |  |  |  |  |  |  |
| Amplitude                  | 3mm (Horizontal rotation)  | Dimension (W $\times$ D $\times$ H) | 280x278x126 (mm)   |  |  |  |  |  |  |



### WZ80-2 Microplate Thermo Shaker



#### ///Introduction

This Microplate thermo shaker is designed for microplates, controlled by PID. With timer, incubation, shake functions, it is suitable for different plates like ELISA 96 /384 wells plates, cell culture plates (24 /48 /96 wells).



LCD Display



Timer/Pulse Short mixing



For 2 plates, small size



Heating lid

- LCD display
- · Heating id ensures temperature uniformity
- Controlled by PID, stable temperature

- Buzzer alarm when program ends up
- Brushless motor, maintenance free
- Safe to use

| <sup>™</sup> Product parameters |                            |                                     |                          |  |  |  |  |  |
|---------------------------------|----------------------------|-------------------------------------|--------------------------|--|--|--|--|--|
| Model                           | WZ80-2                     | Capacity                            | 2 plates                 |  |  |  |  |  |
| Temperature Control Range       | RT+5~80°C                  | Speed                               | 200~1500 rpm             |  |  |  |  |  |
| Temperature Set Range           | 5°C ~80°C                  | Amplitude                           | 2mm(Horizontal rotation) |  |  |  |  |  |
| Temperature Control Accuracy    | ±0.3°C                     | Max.Power                           | 150W                     |  |  |  |  |  |
| Temperature Uniformity          | ±0.3°C                     | Voltage                             | AC100-230V 50-60Hz       |  |  |  |  |  |
| Heating Up Rate                 | < 15min( 20°C to 80°C )    | Weight                              | 6.2kg                    |  |  |  |  |  |
| Timer                           | 1m-99h59m/0: infinite time | Dimension (W $\times$ D $\times$ H) | 280x278x150 (mm)         |  |  |  |  |  |



### RM-80D Lab Roller Mixer

### **#Introduction**

RM-80D is designed for gently mixing a wide range of tubes. The speed can be set digitally anywhere between 10rpm and 80rpm. In addition to a rolling motion, the RM-80D is mounted slightly off-center to rise and fall in a "see- saw" fashion. These two motions ensure your samples are thoroughly mixed for optimal homogeneity.



### "Features

- · LED display, easy to operate
- Rolling and swinging two modes, gentle mixing
- Adjustable speed and quiet running
- Suitable for 8mm-200mm diameter tubes
- Suitable for 4°C chamber or 42°C incubator with relative humidity 80%









| <sup>™</sup> Product parameters |                  |                                 |                       |  |  |  |
|---------------------------------|------------------|---------------------------------|-----------------------|--|--|--|
| Model                           | RM-80D           | Max.Capacity                    | 4.2kg                 |  |  |  |
| Speed                           | 10rpm-80rpm      | Timer                           | 1min ~99h59m          |  |  |  |
| Running Modes                   | Rolling/Swinging | Voltage                         | AC 100 ~230V, 50/60Hz |  |  |  |
| Amplitude                       | 25mm             | Power                           | 30W                   |  |  |  |
| Numbers of Rollers              | 6                | $Dimensions(W\times D\times H)$ | 230x440x120 (mm)      |  |  |  |
| Roller Length                   | 280mm            | Weight                          | 3.8kg                 |  |  |  |



### **TM-80 Rotating Mixer**

#### ///Introduction

TM-80 is designed to provide stacking rotating plates which doubles the usable surface area; it is much precise with speed adjustment and timer functions. It can be placed in an incubator. The mixer is suitable for tissue culture, extraction, blood sample mixing, radioimmunoassay, glucose, in biological, chemical, animal and plant analysis, clinical experiments and many other aspects.



#### **#Features**

- LED display of speed and timer
- Compatible with tubes 1.5-50ml
- Rotating plate tilt angle 0  $\sim$  90°
- Program ends up with beep alarm
- High quality motor
- · Gentle mixing
- Tube holder is easy to remove and clean











### Turnable plate capacity with tube holders:

### $8\times50$ ml tubes, $16\times10/15$ ml tubes or $32\times1.5/2.0$ ml tubes

| <b>∞Product parameters</b> |               |                                 |                        |  |  |  |  |
|----------------------------|---------------|---------------------------------|------------------------|--|--|--|--|
| Model                      | TM-80         | Voltage                         | AC 100 ~ 230V, 50/60Hz |  |  |  |  |
| Speed                      | 10rpm ~ 80rpm | Power                           | 30W                    |  |  |  |  |
| Tilt Angle Range           | 0° ~ 90°      | $Dimensions(W\times D\times H)$ | 250 x320 x300 (mm)     |  |  |  |  |
| Timer                      | 1m-99h59m     | Net.weight                      | 4.5kg                  |  |  |  |  |



### MC-12K Mini High Speed Centrifuge

#### **#Introduction**

The MC-12K Mini High Speed Centrifuge is designed with combination rotor, which suitable for centrifuge tubes 12×0.5/1.5/2.0ml, 32×0.2ml,and PCR strips 4×8×0.2ml. It does not require replacement of rotor, which is convenient and timesaving for users. Speed and time values can be adjusted during working to meet different experimental requirements.



### "Features"

- Combination rotor for tubes of 0.2-2.0ml
- · LED display, easy to operate.
- · Adjustable speed and time during working.
- Speed/RCF can be switched
- The top lid is fixed with a push-button buckle, easy to operate
- "Quick" centrifugal button available
- Audio beep alarm & digital display when Error or mis-operation happen

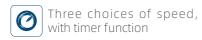
| <sup>™</sup> Product parameters |  |                                     |                    |  |  |  |
|---------------------------------|--|-------------------------------------|--------------------|--|--|--|
| Model                           | MC-12K                                 | Power                               | 90W                |  |  |  |
| Speed Range                     | 500-12000rpm (500rpm increments)       | Noise Level                         | ≤ 65 dB            |  |  |  |
| Max RCF                         | 9650×g                                 | Dimension ( $W \times D \times H$ ) | 237x189x125(mm)    |  |  |  |
| Timer                           | 1-99m59s ("Quick" function available ) | Weight                              | 1.5kg              |  |  |  |
| Acceleration time               | ≤ 12s                                  | Voltage                             | AC 100240V 50-60Hz |  |  |  |
| Deceleration time               | ≤ 185                                  |                                     |                    |  |  |  |
|                                 | Centrifugal tube 32*0.2ml              |                                     |                    |  |  |  |
| Capacity                        | Centrifugal tube 12*0.5/1.5/2.0ml      |                                     |                    |  |  |  |
|                                 |  | PCR strips: 4x8x0.2ml               |                    |  |  |  |



### Mini-7KS Combination Rotor Centrifuge

### **#Introduction**

Product Mini-7KS is designed with a "three in one" combination rotor, which suitable for centrifuge tubes 6x1.5/2.0ml or 6x0.5ml or 16x0.2ml and 8 x 2 x0.2ml PCR tube strips. It can centrifuge a variety of centrifuge tubes without replacement of rotor, which is convenient for users and saves time.







### ///Features

- Micro DC motors and carbon fiber rotors
- Ultra -low noise runs, almost silent
- High strength housing for fall and impact resistance
- · Clamshell switch and stop automatically when opening
- "Combination rotor
- Three choices of speed (4000rpm,6000rpm,7000rpm) and timer functions meet different experimental requirements

| <b> </b> |   |                       |                  |  |  |  |
|----------|---|-----------------------|------------------|--|--|--|
| Model    | Mini-7KS  | Timer                 | 1s-99m59s        |  |  |  |
| Speed    | 4000rpm,6000rpm&7000rpm adjustable  | Noise Level           | ≤ 55dB           |  |  |  |
| Max.RCF  | 960xg(4000rpm)/2200xg(6000rpm)/2900xg(7000rpm)                            | Dimensions<br>(W×D×H) | 160x176x135 (mm) |  |  |  |
| Voltage  | 220V/110V 50~60HZ   | Weight                | ≤ 1.6kg          |  |  |  |
| Power    | 35W   |                       |                  |  |  |  |
| Capacity | centrifuge tube: 6x1.5ml/2.0ml,6x0.5ml,16x0.2ml PCR tube strips:2x8x0.2ml |                       |                  |  |  |  |





### Mini Centrifuge

#### **///Introduction**

The mini centrifuge is novel in appearance and versatile. It is equipped with two centrifugal rotors and multiple test tube sleeves for 2.0ml/1.5ml/ 0.5ml/0.2ml centrifuge tubes and  $8 \times 2 \times 0.2$ ml PCR tube strips. Fully transparent round top cover with multi rotor equipped, and an open cover pause function and electronic timing fully embodied the design concept of humanization.





