

**PRODUCT
BROCHURE
2019–2020**



Professional manufacturer
of laboratory instruments



HANGZHOU MIU INSTRUMENTS CO.,LTD.
<http://www.miulab.com>

MP-16 Mini Thermal Cycler

Thermal Cycler

Introduction

Mini Thermal Cycler is an ultra-light and ultra-thin thermal cycle gene amplification instrument. Widely used in molecular biology, criminal investigation, disease research and other fields. Mini portable for car use.

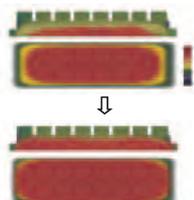
Features

1. New and unique appearance, the interface operation is simple and convenient, ultra-light ultra-thin.
2. The latest generation of semiconductor technology, excellent augmentation performance, effectively eliminate the edge effect of module heat conduction, the module temperature uniformity is excellent.
3. The bottom shell with one aluminum carved processing, not only exquisite and solid, but also greatly enhance the heat dissipation performance.
4. 5-inch TFT high-definition full-touch color screen, can quickly edit the required files, visual display of temperature curve, convenient and fast setting, accurate display of temperature curve and instrument running process status in real time.
5. User login, authority management, password protection function, ensure data security, administrator can clear users, large data storage, the machine can store more than 100 files.
6. The ingenious elastic hot cover structure design, adapts the test tubes of different heights to ensure the best conditions for the test.
7. Real-time temperature display, more conducive to controlling the sample temperature.
8. The hot cover temperature and hot lid working mode can be set, the hot cover can be switched on and off, and the tube temperature control mode and block temperature control mode can be selected to meet more different experimental requirements.

The heat transfer at the edge of the module is nonuniform



Block temperature is uniform



Parameters

Model	MP-16	Program max. cycle number	99
Temp. range	4~99.9°C	Time increment/decrement	-599~+599s
Sample capacity	16×0.2ml	Temp. increment/decrement	-9.9~+9.9°C
Max. heating rate	5°C/s	Program pause function	Yes
Maxi. cooling rate	4°C/s	16°C Insulation	Forever
Temp. uniformity	±0.25°C	LCD	5 inches,800×480 Pixel
Temp. accuracy	±0.20°C	Program storage quantity	> 100
Temp. display resolution	0.1°C	Communication Interface	USB 2.0
Temp. control method	Block/Tube	Power supply	12V 9.99A
Single step time range	1~59m59s(0 is foreve)	Dimensions(mm)	W.200×D.230×H.85mm
Hot cover temp. range	30~105°C	Net weight	3.2kgs
Max. steps of the program	30		

MP-32+ Mini Gradient Thermal Cycler

Thermal Cycler

Introduction

Mini Gradient PCR is an ultra-light and ultra-thin thermal cycle gene amplification instrument. Widely used in molecular biology, criminal investigation, disease research and other fields.

Features

1. New and unique appearance, the interface operation is simple and convenient, ultra-light ultra-thin.
2. The latest generation of semiconductor technology, excellent augmentation performance, effectively eliminate the edge effect of module heat conduction, the module temperature uniformity is excellent. Built-in multiple refrigeration film, multiple sensors are evenly distributed, the program temperature control is more precise.
3. The bottom case is made of one-piece aluminum, which is not only beautiful and sturdy, but also has a higher heat dissipation performance.
4. 5-inch TFT high-definition full-touch color screen, can quickly edit the required files, visual display of temperature curve, convenient and fast setting, accurate display of temperature curve and instrument running process status in real time.
5. The system has a built-in gradient calculator, which can easily obtain accurate annealing temperature for different experimental samples to optimize PCR reaction conditions.
6. User login, rights management, password protection, data security, administrators can clear users, large data storage, the maximum number of files that can be stored in the machine is greater than 100.
7. The ingenious elastic hot-cover structure design adapts the test tubes of different heights to ensure the best conditions for the experiment.
8. Real-time display gradient distribution, real-time temperature display, more conducive to control the sample temperature.
9. The hot lid temperature and working mode can be set, hot lid can be switched on and off, and test tube temperature control mode and module temperature control mode can be choose to meet more different experimental requirements.