#### **#Features**

- Large radius with 8-hole rotor design, 1.5-fold stronger centrifugal force
- Top cover opens automatically for easy one-handed operation
- Snap-on design for easy rotor replacement and removal
- Noise reduction function, near silent operation
- The maintenance-free motor is durable, safe and reliable
- Exquisite appearance and compact size







Stronger centrifuge force



Clamshell switch

### **Applications**

- Serum extracted from whole blood
- Separation of blood cells
- Rapid sedimentation of samples

- Supernatant extraction of various samples Microbial sample processing Partition centrifugation for PCR experiments

| <b>∞Product parameters</b> |   |         |                   |          |               |  |  |
|----------------------------|---|---------|-------------------|----------|---------------|--|--|
| Model                      | Mini-4K   | Mini-6K | Mini-7K           | Mini-10K | Mini-10K+     |  |  |
| Speed                      | 4000rpm   | 6000rpm | 7000rpm           | 10000rpm | 3000-10000rpm |  |  |
| Max.RCF                    | 860xg   | 2000xg  | 2600xg            | 5400xg   | 500-5400xg    |  |  |
| Capacity                   | Centrifuge Tube: 8×2.0ml/1.5ml/0.5ml PCR tube strips: 4×8×0.2ml |         |                   |          |               |  |  |
| Timer                      |   |         | 1~99m59s          |          |               |  |  |
| Noise Leve                 | ≤ 4   | 5dB     | ≤ 55dB            | ≤ 60     | OdB           |  |  |
| Dimensions<br>(W×D×H)      | 160×176×135 (mm)  |         |                   |          |               |  |  |
| Weight                     | ≤ 1.5kg   |         |                   |          |               |  |  |
| Power                      | 35W   |         |                   |          |               |  |  |
| Voltage                    |   |         | 220V/110V 50-60Hz |          |               |  |  |

### **Equipped accessories**



**"Strip rotor** For 4×8×0.2ml tubes



#8-position rotor For 1.5/2.0ml×8 tubes



Tube adaptors For 0.5ml tubes



### Mini Centrifuge

### **#Introduction**

The mini centrifuge is novel in appearance and versatile. It is equipped with two centrifugal rotors and multiple test tube sleeves for 2.0ml/1.5ml/0.5ml/0.2ml centrifuge tubes and 8× 2× 0.2ml PCR tube strip. Fully transparent round top cover with multi rotor equipped, and an open lid pause function and electronic timing fully embodied the design concept of humanization.



#### **#Features**

- Exquisite appearance and compact size
- Large radius with 8-hole rotor design, 1.5-fold stronger centrifugal force
- Top cover opens automatically for easy one-handed operation
- Snap-on design for easy rotor replacement and removal
- Noise reduction function, near silent operation









| <b> </b> |  |   |           |             |              |          |           |
|----------|--|---|-----------|-------------|--------------|----------|-----------|
| Model    | Mini-4KA   | Mini-6KA  | Mini-10KA | Model       | Mini-4KA     | Mini-6KA | Mini-10KA |
| Speed    | 4000rpm  | 6000rpm   | 10000rpm  | Noise Level | ≤ 4 <u>.</u> | 5dB      | ≤ 55dB    |
| Max.RCF  | 860xg 2000xg 5400xg <b>Dimensions (W×D×H)</b> 160 x 176 x 121 (mm) |   |           |             |              | nm)      |           |
| Timer    | <b>Weight</b> ≤ 1.5kg  |   |           |             |              |          |           |
| Voltage  | 220V/110V 50-60HZ  |   |           |             |              |          |           |
| Power    | 35W  |   |           |             |              |          |           |
| Capacity |  | Centrifuge Tube: 8×2.0ml/1.5ml/0.5ml PCR tube strips: 4×8×0.2ml |           |             |              |          |           |

### **Applications**

- · Serum extracted from whole blood
- Separation of blood cells
- Rapid sedimentation of samples

- Supernatant extraction of various samples Microbial sample processing Partition centrifugation for PCR experiments

### **Equipped accessories**



///Strip rotor For 4×8×0.2ml tubes



#8-position rotor For 1.5/2.0ml×8 tubes



Tube adaptors For 0.5ml tubes



### MC-15K Micro High Speed Centrifuge

### **#Introduction**

The product MC-15K is a miniaturized high-speed centrifuge with small footprint and safe operation that for biological laboratories. It accelerates/decelerates quickly with soft brake function, effectively preventing sample resuspension and protecting sensitive samples.







**"Tube adaptors** 



#### Features

- Noise reduction and near silent runs
- Pressing the "Quick" key alone for transient centrifugation
- High strength aluminum alloy rotor is sterilizable
- Unique air duct for minimum sample temperature rise
- Stronge Al-alloy autoclavable rotor
- Safe and reliable electronic lock protection
- Equipped with an automatic imbalanced detection system

\_\_\_\_\_









| <b>™Product parameters</b> |                                   |                                       |                  |  |  |  |
|----------------------------|-----------------------------------|---------------------------------------|------------------|--|--|--|
| Model                      | MC-15K                            | Liquid temperature rise               | ≤ 10°C           |  |  |  |
| Voltage                    | DC24V 5A                          | Noise Level                           | ≤ 60dB           |  |  |  |
| Timer                      | 1s~99m59s                         | Acceleration/Deceleration Rate (Fast) | ≤ 30±5s          |  |  |  |
| Speed                      | 500~15000rpm ( 100rpm increments) | Acceleration/Deceleration Rate (Slow) | 60±5s            |  |  |  |
| Max.RCF                    | 100~15000xg ( 100xg increments)   | Max.Sample Density                    | 1.2g/ml          |  |  |  |
| Max.Rotor Radius           | 60mm                              | Power                                 | 100W             |  |  |  |
| Capacity                   | 12×1.5/2.0ml                      | Dimension $(W \times D \times H)$     | 230x270x155 (mm) |  |  |  |



### **CF-1524 High Speed Centrifuge**

### "Features"

- TFT LCD touch screen, easy and friendly operation
- Impact design, Reliable and Safe
- Extremely quiet, lower than 62dB
- Soft brake function to protect sensitive samples
- · Maintenance-free brushless motor
- Adsorption locking design help user to close lid by one hand
- Bio-safety rotor with triple protection





TFT touch screen



Soft brake protects sensitive samples



Maintenance-free brushless motor



Extremely quiet

| <b>Product</b>        |                                   |                                |                                 |  |  |  |  |
|-----------------------|-----------------------------------|--------------------------------|---------------------------------|--|--|--|--|
| Model                 | CF-1524                           | Acceleration/Deceleration      | I (≤20s); II (≤40s); III (≤60s) |  |  |  |  |
| Speed                 | 500~15000rpm (Increasement100rpm) | Max. Power                     | 500W                            |  |  |  |  |
| Timer                 | 1s~99m59s(short spin available)   | Net. Weight                    | 12kg                            |  |  |  |  |
| Max.Density of Sample | 1.2g/ml                           | $Dimension(W\times D\times H)$ | 250×360×210(mm)                 |  |  |  |  |

| <b> </b>         |                      |             |              |
|------------------|----------------------|-------------|--------------|
| Capacity         | 24×1.5ml/2.0ml tubes | 18×5ml      | 4×PCR strips |
| Picture          |                      |             |              |
| Rotor Max.Radius | 85r                  | 68mm        |              |
| RCF              | 100-21               | 100-17100xg |              |



### **CF-1524R Refrigerated Centrifuge**

### Features

- TFT LCD touch screen, easy and friendly operation
- Impact design, Reliable and Safe
- Extremely quiet, lower than 58dB
- Soft brake function to protect sensitive samples
- Maintenance-free brushless motor
- Adsorption locking design help user to close lid by one hand
- Bio-safety rotor with triple protection
- QTemp. function for quick pre-cooling of centrifuge





Soft brake protects sensitive samples





Maintenance-free brushless motor



Extremely quiet

| //Prod  |                                       |                                     |   |                          |  |  |  |
|---------|---------------------------------------|-------------------------------------|---|--------------------------|--|--|--|
| Model   | CF-1524R                              | Max.Density of<br>Sample            | 1.2g/ml   | Cooling Rate<br>(to 4°C) | ≤ 20min  |  |  |
| Voltage | AC100~120V/AC200~240V<br>50~60Hz      | Acceleration/<br>Deceleration       | I (≤20s); II (≤40s); III (≤<br>60s)                                   | Temperature<br>Range     | -20°C ~ +40°C<br>(under room<br>temperature<br>25°C) |  |  |
| Timer   | 1s~99m59s (short spin<br>available)   | Cooling function                    | Motor not working: cool down to -20°C Motor working: cool down to 4°C | Power                    | 600W   |  |  |
| Speed   | 500~15000rpm<br>(Increasement100rpm ) | Temperature<br>Accuracy<br>(at 4°C) | ±2°C  | Noise                    | 58dB   |  |  |
| RCF     | 100-21400xg                           | Dimension $(W \times D \times H)$   | 300x490x320(mm)   | Weight                   | 30kg   |  |  |

| <b>"Optional rotors</b> |                      |                   |                           |
|-------------------------|----------------------|-------------------|---------------------------|
| Capacity                | 24×1.5ml/2.0ml tubes | 4× 8x0.2ml strips | 18×5ml (For round bottom) |
| Picture                 |                      |                   |                           |
| Rotor Max.Radius        | 85mm                 | 68mm              | 85mm                      |
| RCF                     | 100-21400xg          | 100-17100xg       | 100-21400xg               |