Parameters

Model	MP-32+	Hot cover temp. range	30~105°C
Single step time range	1~59m59s(0 is forever)	Max. steps of the program	30
Temp. range	4~99.9°C	Program max. cycle number	99
Sample capacity	32×0.2ml	Time increment/decrement	-599~+599s
Max. heating rate	6°C/s	Temp. increase/decrease	-9.9~+9.9°C
Max. cooling rate	5°C/s	Program pause function	Yes
Temp. uniformity	±0.25°C	16°C Insulation	Forever
Temp. accuracy	±0.20°C	LCD	5 inch, 800×480 Pixel
Temp. display resolution	0.1°C	Program storage quantity	> 100
Temp. control method	Block/Tube	Communication Interface	USB 2.0
Gradient temp. uniformity	±0.3°C	Input power	24V, 8A
Gradient temp. accuracy	±0.3°C	Dimensions	W.200×D.230×H.85mm
Gradient temp. range	30~99.9°C	Net weight	3.2kgs
Gradient temp. difference range	0.1~30°C		

PR-96E Gradient Thermal Cycler

Thermal Cycler

Introduction

Gradient PCR instrument is a gene amplification instrument with gradient PCR function derived from ordinary PCR instrument. It is widely used in molecular biology, criminal investigation, disease research and other fields.

Feature

1. New and unique appearance, the interface operation is simple and convenient, compact size.
2. The latest generation of semiconductor technology, excellent augmentation performance, effectively eliminate the edge effect of module heat conduction, the module temperature uniformity is excellent. Built-in multi-channel refrigeration film, several sensors are evenly distributed, the program temperature control is more precise.
3. 5-inch TFT high-definition full-touch color screen, can quickly edit the required files, visual display of temperature curve, convenient and fast setting, accurate display of temperature curve and instrument running process status in real time.
4. The system has a built-in gradient calculator, which can easily obtain accurate annealing temperature for different experimental samples to optimize PCR reaction conditions.
5. User login, rights management, password protection, data security, administrators can clear users, large data storage, the maximum number of files that can be stored in the machine is greater than 100.
6. The ingenious elastic hot cover structure design, ADAPTS to the different height test tube, guarantees the best conditions for the test.
7. Real-time display of gradient temperature distribution, real-time temperature display, more conducive to controlling the sample temperature.
8. The hot lid temperature and working mode can be set, hot lid can be switched on and off, and test tube temperature control mode and module temperature control mode can be choose to meet more different experimental requirements.



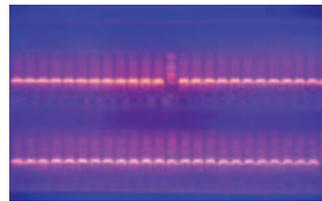
One-click open button



96-well large sample table



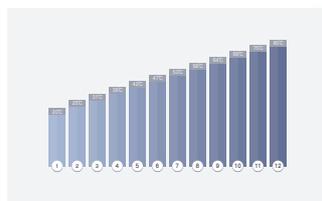
Remove edge effect technique



Uniformity



5-inch display

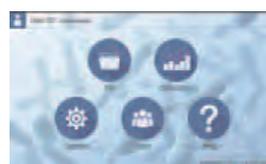


Gradient Calculation



Interface display

The 5-inch TFT high-definition full-touch color screen can quickly edit the required files, temperature curve visual display, the setting is convenient and fast, real-time accurate display temperature curve and instrument operation process status.



Main Interface



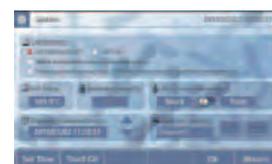
Running file



Gradient Calculation



Edit file



Set interface



Can be used with 96-well PCR plates

Parameter

Model	PR-96E	Hot cover temp. range	30~105°C
Single step time	1~59m59s(0 is forever)	Max. steps of the program	30
Temp. range	4~99.9°C(constant temp.: 4°C)	Program max. cycle nu	99
Sample capacity	96×0.2ml	Time increment/decrement	-599~+599s
Max. heating rate	4.5°C/s	Temp. increase/decrease	-9.9~+9.9°C
Max. cooling rate	4°C/s	Program pause function	Yes
Temp. uniformity	±0.25°C	16°C Insulation	Forever
Temp. accuracy	±0.20°C	LCD	5 inch, 800×480 Pixel
Temp. display resolution	0.1°C	Program storage quantity	> 100
Temp. control method	Block/Tube	Communication Interface	USB 2.0
Gradient temp. uniformity	±0.3°C	Input power	100~240V AC6.6~3.1A 50/60Hz
Gradient temp. accuracy	±0.3°C	Dimensions	W.185×D.280×H.160mm
Gradient temp. range	30~99.9°C	Net weight	4.3kgs
Gradient temp. difference range	0.1~30°C		

MINIP-2500 Micro-plate Centrifuge

Centrifuge Series

Introduction

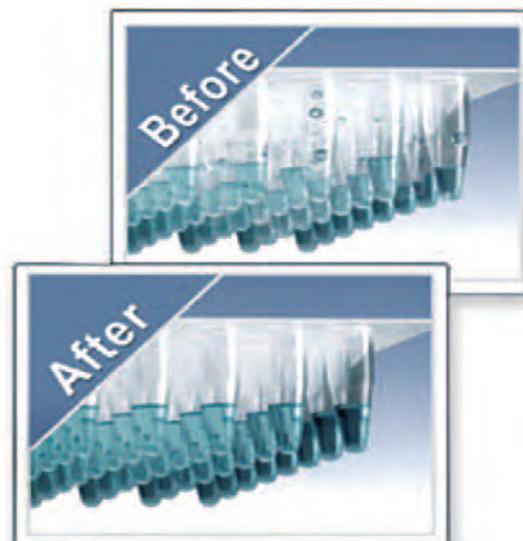
Micro-plate Centrifuge MINIP-2500 is specially designed for the 96-hole micro plates. It can quickly spin down droplets and condensation.

Feature

1. Wide applicable range. It suits for skirted, semi-skirted, non-skirted and all standard PCR plates.
2. Strong centrifugal power. Accelerate to 2500rpm quickly. From top speed to stop cost around 10 seconds.
3. Humanized design. Two modes – press to operate or timer control – make the experiments more convenient and efficient.
4. Smart size, simple operation. The cover can be fully opened to 95°, convenient to put and fetch the plates.
5. Quick spin down droplets and condensation. Used before and after thermal cycling to improve PCR yield.

Parameter

Model	MINIP-2500
Spdpe Range	2800rpm
RCF	627g
Sample Capacity	2PCR plates
Rotor	Fixed vertically
Time Range	1s ~99s or touch operation
Voltage	DC 24V Power adapter (AC 100V~230V,50/60Hz)
Power	40W
Dimension	W.190 x D. 219 x H.186mm
Net Weight	2.7kgs



MINI-4K/6K/7K/10K/10K+ Mini Centrifuge

Centrifuge Series

Introduction

Mini Centrifuge is perfect designed with novel and unique appearance. It is pretty and skillful, equipped with 2 types of rotors and several types of tube carriers for 2.0ml / 0.5ml / 0.2ml tubes and 0.2ml x 8 PCR tube strips. It is designed user-friendly. Open/close the cover will automatically start/stop the centrifuge. Mini centrifuge series are built-in timing function.

Feaure

1. Large radius rotor with 8 tube holes, centrifugal force is 1.5 times bigger than ordinary 6-hole rotor at the same rolling speed.
2. The cover press-button is outward designed with start/stop function. Press the button, the cover will open automatically to 95°, which is very convenient for one-hand operation.
3. The rotor is clip-on fixed. Very convenient for rotors exchanging yet fixed solid reliable.
4. LED displays speed (MINI-10K+) and timing.
5. Working is silent and stable. Free-maintenance motor, long-life and safe.
6. Smart appearance. Multi-purpose to meet different experimental demands.