### MP-2500 Microplate Centrifuge



///Before











### **///Introduction**

MP-2500 microplate centrifuge is an instantaneous centrifuge specially designed for microplate. It is suitable for: 0.2ml PCR tube strip、8×0.2ml PCR tube strips、96-well or 384-well PCR plates、Various standard PCR microplates (including skirted)

#### **#Features**

- Applies to kinds of PCR plates with/without skirt
- Two operating modes: inching and timing
- Instantaneous acceleration to 2800 rpm and stop in 6 s with electronic
- Wall droplets rapidly cleared
- Efficiently improves PCR experiment result
- Top cover opening 95° for easy operation



BLDC motor Long life maintenance free







| <b>∞Product parameters</b> |                    |                    |  |  |  |  |
|----------------------------|--------------------|--------------------|--|--|--|--|
| Model                      | MP-2500            | Noise Level        | ≤ 55dB   |  |  |  |
| Voltage                    | DC 24V, 2A         | Capacity           | 8×0.2ml PCR tube strips/0.2ml PCR tubes / 2×96-well<br>PCR plate |  |  |  |
| Timer                      | 1s~99s(Short Spin) | Deceleration Time  | ≤ 6s   |  |  |  |
| Max.Speed                  | 2800rpm            | Acceleration Time  | ≤15s   |  |  |  |
| Max.RCF                    | 600xg              | Power              | 48W  |  |  |  |
| Max.Rotor Radius           | 63mm               | Dimensions (W×D×H) | 220x245x200 (mm)   |  |  |  |



### **CS-200E Orbital Shaker**

### ///Introduction

CS-200E is an economical shaker which is affordable for most labs, offering gentle and stable vibration for a variety of sample mixture in fields biology, micro biology and medical analysis. Platforms are applied to kinds of vessels like, cultures, flasks, tubes and etc.



### \_\_\_\_

### "Features

- Simple design makes operation easy
- Brushless motor is maintenance free and reliable, quiet
- Speed can be adjustable with stable vibration
- Durable rubber mat is leakproof and anti-corrosive
- Various platforms for option

| <b>∞Product parameters</b> |                           |                        |            |                      |                 |  |  |
|----------------------------|---------------------------|------------------------|------------|----------------------|-----------------|--|--|
| Model                      | CS-200E                   | Speed                  | 50-250rpm  | Dimension<br>(W×D×H) | 345X280X93 (mm) |  |  |
| Shaking Mode               | Circle                    | Operation Mode         | Continuous | Voltage              | AC100-240V      |  |  |
| Orbital Diameter           | 20mm                      | Max.Load (with clamps) | 3.5kg      | Shell guard level    | IP21            |  |  |
| Time                       | 1m-99h59m/0 infinite time |                        | Power      | 35                   | 5W              |  |  |

| //O  | ptional Trays                                     |                  |            |                                 |
|------|---|------------------|------------|---------------------------------|
| Туре | Platform  | Dimension (mm)   |            |                                 |
| CP1  | Single platform                                   | 280x260 (mm)     | CP1        | "CP1 "CP2                       |
| CP2  | Double platform                                   | 280x260x120 (mm) |            |                                 |
| Р3   | Aluminum alloy tray with 6x250ml flask clamps     | 270×220×5 (mm)   |            |                                 |
| P4   | Aluminum alloy tray with 12x100ml flask clamps    | 270×220×5 (mm)   |            |                                 |
| P5   | Stainless steel tray with adjustable flask holder | 270×220×40 (mm)  | 1010       | March 1                         |
| P6   | Universal tray                                    | 301×235×50 (mm)  | <b>∞P4</b> | <sup>"</sup> P4 <sup>"</sup> P5 |



### CS-100/200 Orbital Shaker

#### ///Introduction

CS-100/200 series orbital shaker offers gentle oscillation suitable for various mixing in different fields due to DC brushless motor and microcomputer control technology. It is easy to change different trays, it can mix and cultivate common flasks, petri dishes, and beakers. Widely used in fields of biology, microbio logy and medical analysis.



#### Features

- · Maintenance free DC brushless motor
- Can be used in freezer room due to a variety of modes for mixing in
- LCD displays instant speed, running time and working status
- Timer function with automatic alarm function
- Replaceable trays for different vessels

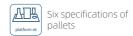




Timer/pulse/short

-P6





| <b>™Product parameters</b> |            |                 |                                     |          |          |  |  |
|----------------------------|------------|-----------------|-------------------------------------|----------|----------|--|--|
| Model                      | CS-100     | CS-200          | Model                               | CS-100   | CS-200   |  |  |
| Speed                      | 50-300rpm  | 50-250rpm       | Working Temperature                 | 4-       | 45°C     |  |  |
| Orbit Diameter             | 10mm       | 20mm            | Dimension (W $\times$ D $\times$ H) | 284×264× | ×90 (mm) |  |  |
| Timer                      | 1m-99h59m/ | 0 infinite time | Voltage                             | AC10     | 00-230V  |  |  |
| Load                       | 3kg        | 2.5kg           | Power                               | 3        | 35W      |  |  |

| /// <b>O</b> | ptional Trays                                     |                  |
|--------------|---|------------------|
| Туре         | Platform  | Dimension (mm)   |
| CP1          | Single platform                                   | 280x260 (mm)     |
| CP2          | Double platform                                   | 280x260x120 (mm) |
| Р3           | Aluminum alloy tray with 6x250ml flask clamps     | 270×220×5 (mm)   |
| P4           | Aluminum alloy tray with 12x100ml flask clamps    | 270×220×5 (mm)   |
| P5           | Stainless steel tray with adjustable flask holder | 270×220×40 (mm)  |
| P6           | Universal tray                                    | 301×235×50 (mm)  |



### **RS-100E Rocker Shaker**

### **///Introduction**

This rocker shaker is designed with simple conception, widely used for dying and decoloring. It's a ideal device for cell culture, antibody and vaccine production fields as well as hybridization, WB and samples washing procedures and etc.



### ///Features

- Simple design makes operation easy
- Brushless motor is maintenance free and reliable, quiet
- Speed can be adjustable with stable vibration

- Durable rubber mat is leakproof and anti-corrosive
- Various platforms for option

| <b>∞Product parameters</b> |              |                                     |                  |  |  |  |
|----------------------------|--------------|-------------------------------------|------------------|--|--|--|
| Model                      | RS-100E      | Max. Load (with clamps)             | 3kg              |  |  |  |
| Shaking Mode               | Rock shaking | Dimension (W $\times$ D $\times$ H) | 345X308X108 (mm) |  |  |  |
| Orbital Diameter           | 10°          | Voltage                             | DC24V            |  |  |  |
| Speed                      | 10-70rpm     | Power                               | 50W              |  |  |  |
| Operation Mode             | Continuous   | Shell guard level                   | IP21             |  |  |  |

| <b> </b> |                 |                  |  |  |  |  |
|----------|-----------------|------------------|--|--|--|--|
| Туре     | Platform        | Dimension (mm)   |  |  |  |  |
| CP1      | Single platform | 280x260 (mm)     |  |  |  |  |
| CP2      | Double platform | 280x260x120 (mm) |  |  |  |  |



CP1





CP2



### **RS-100 Rocker Shaker**

#### ///Introduction

RS-100 provides a gentle oscillation to various laboratory vessels, such as petri dishes, triangular flasks and culture flasks; which could be used in cold room. It's ideal device for bio molecular hybridization on strips and for staining/destaining procedures in electrophoresis and homogenization.









#### "Features

- Offering gentle oscillation when acceleration and deceleration
- Compliance to various vessels, like culture dishes, flasks
- Optional platforms for choices to users' needs

- User-friendly LCD display is easy to operate
- Ball bearing makes joints more reliable
- Maintenance free DC brushless motor
- Stainless platforms with wear-resistant mat, easy to clean, anti-corrossive, anti-deformable

| <b> <i> </i></b> | 5                          |                                     |                      |
|------------------|----------------------------|-------------------------------------|----------------------|
| Model            | RS-100                     | Voltage                             | AC100 ~ 230V,50/60HZ |
| Speed            | 10 ~ 100 rpm               | Power                               | 45W                  |
| Timer            | 1m-99h59m/0: infinite time | Tray Size(W×D)                      | 300×240 mm           |
| Amplitude        | (up and down) 25mm(10')    | Dimension (W $\times$ D $\times$ H) | 284×264×139 (mm)     |
| Max.Capacity     | 5.0kg                      | Net.Weight                          | 5.6kg                |

| <b> </b> |                 |                  |  |  |  |  |
|----------|-----------------|------------------|--|--|--|--|
| Туре     | Platform        | Dimension (mm)   |  |  |  |  |
| CP1      | Single platform | 280x260 (mm)     |  |  |  |  |
| CP2      | Double platform | 280x260x120 (mm) |  |  |  |  |





CP1

CP2



### **NS-9 Incubator Shaker**



#### ///Introduction

This incubator can offer oscillation and incubation(heating) for samples in beakers or flasks and other vessels due to a variety of optional platforms. It is an ideal equipment for cell/tissue culture, fermentation, hybridization and biochemical reaction in medical, biology, pharmacy, food safety and environmental experiments.

### ///Features

- 4.3 inch colorful TFT screen, easy to use
- Impact structure, reasonable size for most labs
- Good temperature uniformity, low noise benefit from MCU controller and advance software
- Unique balance system ensuring stable high speed running
- Over-temperature protect, as well as safe guard upon lid open
- Maintenance free brushless motor and high precise bearing





| <sup>™</sup> Product parameters |                 |                           |                 |                      |                 |   |                           |
|---------------------------------|-----------------|---------------------------|-----------------|----------------------|-----------------|---|---------------------------|
| Mode                            | NS-9            | Temperature<br>Display    | 0.1℃            | Platform dimension   | 310 x 310mm     | Voltage   | AC100-120V/<br>AC210-240V |
| Temperature<br>Control<br>Range | RT +5°C ~ 60°C  | Temperature<br>Uniformity | ≤±0.5°C (@37°C) | Max.Height of vessel | 305mm           | Max.Power   | 650W                      |
| Temperature<br>Set Range        | 0°C ~60°C       | Amplitude                 | 20mm            | Max.Load             | 5kg             | $\begin{array}{c} \text{Dimension} \\ (\text{W} \times \text{D} \times \text{H}) \end{array}$ | 400 x 630x 490<br>(mm)    |
| Temperature<br>Precision        | ≤ ±0.3°C(@37°C) | Speed range               | 50 ~ 300rpm     | Timer                | 1m~99h/Infinite | Weight  | 37kg                      |

| ™Max. capacity of NP4 |          |  |  |  |  |
|-----------------------|----------|--|--|--|--|
| Flask type            | Capacity |  |  |  |  |
| 50ml                  | 25       |  |  |  |  |
| 100ml                 | 16       |  |  |  |  |
| 250ml                 | 9        |  |  |  |  |
| 500ml                 | 5        |  |  |  |  |
| 1L                    | 4        |  |  |  |  |
| 2L                    | 2        |  |  |  |  |

| <b>  ■Optional accessories</b> |                                 |                                    |  |  |  |  |
|--------------------------------|---------------------------------|------------------------------------|--|--|--|--|
| Туре                           | Platform                        | Size                               |  |  |  |  |
| NP1                            | Flat type                       | 315X315                            |  |  |  |  |
| NP2                            | Universal with springs          | 310X310X45                         |  |  |  |  |
| NP3-1                          | 50mlx25 or 100mlx16 or 250mlx9  | Platform with clamps               |  |  |  |  |
| NP3-2                          | 500mlx5 or 1000mlx4 or 2000mlx2 | 315X315                            |  |  |  |  |
| NP4                            | Platform with adhesive mats     | 315X315 (with 4 pcs adhesive mate) |  |  |  |  |



### **NS-16 Incubator Shaker**

#### **#Introduction**

This incubator can offer oscillation and incubation(heating) for samples in beakers or flasks and other vessels due to a variety of optional platforms. It is an ideal equipment for cell/tissue culture, fermentation, hybridization and biochemical reaction in medical, biology, pharmacy, food safety and environmental experiments.



### "Features"

- 4.3 inch colorful TFT screen, easy to use
- Impact structure, reasonable size for most labs
- Good temperature uniformity, low noise benefit from MCU controller and advance software
- Unique balance system ensuring stable high speed running
- Over-temperature protect, as well as safe guard upon lid open
- Maintenance free brushless motor and high precise bearing





| Model                        | NS-16              | Temperature<br>Display<br>Accuracy | 0.1℃            | Platform<br>dimension | 420 x420mm      | Voltage   | AC100-120V/<br>AC210-240V |  |
|------------------------------|--------------------|------------------------------------|-----------------|-----------------------|-----------------|---|---------------------------|--|
| Temperature<br>Control Range | RT +5°C ~ 60°C     | Temperature<br>Uniformity          | ≤±0.5°C (@37°C) | Max.Height of vessel  | 365mm           | Max.Power   | 650w                      |  |
| Temperature<br>Set Range     | 0°C ~60°C          | Amplitude                          | 20mm            | Max.Load              | 10kg            | $\begin{array}{c} \text{Dimension} \\ \text{(W} \times \text{D} \times \text{H)} \end{array}$ | 525 x 770 x 535<br>(mm)   |  |
| Temperature<br>Precision     | ≤±0.3°C<br>(@37°C) | Speed range                        | 50 ~ 300rpm     | Timer                 | 1m~99h/Infinite | Weight  | 45kg                      |  |

| Max. capacity of NP8 |          |            |          |  |  |  |  |
|----------------------|----------|------------|----------|--|--|--|--|
| Flask type           | Capacity | Flask type | Capacity |  |  |  |  |
| 50ml                 | 64       | 1L         | 9        |  |  |  |  |
| 100ml                | 36       | 2L         | 4        |  |  |  |  |
| 250ml                | 16       | 3L         | 4        |  |  |  |  |
| 500ml                | 9        |            |          |  |  |  |  |

| <b>#Optio</b> | #Optional accessories           |                                    |  |  |  |  |  |  |
|---------------|---------------------------------|------------------------------------|--|--|--|--|--|--|
| Туре          | Platform                        | Size                               |  |  |  |  |  |  |
| NP5           | Flat type                       | 420X420                            |  |  |  |  |  |  |
| NP6           | Universal with springs          | 410X410X80                         |  |  |  |  |  |  |
| NP7-1         | 50mlx49                         |                                    |  |  |  |  |  |  |
| NP7-2         | 100mlx36 or 250mlx16            | Platform with clamps<br>420X420    |  |  |  |  |  |  |
| NP7-3         | 500mlx9 or 1000mlx5 or 2000mlx4 |                                    |  |  |  |  |  |  |
| NP8           | Platform with adhesive mats     | 420X420 (with 9 pcs adhesive mate) |  |  |  |  |  |  |



### **WS-100 Water Bath Shaker**

### ///Introduction

This equipment offers water bath incubation and mild oscillation, which is economical, safe and quiet. It is widely used in fields of biology, microbiology, medical analyzer and etc.









### "Features

- TFT color display, easy operation to set up programs
- Maintenance free brushless motor
- PID controlled, stable temperature
- Built-in liquid level sensor with beep alarm, safe and reliable
- Hinge lid can open to 95 degree, convenient for user to handle samples

| <b>Capacity</b> |          |
|-----------------|----------|
| Tubes           | Flasks   |
| 45*10ml         | 6*100ml  |
| 45*15ml         | 3*250ml  |
| 20*50ml         | 2*500ml  |
|                 | 1*1000ml |

| //Product parameters      |                |                                     |                               |  |  |  |  |  |
|---------------------------|----------------|-------------------------------------|-------------------------------|--|--|--|--|--|
| Model                     | WS-100         | Uniformity                          | ±0.3°C                        |  |  |  |  |  |
| Tank Volume               | 10L            | Vibration Mode                      | Circle                        |  |  |  |  |  |
| Temperature Control Range | RT+5~100°C     | Tank Dimension                      | 240x300x150                   |  |  |  |  |  |
| Temperature Set Range     | 0°C ~100°C     | Voltage                             | AC100~120V/AC200~240V 50~60Hz |  |  |  |  |  |
| Timer                     | 1m~99h59m      | Power                               | 1100W                         |  |  |  |  |  |
| Speed Range               | 30-200 rpm/off | Dimension (W $\times$ D $\times$ H) | 340x470x345 (mm)              |  |  |  |  |  |
| Temperature Accuracy      | ±0.3°C @37° C  |                                     |                               |  |  |  |  |  |



### **HS-350C Hotplate Magnetic Stirrer**

### ///Introduction

HS-350C magnetic hotplate is characterized safe, user-friendly. The hotplate is made of stainless steel coated with nano ceramic, which can heat up to  $340^{\circ}\text{C}$ .