Acessories



Rotor



Strip Rotor



Tube adapters



Mini-4K/6K/7K/10K



Mini-10K+

Parameters



Model	Mini-4K	Mini-6K	Mini-7K	Mini-10K	Mini-10K+
Speed Range	4000rpm	6000rpm	7000rpm	10000rpm	3krpm-10krpm (increment:1000rpm)
RCF	approx.850g	approx.2000g	approx.2600g	approx.5300g	approx.500g ~5300g
Rotor capacity	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter) 2x8x0.2ml PCR Strips	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter) 2x8x0.2ml PCR Strips	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter)	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter)	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter) 2x8x0.2ml PCR Strips(when speed≤6000rpm)
Time Range	1s ~9999min or continuous	1s ~9999min or continuous	1s ~9999min or continuous	1s ~9999min or continuous	1s ~999min or continuous
Working Noise	≤45dB	≤45dB	≤55dB	≤55dB	≤55dB
Voltage	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz
Power	≤45W	≤45W	≤45W	≤45W	≤45W
Fuse	250V, 1A, Φ5x20	250V, 1A, Φ5x20	250V, 1A, Φ5x20	250V, 1A, Φ5x20	250V, 1A, Φ5x20
Dimension	W.156 x D.176 x H.121mm	W.156 x D.176 x H.121mm	W.156 x D.176 x H.121mm	W.156 x D.176 x H.121mm	W.156 x D.176 x H.121mm
Net Weight	1.5kgs	1.5kgs	1.5kgs	1.5kgs	1.5kgs

MINI-4KC/6KC/7KC/10KC/10K+C Mini Centrifuge

Centrifuge Series

Introduction

Mini Centrifuge is perfect designed with novel and unique appearance. It is pretty and skillful, equipped with 2 types of rotors and several types of tube carriers for 2.0ml / 0.5ml / 0.2ml tubes and 0.2ml x 8 PCR tube strips. It is designed user-friendly. Open/close the cover will automatically start/stop the centrifuge. Mini centrifuge series are built-in timing function.

Feaure

1. Large radius rotor with 8 tube holes, centrifugal force is 1.7times bigger than ordinary 6-hole rotor at the same rolling speed.
2. The cover press-button is outward designed with start/stop function. Press the button, the cover will open automatically to 95°, which is very convenient for one-hand operation.
3. The rotor is clip-on fixed. Very convenient for rotors exchanging yet fixed solid reliable.
4. LED displays speed (MINI-10K+) and timing.
5. Working is silent and stable. Free-maintenance motor, long-life and safe.
6. Smart appearance. Multi-purpose to meet different experimental demands.

Acessories



Combined rotor



Tube adapters



MINI-4KC/6KC/7KC/10KC



Mini-10K+C

Parameters



Model	Mini-4KC	Mini-6KC	Mini-7KC	Mini-10KC	Mini-10K+C
Speed Range	4000rpm	6000rpm	7000rpm	10000rpm	3krpm-10krpm (increment:1000rpm)
RCF	approx.1000g	approx.2300g	approx.3100g	approx.5600g	approx.500g-5600g
Rotor capacity	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter) 2x8x0.2ml PCR Strips	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter) 2x8x0.2ml PCR Strips	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter)	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter)	8x2.0/1.5/0.5/0.2ml centrifuge tubes (With 0.5ml and 0.2ml tube adapter) 2x8x0.2ml PCR Strips (when speed≤6000rpm)
Time Range	1s ~9999min or continuous	1s ~9999min or continuous	1s ~9999min or continuous	1s ~9999min or continuous	1s ~999min or continuous
Working Noise	≤45dB	≤45dB	≤55dB	≤55dB	≤55dB
Voltage	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz
Power	≤45W	≤45W	≤45W	≤45W	≤45W
Fuse	250V, 1A, Φ5x20	250V, 1A, Φ5x20	250V, 1A, Φ5x20	250V, 1A, Φ5x20	250V, 1A, Φ5x20
Dimension	W.156 x D.176 x H.121mm	W.156 x D.176 x H.121mm	W.156 x D.176 x H.121mm	W.156 x D.176 x H.121mm	W.156 x D.176 x H.121mm
Net Weight	1.5kgs	1.5kgs	1.5kgs	1.5kgs	1.5kgs

MC-15 Miniature High-speed Centrifuge

Centrifuge Series

Introduction

Miniature High-speed Centrifuge has compact appearance design with high rotor speed and low noise. It is streamline elegant with small size. With variable frequency motor, MC-15 has excellent acceleration to achieve target speed / stop to save time.