Over-heat protection





Strong magnetic Anti-bounce

### //Features



- Stainless steel coated ceramic, anti-corrosive, beating high temperature
- Adjustable speed is suitable for different experiments
- Safety Temp. displays on screen, automatically turned off once temperature exceeding 50°C to the setting temperature
- Instant temperature displayed after shut-off, prevent users get burnt by accident

| <b>™Product parameters</b>  |                                |                                      |                                   |  |  |  |  |
|-----------------------------|--------------------------------|--------------------------------------|-----------------------------------|--|--|--|--|
| Model                       | HS-350C <b>Voltage</b>         |                                      | AC100-120V/AC200-240V 50-<br>60Hz |  |  |  |  |
| Heating plate Material      | Stainless steel coated ceramic | Heating Plate Dimension              | ф137mm                            |  |  |  |  |
| Temperature Range           | R.T. +5°C ~340°C               | Max.Sample Volume (H <sub>2</sub> O) | 20L                               |  |  |  |  |
| Temperature Set Range       | 0°C ~340°C                     | Max.Stirring Bar Length              | 80mm                              |  |  |  |  |
| External temperature sensor | PT1000                         | Display                              | LCD                               |  |  |  |  |
| Safety Temp.                | 390℃                           | Dimension (W $\times$ D $\times$ H)  | 160x270x75 (mm)                   |  |  |  |  |
| Speed Range                 | 100~1500rpm                    | Power                                | 550W                              |  |  |  |  |
| Stirring Position           | 1                              | Weight                               | 2.5kg                             |  |  |  |  |





### **HS-350 Hotplate Magnetic Stirrer**

### ///Introduction

This stirrer with magnetic hotplate is made of stainless steel coated ceramic, the heating plate can heat up to 340°C, which is anti-corrosive, bearing heat shock. Stirring with magnetic stir bar, it is used in a variety of labs.

### "Features"

- TFT screen, easy to use and set parameters
- Maintenance brushless motor, safe and durable
- Stainless steel coated ceramic, anti-corrosive, bearing high temperature
- Adjustable speed
- Countdown timer with alarm
- Over-heat protect with temperature displayed



| <b> <i>™</i>Product parameters</b> |                                |                                      |                 |  |  |  |
|------------------------------------|--------------------------------|--------------------------------------|-----------------|--|--|--|
| Model                              | HS-350                         | Temperature Sensor                   | PT1000          |  |  |  |
| Voltage                            | AC100-120V/AC200-240V 50-60Hz  | Speed Range                          | 100~1500rpm     |  |  |  |
| Heating Plate Dimesion             | Ø 137                          | Max.Sample Volume (H <sub>2</sub> O) | 20L             |  |  |  |
| Timer                              | 1m-99h59m                      | Max.Stirring Bar Length              | 80mm            |  |  |  |
| Stirring Position                  | 1                              | Min.Adjustable Safe Temperature      | 50°C            |  |  |  |
| Heating Plate Material             | Stainless steel coated ceramic | Max.Adjustable Safe Temperature      | 390°C           |  |  |  |
| Heating Plate Temperature          | RT+5°C -350°C                  | Dimension (W $\times$ D $\times$ H)  | 170x275x76 (mm) |  |  |  |
| Temperature Set Range              | 0°C ~350°C                     | Power                                | 550W            |  |  |  |
| Temperature Stability              | ±1°C                           | Weight                               | 2.2kg           |  |  |  |



### **HS-8 Hotplate Magnetic Stirrer**

### **///Introduction**

HS-8 is a hotplate stirrer designed for high-efficiency experiments. The maintenance free brushless DC motor working with low noise. Working surface adopts stainless steel coated silicone film which is non-slip and corrosion resistant





Non-slip surface



### Features

- LCD display
- Stable temperature
- Max. temperature 120°C

- Multi channel improves efficiency
- Stirrer bar running synchronously ensure samples uniformity
- Maintenance free brushless DC motor

| <b>™Product parameters</b> |                               |                                     |  |  |  |  |  |  |
|----------------------------|-------------------------------|-------------------------------------|--|--|--|--|--|--|
| Model                      | HS-8                          | Safe temperature                    | 140°C  |  |  |  |  |  |
| Voltage                    | AC100~120V/AC200~240V 50~60Hz | Speed Range                         | 200-1200 rpm                                 |  |  |  |  |  |
| Stirring Position          | 8                             | Power                               | 400W (heating power)<br>30W (stirring power) |  |  |  |  |  |
| Max.Capacity               | 8x400ml                       | Motor                               | Brushless DC motor                           |  |  |  |  |  |
| Max.Stirring Bar Length    | 46mm                          | Working Surface                     | stainless steel coated silicone film         |  |  |  |  |  |
| Temperature                | RT +5~120°C                   | Display                             | LCD  |  |  |  |  |  |
| Temperature Set Range      | 0°C ~120°C                    | Dimension ( $W \times D \times H$ ) | 205x480x50 (mm)                              |  |  |  |  |  |



### **S-8 Magnetic Stirrer**

### ///Introduction

S-8 is a stirrer designed for high-efficiency experiments. The maintenance free brushless DC motor working with Low noise. Working surface adopts stainless steel coated silicone film which is non-slip and corrosion resistant.







### "Features

- LCD display
- Maintenance free brushless DC motor

- Multi channel improves efficiency
- Stirrer bar running synchronously ensure samples uniformity

| <b>∞Product parameters</b>          |                    |                     |                                      |  |  |  |  |
|-------------------------------------|--------------------|---------------------|--------------------------------------|--|--|--|--|
| Mode                                | S-8                | Timer               | 1m~99h59m                            |  |  |  |  |
| Voltage                             | AC100~240V 50~60Hz | Stirring Bar Length | 46mm                                 |  |  |  |  |
| Position                            | 8                  | Speed Range         | 200-1200 rpm                         |  |  |  |  |
| Max.Capacity                        | 8x400ml            | Motor               | Brushless DC motor                   |  |  |  |  |
| Power                               | 30W                | Working Surface     | stainless steel coated silicone film |  |  |  |  |
| Dimension (W $\times$ D $\times$ H) | 205x480x50 (mm)    | Display             | LCD                                  |  |  |  |  |



### OS-2200 (D) Overhead Stirrer

### ///Introduction

OS-2200 (D) is a high-tech overhead stirrer with its compact design and ideal for mixing medium and high viscosity liquid or solid-liquid mixture applications in chemical synthesis, pharmaceutical, physical and chemical analysis, petrochemical, cosmetics, health products, food, biotechnology and other fields.



LCD display



Torque display



Automatic Display



Optional stirrer



### "Features

- Large screen, aluminum alloy head shell
- Speed and torque display, easy to operate
- Near silence due to BLDC motor
- Safe and durable, overload protection and automatically shut down
- Adjustable rotational speed with the sample consistency Clockwise or counterclockwise two operation modes

| <b>"Product</b>   | Product parameters |           |                           |                              |              |                                    |            |          |             |            |
|-------------------|--------------------|-----------|---------------------------|------------------------------|--------------|------------------------------------|------------|----------|-------------|------------|
| Model             | OS-2200            | OS-2200D  | Model                     | OS-<br>2200                  | OS-<br>2200D | Model                              | OS-2200    | OS-2200D |             |            |
| Max.Capacity      | 20L                | 40L       | Speed display<br>Accuracy | ±1rpm                        |              | ±1rpm                              |            | Voltage  | AC100 ~ 240 | 0V 50~60Hz |
| Max.Viscosity     | 20000mpas          | 50000mpas | Rotation direction        | clockwise/anti-<br>clockwise |              | Power                              | 100W       | 120W     |             |            |
| Max.Torque        | 40Ncm              | 60Ncm     | Clamping Diameter         | 0.5-10mm                     |              | Dimensions $(W \times D \times H)$ | 90 x 160 x | 220 (mm) |             |            |
| Speed             | 50~ 22             | 200rpm    | Timer                     | 1-99h59m                     |              | Weight                             | 3.3kg      | 3.5kg    |             |            |
| Speed<br>Accuracy | ±31                | rpm       | Screen                    | TFT 3.5 inch                 |              |                                    |            |          |             |            |

| /// | MOptional accessories       |        |                  |                        |     |                             |        |                  |             |
|-----|-----------------------------|--------|------------------|------------------------|-----|-----------------------------|--------|------------------|-------------|
| No. | Stirrers                    | Length | Max.<br>dismeter | Remark                 | No. | Stirrers                    | Length | Max.<br>dismeter | Remark      |
| 1   | Propeller and<br>Shaft      | 40cm   | 5cm              | 304 Stainless<br>Steel | 5   | Propeller and<br>Shaft      | 35cm   | 6.5cm            | PTFE coated |
| 2   | Straight Blade<br>and Shaft | 40cm   | 6cm              | 304 Stainless<br>Steel | 6   | Straight Blade<br>and Shaft | 35cm   | 7cm              | PTFE coated |
| 3   | Pitched Blade<br>and Shaft  | 40cm   | 6.8cm            | 304 Stainless<br>Steel | 7   | Pitched Blade<br>and Shaft  | 35cm   | 6.8cm            | PTFE coated |
| 4   | Centrifugal head and Shaft  | 40cm   | 9cm              | 304 Stainless<br>Steel | 8   | Centrifugal head and Shaft  | 35cm   | 8.5cm            | PTFE coated |



### MJ-800(D) Bacti-cinerator Sterilizer

#### ///Introduction

Bacti-cinerator sterilizer is used for incineration and disinfection of small tools and bottles such as inoculation rings, inoculation needles, lab tweezers and triangle and tube mouth. It is easy to operate and widely used in the environment of biological safety cabinets, purification worktables, suction fans and mobile vehicles, etc.



### "Features

- · Replace alcohol lamp, safe and convenient
- Center temperature up to 800°C  $\pm 50$ °C , rapid sterilization
- Small and light, easy to use
- · Suitable for anaerobic chamber
- Ash organic material to prevent infectious splash and cross contamination
- Automatic shutdown after 3H, extending service life

### ///optional accessory







///For MJ-800D



Fixed Angle



Max. Temp ≥ 800°C ±50°C

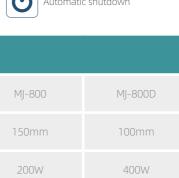


Rapid sterilize



Automatic shutdown







### GS-300(D) Glass Bead Sterilizer

#### **#Introduction**

GS-300(D) Glass Bead Sterilizer is a product for rapid sterilization of small experimental tools (such as surgical forceps, scissors, forceps, scalpels, needles, inoculation rings, inoculation needles, etc.) by high temperature glass beads. It can be used sterilize small solid metal and glass utensils within 10 seconds, and effectively eliminate bacteria, spores and other microorganisms. It is widely used in scientific research laboratories





#### Features

- Small size, easy operation and durable
- Maximum temperature is 300°C
- High-performance heating elements, high-precision temperature controller with over temperature protection
- Cool down to 100°C automatically after 5-hour heating of 300°C



LED Display



Corrosion Resistant



Max. Temp up to 300

| <b>∞Product parameters</b> |                               |                   |                       |                      |                     |
|----------------------------|-------------------------------|-------------------|-----------------------|----------------------|---------------------|
| Model                      | GS-300                        | GS-300D           | Model                 | GS-300               | GS-300D             |
| Voltage                    | AC100-120V/AC200-240V 50-60Hz |                   | Tank Dimension        | ф40mm×80mm           | ф40mm×140mm         |
| Temperature Range          | 100~300℃                      |                   | Beads Capacity        | 150g                 | 300g                |
| Temperature Accuracy       | ≤5°C                          |                   | Power                 | 120W                 | 250W                |
| Heating Rate               | ≤ 25min (Room tem             | perature to 300°) | Dimensions<br>(W×D×H) | 135 x 150 x 160 (mm) | 135 x 150 x 210(mm) |



### **BC-108 Blue Light Transilluminator**

### ///Introduction

BC-108 works with LED Blue Light source, which can prevent the users' eyes, face, hands from UV rays hurt. It can replace traditional UV transilluminator to observe the nucleic acid and protein in the stained gel, cut the gel.



\_\_\_\_\_

### <u> Fe</u>atures

- · Safe and reliable
- Small, ultra-thin and light
- User-friendly lid: easy to observe with amber transparent filter lid which is rotated or fixed angle as needed
- Durable: Maintenance free LED life longer than 60,000h
- Recommend to use nucleic acid stain agent which can be stimuated by 470nm wavelength light

| <b>™Product parameters</b> |                       |
|----------------------------|-----------------------|
| Model                      | BC-108                |
| Voltage                    | DC24V                 |
| Max.Gel Size               | 160x100 (mm)          |
| Wavelength                 | 470nm                 |
| LED Radiation Mode         | Double sides matrices |
| LED Life                   | 60000h                |
| Dimensions (WxDxH)         | 225x205x49 (mm)       |
| Weight                     | 1.3kg                 |
| Power                      | 20W                   |



### DC150-1/-2 Sample Concentrator







**///DC150-2** 

### ///Introduction

Fast efficient sample concentration suitable for a variety of tube controlled by PID with high precise temperature. The gas delivery needles are independent, which could control gas separately to ensure sample concentration a good uniformity. The height of the sample concentrators gas reservoir is located on an adjustable stand for accurate height control. This flexible combination of blocks makes the instrument compatible with most sample vessels.

### ///Features

- Independent needles avoid cross contamination
- Every gas volume adjustable
- Needles can work combined or alone
- Convenient to adjust gas for samples
- Accurate temperature, large temperature range, easy to calibrate
- Safe to use due to the height adjustable stand
- Stand rod with scale for accurate height control



Independent needles



Rod with scale



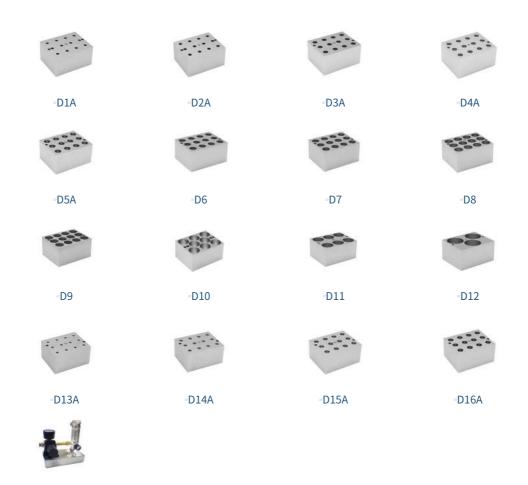
Display



imer

| <b>∞Product parameters</b>      |                |           |                                     |            |          |  |
|---------------------------------|----------------|-----------|-------------------------------------|------------|----------|--|
| Model                           | DC150-1        | DC150-2   | Model                               | DC150-1    | DC150-2  |  |
| Temperature Control<br>Range    | RT +5°C ~150°C |           | Nitrogen Flow                       | 0~12L/min  |          |  |
| Temperature Set Range           | 0°C ~15        | 50°C      | Pressure                            | ≤ 0.2      | MPā      |  |
| Heating Up Rate                 | ≤ 30min (20°C  | to 150°C) | Dimension ( $W \times D \times H$ ) | 220 x290 > | 540 (mm) |  |
| Temperature Stability<br>@40°C  | ±0.3°          | °C        | Block quantity                      | 1          | 2        |  |
| Temperature Stability<br>@100°C | ±0.5°          | °C        | Power                               | 200W       | 400W     |  |
| Temperature Stability<br>@120°C | ±1°(           | -         | Weight                              | 3.9kg      | 5kg      |  |
| Timer                           | 0~99h5         | 9min      |                                     |            |          |  |





Gas flow controller for option

| <b>///Opt</b> | ional Blocks     |          |              |      |                                       |          |              |
|---------------|------------------|----------|--------------|------|---------------------------------------|----------|--------------|
| Туре          | Tube diamter     | Capacity | Size mm      | Туре | Tube diamter                          | Capacity | Size mm      |
| D1A           | 6 mm (φ6.5×47)   | 12       | 96.5X76.5X50 | D9   | 20 mm (φ20.5×47)                      | 12       | 96.5X76.5X50 |
| D2A           | 7 mm (φ7.5×47)   | 12       | 96.5X76.5X50 | D10  | 26 mm (φ26.5×47)                      | 8        | 96.5X76.5X50 |
| D3A           | 10 mm (φ10.5×47) | 12       | 96.5X76.5X50 | D11  | 28 mm (φ28.5×47)                      | 6        | 96.5X76.5X50 |
| D4A           | 12 mm (φ12.5×47) | 12       | 96.5X76.5X50 | D12  | 38mm (φ38.5×47)                       | 3        | 96.5X76.5X50 |
| D5A           | 13 mm (φ13.5×47) | 12       | 96.5X76.5X50 | D13A | 0.2ml centrifuge tube<br>(φ6.1×17)    | 12       | 96.5X76.5X50 |
| D6            | 15 mm (φ15.5×47) | 12       | 96.5X76.5X50 | D14A | 0.5ml centrifuge tube<br>(φ8×23)      | 12       | 96.5X76.5X50 |
| D7            | 16 mm (φ16.5×47) | 12       | 96.5X76.5X50 | D15A | 1.5ml centrifuge tube<br>( φ10.8×31 ) | 12       | 96.5X76.5X50 |
| D8            | 19 mm (φ19.5×47) | 12       | 96.5X76.5X50 | D16A | 2ml centrifuge tube<br>(φ10.8×31)     | 12       | 96.5X76.5X50 |



### **DC150-1A Sample Concentrator**

### ///Introduction

Designed for Microplate with unique heating aluminum block which can transmit heat to sample quickly . Fast efficient sample concentration controlled by PID with high precise temperature, with display, Timer, beep alarm functions.