Feature

1. Compact and small size, save space.
2. Variable frequency motor for excellent acceleration. High speed with low noise.
3. To achieve max. speed 15000rpm (Max. RCF15000xg) or stop from max. speed, it costs about 15s.
4. Highlight LCD displays speed and timing.
5. Rotor is made of aluminium alloy, chemical attack resistant, resist dry heat sterilization many times.
6. "Short" key makes "touch to operate" easy and convenient.
7. Excellent fluid air exchange technology. The unique three air flues design utmostly lower the temperature rising. Protect samples sensitive to temperature.
8. Self-locking function, cover can not be open while operating. Press the key to open the cover after operation. Safe and reliable.
9. Aluminium rotor and plastic rotor (customized) are for optional. Aluminium rotor can resist heat disinfection but lower acceleration. Plastic acceleration speed is faster but is not available for heatdisinfection.

Accessories



No trouble to put tubes in



Metal rotor + Safety cover



Parameter

Model	MC-15	Safety	self-lock, over-speed, over-temp., status diagnosis system
Speed Range	100 ~15000rpm (increment: 100rpm)	Other Functions	speed/RCF switch, touch operation, operating status display, alert
Max. RCF	15000xg	Power	105W
Max. Sample Capacity	2ml/1.5mlx12	Fuse	250V, 5A/10A, Φ 5 x20
Time Range	20sec ~99min	Voltage	AC220~230V / AC110~120V, 50/60Hz
Acceleration to Max. Speed	around 15s	Dimension (WxDxH)	220 x 240 x 145mm
Deceleration to Stop	around 15s	Net Weight	5.1kgs
Drive motor	variable frequency motor		

MT-45 Low Speed Centrifuge

Centrifuge Series

Introduction

MT-45 Low Speed Centrifuge is suitable for extraction of medical products, blood bank, clinical trial and blood serum, plasma, body fluids and biological specimen in biology laboratory.

Feature

1. LCD screen displays timing and speed, convenient to set and read.
2. Three patterns: Short mix, timing set:30 to 59s, continuous running. More efficient.
3. Sound alerts after the rotor stops . LCD displays process.
4. Adjustable speed from 300 to 4500rpm, relative centrifugal force to 2490xg. High accuracy of speed and time, excellent performance.
5. Different types of rotors for optional. Large capacity rotor for multiple options. More samples dealt at one time with high efficiency.
6. Applied with high-performance CPU control mode, high speed accuracy and excellent performance.
7. High safety, low noise. High strength plastic rotor and excellent balance technology for quiet and stable operation.
8. Double-level safety lid. Electronic lock is for safer and more reliable rotor operation.
9. DC brushless motor drives quickly and effortlessly accelerates the rotor to set speed, maintenance-free.
10. Timing starts after reaching the setting speed, make sure centrifugal time accurate. Reasonable curve brake makes better centrifugal effect.

Accessories



MT-A
5ml/7ml x16



MT-B
10ml / 15ml x12



MT-C
50ml x6

Parameter

Model	MT-45
Speed Range	300 ~4500rpm (increment: 100rpm)
Max. RCF	2490xg (increment: 100xg)
Speed Accuracy	±20rpm
Max. Sample Capacity	7ml/5mlx16 or 10ml/15mlx12 or 50mlx6
Time Range	1s~99m59s or continuous
Safety	self-lock, over-speed, status diagnosis system
Working Noise	≤56dB
Acceleration / Deceleration	50s ↑ 20s ↓
Voltage	AC100~240V, 50/60Hz
Power	120W
Dimension (WxDxH)	W.300 x D.431 x H.178mm
Net weight	17.0kgs



ES-60/60+/60E/60C Incubator Shaker

Shaker & Rocker

Introduction

Incubator Shaker is one kind of temperature controlled biochemical instrument combining incubation and shaking function. It is widely used in cell culture, fermentation, hybridization, biochemistry, research of enzyme and cell tissue, etc. which requires higher quality of temperature controlling and shaking speed. It can dynamically and statically cultivate microbial cell and all kinds of strains.

Feature

1. PID control speed technology.
2. Integrate incubator and shaker. Save lab space.
3. Compact design, good temperature uniformity, low noise.
4. Micro-processor controls temperature and shaking speed. Built-in timing function .
5. Human friendly touch-tone operation interface. Cover can be widely angle opened, convenient to watch and pick sample.
6. Equiped with cover switch. When the cover is open, air circulation, heating and shaking will automatically stop. No temperature overshoot problem.
7. Unique speed control circuit to ensure shaker smoothly start to avoid liquid spilling.
8. Circulation fan speed can be adjusted to avoid high-speed of the circulation fan making the sample volatilize.
9. Independent temperature alarm system. Heating is cut off automatically when temperature is over the limited value.
10. Sound alarms after program finishes.
11. Brushless DC motor, long life and maintenance-free.

Optional Platforms



Platform with clamps
P6-250



Platform with clamps
P12-100



Universal platform
with adjustable bars
UP-12



Double deck flat platform
with non-slip rubber mat
PP-4A



Flat platform with
non-slip rubber mat
PP-4



Universal platform with springs
PW-260



Sticky Pad SPD-GS
used in the platform
PP-4 or PP-4A



ES-60

Remarks:

The replaceable platforms are for ES-60 and ES-60C only.



ES-60E



ES-60+

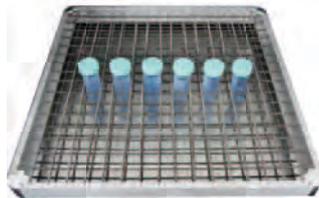


ES-60C

Specific Platforms



Platform PW-1500
W.280 x D.214 x H.13mm
(only for ES-60E)



Platform PW-420
W.410 x D.420 x H.65mm
(only for ES-60+ and ES-60C+)

Parameter

Model	ES-60	ES-60E	ES-60+	ES-60C
Speed Range	50rpm~300rpm	200rpm~1200rpm	50rpm~300rpm	50rpm~300rpm
Shaking Orbit	20mm (circle)	3mm (horizontal)	20mm (circle)	20mm (circle)
Temp. Control Range	R.T.+5~60°C	R.T.+5~60°C	R.T.+5~60°C	4~60°C @R.T.≤25°C
Temp. Setting Range	5~60°C	5~60°C	5~60°C	4~60°C
Temp. Stability@37°C	±0.3°C	±0.3°C	±0.3°C	±0.3°C
Temp. Display Accuracy	0.1°C	0.1°C	0.1°C	0.1°C
Time Range	1min~99h59min	1min~99h59min	1min~99h59min	1min~99h59min
Voltage	AC 220V/AC 110V, 50/60Hz	AC 220V/AC 110V, 50/60Hz	AC 220V/AC 110V, 50/60Hz	AC 220V/AC 110V, 50/60Hz
Power	400W	400W	600W	600W
Fuse	250V, 3A/5A, Φ5x20	250V, 3A/5A, Φ5x20	250V, 5A/10A, Φ5x20	250V, 5A/10A, Φ5x20
Dimension (WxDxH)	W.360 x D.435 x H.320mm	W.360 x D.435 x H.320mm	W.514 x D.660 x H.430mm	W.385 x D.560 x H.320mm
Net Weight	18.7kgs	18.7kgs	44.2kgs	25.8kgs
Optional Platform	Refer to "Platform Option"	Platform PW-1500	Platform PW-420	Refer to "Platform Option"

ES-60C+ Incubator Shaker

Shaker & Rocker

Introduction

ES-60C+ Incubator Shaker is one kind of temperature controlled biochemical instrument combining incubation and shaking function. It is widely used in cell culture, fermentation, hybridization, biochemistry, research of enzyme and cell tissue, etc. which requires higher quality of temperature controlling and shaking speed. It can dynamically and statically cultivate microbial cell and all kinds of strains.

Features

1. PID speed control technology.
2. Integrate incubator and shaker. Save lab space.
3. Compact constant temperature space, good temperature uniformity, low noise.
4. Micro-processor controls temperature and shaking speed. Built-in timing function
5. Human friendly touch-tone operation interface. Cover can be widely angle opened, convenient to watch and pick sample.
6. Equiped with cover switch. When the cover is open, air circulation, heating and shaking will automatically stop. No temperature overshoot problem.
7. Unique speed control circuit to ensure shaker smoothly start to avoid liquid spilling.
8. Circulation fan speed can be adjusted to avoid high-speed of the circulation fan making the sample volatilize
9. Independent temperature alarm system. Heating is cut off automatically when temperature is over the limited value.
10. Sound alarms after program finishes, it can also be set to untimed continuous operation.
11. Brushless DC motor, long life and maintenance-free.