Rod with scale





Gas chamber Good sealing

### Features

- Independent needles avoid cross contamination
- Convenient to adjust gas for samples
- Accurate temperature up to 150°C
- Safe to use due to the height adjustable stand
- Stand rod with scale for accurate height control

| Model                        | DC150-1A              | Block quantity                      | 1                |  |  |
|------------------------------|-----------------------|-------------------------------------|------------------|--|--|
| Temperature control range    | RT+5°C ~150°C         | Timer                               | 0~99h59m         |  |  |
| Temperature Set Range        | 0°C ~150°C            | Nitrogen Flow                       | 0~12L/min        |  |  |
| Heating Up Rate              | ≤30min (20°C to150°C) | Pressure                            | ≤ 0.2MPa         |  |  |
| Temperature stability @40°C  | ≤±0.3°C               | Power                               | 400W             |  |  |
| Temperature stability @100°C | ≤±0.5°C               | Dimension (W $\times$ D $\times$ H) | 220x290x460 (mm) |  |  |
| Temperature stability @120°C | ≤±1°C                 |                                     |                  |  |  |

| <b> </b> |  |                                |  |  |  |
|----------|--|--------------------------------|--|--|--|
| Туре     | Tube diamter                                     | Size (W $\times$ D $\times$ H) |  |  |  |
| D17      | 96×0.2ml PCR plate,8×0.2ml strip                 | 153x96.5x33.5 (mm)             |  |  |  |
| D18      | Elisa plate, deep well plate, cell culture plate | 153x96.5x22.5 (mm)             |  |  |  |





### **DC150-1B Visible Sample Concentrator**

### **#Introduction**

Fast efficient sample concentration controlled by PID with high precise temperature, with display, timer, beep alarm functions. The heating aluminum block which can transmit heat to sample quickly, make the device an ideal replacement of the traditional water bath concentrator. This sample concentrator widely used in fields of drug testing, hormone analysis, liquid phase and spectrometry and etc.



#### Features

- Large temperature range, high efficient
- Unique designed block with slotsfor sample observation
- Independent needles avoid cross contamination
- Device can be used in fume hood to handle poison gas
- Built-in over heatsystem
- LED display, easy to operate





Rod with scale





Independent needles

| Model                          | DC150-1B                   | Temperature<br>Stability @100°C | ≤±0.5°C   | Needles Length                    | 150mm            |  |
|--------------------------------|----------------------------|---------------------------------|-----------|-----------------------------------|------------------|--|
| Temperature Control<br>Range   | RT +5°C ~150°C             | Temperature<br>Stability @120°C | ≤±1°C     | Gas Chamber adjustable distance   | 280mm            |  |
| Temperature Set<br>Range       | 0°C ~150°C                 | Block quantity                  | 1         | Pressure                          | ≤ 0.2MPa         |  |
| Heating Up Rate                | ≤ 30min (20°C to<br>150°C) | Timer                           | 0~99h59m  | Power                             | 400W             |  |
| Temperature<br>Stability @40°C | ≤±0.3°C                    | Nitrogen Flow                   | 0~12L/min | Dimension $(W \times D \times H)$ | 220x290x540 (mm) |  |

| /// <b>O</b> | ptional Bl | ocks               |                 |            |                     |            |
|--------------|------------|--------------------|-----------------|------------|---------------------|------------|
| Туре         | Capacity   | Block hole diamter | Size (mm)       | 111111     | ******              | 11111      |
| K1           | ф10 mmx 12 | ф10.5 mmx 47       | 153 x 96.5 x 50 | 8.00.00.00 | 8800000             | visioners  |
| K2           | ф12 mmx 12 | ф12.5 mmx 47       | 153 x 96.5 x 50 | <b>#K1</b> | <b></b>             | <b>™K3</b> |
| K3           | ф13 mmx 12 | ф13.5 mmx 47       | 153 x 96.5 x 50 |            |                     |            |
| K4           | ф15 mmx 12 | ф15.5 mmx 47       | 153 x 96.5 x 50 | 000000     | 000000              | 000000     |
| K5           | ф16 mmx 12 | ф16.5 mmx 47       | 153 x 96.5 x 50 | 111111     | 00000               | 000000     |
| K6           | ф19 mmx 12 | ф19.5 mmx 47       | 153 x 96.5 x 50 | .VE        | V.C                 | 1/7        |
| K7           | ф20 mmx 12 | ф20.5 mmx 47       | 153 x 96.5 x 50 | <b>∞K5</b> | <i>™</i> <b>K</b> 6 | <b>∞K7</b> |



### MiniH-100P Biological Indicator Incubator

#### ///Introduction

MiniH-100P is special equipment for biological Indicators with small size and light weight. It is suitable for testing and cultivating the sterilization of various biological indicators for pressure steam sterilization and ethylene oxide sterilization, etc.





LCD display



Optional blocks



Overheat protection

### "Feature

- LCD display
- Instant temperature and time countdown display
- · Automatic fault detection with buzzer alarm
- Timer options by 0~99S, 0~99M, 0~99H

- Optional and customized blocks, easy to exchange
- Temperature calibration function
- Low power with 8W
- Multiple security protection

| <b> </b>                             |               |                             |   |
|--------------------------------------|---------------|-----------------------------|---|
| Model                                | MiniH-100P    | Temperature Stability@100°C | ±0.3°C                                  |
| Temperature Setting Range            | RT +5°C ~80°C | Temp.Display Accuracy       | 0.1℃                                    |
| Temperature Set Range                | 0°C ~80°C     | Timer                       | 1~99h, 1~99m, 1~99s,<br>O:infinite time |
| Temperature Uniformity (below 56°C ) | ±0.3°C        | Heatinge Up Rate            | <6m ( 20°C to 56°C )                    |
| Temperature Stability@40°C           | ±0.3°C        | Power                       | 48W                                     |

| <b>#Option</b> | <b>"Optional Blocks</b> |  |  |  |  |
|----------------|-------------------------|--|--|--|--|
| Туре           | Capacity                |  |  |  |  |
| E1             | 15 x φ10mm (φ10.8 x 32) |  |  |  |  |
| E2             | 12 x φ12mm (φ12.5 x 32) |  |  |  |  |
| E3             | 8 x φ15mm (φ15.5 x 32)  |  |  |  |  |
| E4             | 8 x φ16mm (φ16.5 x 32)  |  |  |  |  |
| E5             | 24 x φ9mm (φ9.5 x 32)   |  |  |  |  |









ω**Ε1** 

E2

E3



∞E4



~E5



### **VP-26D Vacuum Suction System**

#### **#Introduction**

Our vacuum suction system is a benchtop, contamination free vacuum equipment, portable and easy to operate. This system combined by a vacuum pump and a collection bottle, which is widely used for sample aspiration/collection in biochemistry and medical engineering experiments like centrifugal liquid supernatant or sediment, Elisa plate washing and biochemical analyzer liquid.





#### Features

- · Quiet, small size
- Low power drived by motor
- Oil-resistant pump membrane, can improve pump performance and Anti-vibration
- Adjustable pressure 0~0.09Mpa, air release valve



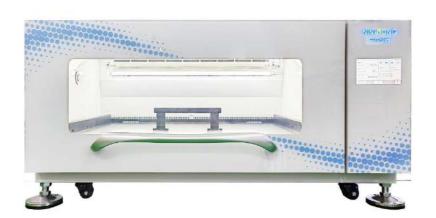
| <b>∞Product parameters</b>          |                               |          |                   |           |        |
|-------------------------------------|-------------------------------|----------|-------------------|-----------|--------|
| Mode                                | VP-26                         | VP-26D   | Mode              | VP-26     | VP-26D |
| Voltage                             | AC100~120V/AC200~240V 50~60Hz |          | Pressure          | 0~0.08Mpa |        |
| Gas Flow                            | 261                           | _/m      | Filter Bottle     | 250ml     | 1000ml |
| Vacuum Degree                       | 0.08Mpa                       |          | Usage Temperature | 5°C ~30°C |        |
| Dimension ( $W \times D \times H$ ) | 195x275x                      | 165 (mm) | Relative Humidity | ≤70%      |        |
| Power                               | 60                            | )W       | Weight            | 4.5       | 5kg    |

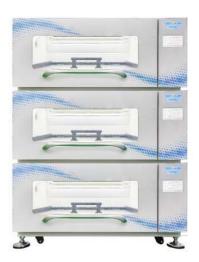
### Remarks

- Please pay attention to the liquid volume in collection bottle, discharge when it reaches max. line to avoid suck-back.
- Don't keep it working over than 30min, turn off the equipment when it warms up. Restart when it cools down.
- After finishing experiment, vent residual gas from pump to extend equipment life. The trapped air in pump may damage pump.



### **CA-280 Stackable Incubated Shaker**





### ///Introduction

CA-280(ABC) are stackable shakers which can be stacked two or three on floor for space saving. Shakers are controlled by PID micro-computer with high accurate temperature, with over-temperature audible and visual alarm, and various platforms for variety of flasks, beakers, culture dishes, tubes and etc. This model of shakers are widely used in industries of medical, biology, pharmaceutical, food and environment for applications of Bacterial suspensions, Hybridizations, Solubility studies, Washing procedures, General mixing, Protein expression, Staining and destaining and ect.

### "Features

- Quality cooling system, outstanding temperature uniformity
- Unique designed dynamic balancing system
- Built-in UV light for thorough sterilization
- Rugged construction, extremely quiet working, stable shaking
- Stack three to save space in labs
- Long life span, easy to maintenance
- Built-in USB port for data output, optional printer
- Upward lift door with balance power-assist
- Double-glazed security door with good heat insulation, users can easy to observe









| <b> </b>                          |   |                                |                     |  |  |
|-----------------------------------|---|--------------------------------|---------------------|--|--|
| Product                           | Stackable Incubated Shaker                      |                                |                     |  |  |
| Model                             | CA-280A(single) CA-280B(double) CA-280C(triple) |                                |                     |  |  |
| Speed (no load)                   |   | 5-330rpm                       |                     |  |  |
| Speed accuracy                    |   | ±1rpm                          |                     |  |  |
| Amplitude                         |   | Ф26mm                          |                     |  |  |
| Temperature range                 | 4   | ~60°C (Ambient temperature ≤ 3 | 0°C )               |  |  |
| Room temperature                  | ≤ 30°C  |                                |                     |  |  |
| Temperature adjustment accuracy   | ±0.1°C  |                                |                     |  |  |
| Temperature uniformity            | ±0.5°C (@37°C)                                  |                                |                     |  |  |
| Display                           |   | LCD                            |                     |  |  |
| Convection way                    |   | Forced-convection heat transfe | er                  |  |  |
| Temperature control               |   | PID                            |                     |  |  |
| Timer                             |   | 0-999h59m                      |                     |  |  |
| Interchangeable platform size     |   | 905mmx565mm                    |                     |  |  |
| Voltage                           |   | AC220±10% 50-60Hz              |                     |  |  |
| Power                             |   | 1300W                          |                     |  |  |
| Dimension (LxWxH)                 | 1315mmx855mmx660mm                              | 1315mmx855mmx1230mm            | 1315mmx855mmx1795mm |  |  |
| Weight                            | 250kg 490kg 730kg                               |                                |                     |  |  |
| Noise                             | < 55dB  |                                |                     |  |  |
| Height from platform to inner top | 340mm   |                                |                     |  |  |

| ™Note:capacity of one shaker |                                    |                          |  |
|------------------------------|------------------------------------|--------------------------|--|
| Flask type                   | Max.<br>Capacity(Adhesive<br>mats) | Max.<br>Capacity(Clamps) |  |
| 50ml                         | 171                                | 160                      |  |
| 100ml                        | 104                                | 96                       |  |
| 250ml                        | 67                                 | 60                       |  |
| 500ml                        | 40                                 | 40                       |  |
| 1L                           | 24                                 | 24                       |  |
| 2L                           | 15                                 | 15                       |  |
| 3L                           | 11                                 | 11                       |  |

| <b>  ■Optional accessories</b> |                               |                            |  |
|--------------------------------|-------------------------------|----------------------------|--|
| Platform<br>model              | Description                   | Dimension                  |  |
| NP661                          | Flat platform                 | 905X565(mm)                |  |
| NP662                          | Multifunction spring platform | 895X565X100(mm)            |  |
| NP663                          | Flask clamps                  | 905X565(mm)                |  |
| NP664                          | Adhesive mats                 | 905X565(mm)<br>24 pcs mats |  |



## CA-C280 (ABC) CO<sub>2</sub> Stackable Incubated Shaker





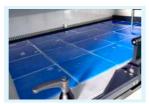
#### **#Introduction**

CA-C280(ABC) are carbon dioxide stackable Incubated Shakers, commonly used in microbial cell fermentation, animal cell and plant cell culture, also in industries of biological medicine, food development, biology, agriculture and environmental protection to carry out microbial cultivation, strain and cell line screening etc. as well as hybridization, biochemical reaction and enzyme reaction with high requirements of temperature.

#### ///Features

- Double-glazed security door with heating film, avoid fogging and dripping
- Compact design, Stack up to three units high, Space-saving
- Window shade is optional for some light sensitive sample
- Drawer-type platform, easily pulled in and out for operation and accessories installation
- Upward lift door with balance power-assist
- The platform stops once door is open
- 7 inch colorful TFT screen, easy to use
- Built-in USB port for data output











| "Product parameters              |  |                     |                     |
|----------------------------------|--|---------------------|---------------------|
| Product                          | CO <sub>2</sub> Stackable Incubated Shaker |                     |                     |
| Model                            | CA-C280A(Single)                           | CA-C280B(Double)    | CA-C280C(Triple)    |
| Speed (no load)                  | 5-260 rpm                                  |                     |                     |
| Speed accuracy                   |  | ±1rpm               |                     |
| Amplitude                        | Ф50mm(Standard) Ф26mm(Optional)            |                     |                     |
| Temperature range                | 4~60°C (Ambient temperature ≤ 30°C )       |                     |                     |
| Temperature adjustment accuracy  | ±0.1°C                                     |                     |                     |
| Temperature uniformity           | ±0.2 (@37℃)                                |                     |                     |
| CO₂ control range                | 0-20%                                      |                     |                     |
| CO <sub>2</sub> control accuracy | 0.1%                                       |                     |                     |
| Display                          | LCD (Touch Screen)                         |                     |                     |
| Temperature control              | PID  |                     |                     |
| Timer                            | 0-999h59m                                  |                     |                     |
| Interchangeable platform size    | 905mmx530mm                                |                     |                     |
| Voltage                          | AC220±10% 50-60Hz                          |                     |                     |
| Power                            | 1300W                                      |                     |                     |
| Dimension (LxWxH)                | 1315mmX855mmX660mm                         | 1315mmX855mmX1230mm | 1315mmX855mmX1795mm |
| Weight                           | 250kg                                      | 490kg               | 730kg               |
| Noise                            | < 55dB                                     |                     |                     |

# Capacity of one stack: Flask type Max. flasks on adhesive platform Max. flasks on clamp platform 250ml 60 60 500ml 38 38 1L 24 18 2L 15 15 3L 11 11



### **CA-128 Incubated Shaker**







#### **"Introduction**

CA-128(ABC) stackable shakers are designed with smaller size catering to requirements of less sample quantity and smaller labs, controlled by PID micro-computer with high accurate temperature, with over-temperature audible and visual alarm, and various platforms for variety of flasks, beakers, culture dishes, tubes and etc. This model of shakers are widely used in industries of medical, biology, pharmaceutical, food and environment for applications of Bacterial suspensions, Hybridizations, Solubility studies, Washing procedures, General mixing, Protein expression, Staining and destaining and ect.

#### Features

- 5-inch HD color touch screen with friendly UI design
- Accurate speed control due to high quality servosystem and precision bearings
- Steady oscillation, accurate controls of temperature and speed, extremely quiet working
- Drawer-type platform, easily pulled in and out for operation and accessories installation
- Integrated data record and chart function.
- USB port for data export and save
- Automatic defrosting function by refrigerating system



| <b>"Product parameters</b>    |                                      |                    |                    |
|-------------------------------|--------------------------------------|--------------------|--------------------|
| Product                       | Stackable Incubator Shaker           |                    |                    |
| Model                         | CA-128(Single)                       | CA-128(Double)     | CA-128(Triple)     |
| Speed (no load)               | 5-350rpm                             |                    |                    |
| Speed accuracy                | ±1rpm                                |                    |                    |
| Amplitude                     | Ф26mm                                |                    |                    |
| Temperature range             | 4~60°C (Ambient temperature ≤ 30°C ) |                    |                    |
| Interchangeable platform size | ±0.1°C                               |                    |                    |
| Temperature uniformity        | ±0.5°C (@37°C)                       |                    |                    |
| Display                       | LCD (Touch screen)                   |                    |                    |
| Control method                | PID                                  |                    |                    |
| Timer                         | 0-999h59m                            |                    |                    |
| Voltage                       | AC220±10% 50-60Hz                    |                    |                    |
| Power                         | 750W                                 |                    |                    |
| Interchangeable platform size | 490x465 mm                           |                    |                    |
| Noise                         | ≤ 55dB                               |                    |                    |
| Dimension (LxWxH)             | 820mmx715mmx700mm                    | 820mmx715mmx1300mm | 820mmx715mmx1900mm |

| Flask type | Capacity(Pcs of flasks) |  |
|------------|-------------------------|--|
| 250ml      | 30                      |  |
| 500ml      | 18                      |  |
| 1L         | 10                      |  |
| 2L         | 7                       |  |
| 3L         | 5                       |  |
| 5L         | 4                       |  |