Platform PW-420
W.410 x D.420 x H.65mm

Parameters

Model	ES-60C+
Speed range	50rpm ~300rpm
Shaking orbit	20mm (circle)
Temp. control range	4 ~60°C @Ambient temp. ≤25°C
Temp. setting range	4 ~60°C
Temp. stability	±0.3°C
Temp. Display accuracy	0.1°C
Time range	1min ~99h59min
Voltage	AC 220V , 50/60Hz
Power	1200W
Fuse	250V, 5A/10A, Φ5x20
Dimension	W.560xD.823xH.449
Net weight	61Kgs
Platform	PW-420



SWT-100 Water Bath Shaker

Shaker & Rocker

Introduction

Water Bath Shaker is a temperature controlled thermostat water bath and oscillator combined laboratory equipment, mainly applicable to colleges and universities, medical, petrochemical, health and epidemic prevention, environmental monitoring and other research departments for biological, Biochemical, cell, bacteria and other liquid, solid-state chemical oscillation.

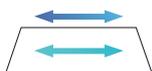
Feature

1. Unique and novel appearance, small size, powerful functions. All surfaces in contact with water are made of high-quality stainless steel and are corrosion-resistant.
2. TFT LCD holographic displays operating speed, temperature, time. Graphic dynamic symbols and precise data at a glance.
3. Built-in chip memory storage mode, memory 9 kinds commonly used combination of parameters, and can achieve single-node cycle or multi-node pulse cycle. To meet more experimental requirements.
4. Using microcomputer program PID automatic temperature control, with a good temperature uniformity, high temperature control accuracy, safety and comprehensive protection features.
5. Oscillation and heating using split design, the moving frame can be taken out when it do not need to oscillation, can be used as a constant temperature water bath box, a dual-purpose machine.
6. DC motor, low noise, maintenance-free, long service life.
7. Transparent clamshell design, easy to operate, real-time observation of the internal operating status.

Remarks

Number of conical flasks of different sizes that can be accommodated:

- Conical flask 1000ml*1
- Conical flask 500ml*4
- Conical flask 250ml*5
- Conical flask 100ml*12



Parameter

Model	SWT-100
Heating capacity	10L
Temp. Control Range	R.T.+5°C ~100°C
Temp.Stability (100°C)	±0.5°C
Time Range	1m-99h59m OFF is forever
Oscillation mode	Reciprocating
Amplitude	26mm
Speed range	20~200rpm
Sink size((WxDxH)	250x304x200mm
Voltage	AC220/110V, 50/60Hz
Power	1100W
Dimensions(WxDxH)	W.288 x D.506 x H.350 mm
Net weight	10kgs

TS-300/300T/300S Decolorization shaker

Shaker & Rocker

Introduction

Decolorization shaker is widely used in coomassie blue dyeing and decolorization shaking, electrophoresis gel fixing, silver nitrate dyeing fixing, dyeing, development and so on.

Feature

1. Compact appearance, space saving, powerful function and strong compatibility.
2. Suction cup type machine feet, super shockproof, high speed and smooth, no noise.
3. large platform design, placing more samples, strong load capacity.
4. Three models are available, the configuration performance is from low to high, to meet more choices.

Optional Platforms



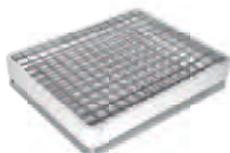
Platform TS-A
(Stainless steel platform
and rubber mat combination)



Conical Flask Stand TS-B
(250ml can put 12pcs)



Conical Flask Stand TS-C
(100ml can put 20pcs)



Universal Platform TS-D



TS-300



TS-300T/300S

Parameter

Model	TS-300	TS-300T	TS-300S
Speed Range	0~300rpm	50~300rpm	50~300rpm
Time Range	/	1min~99h59min	1min~99h59min
Digital Display	/	Time/speed display	Time/speed display
Radius of gyration	10mm	10mm	10mm
Max Load Capacity	2.5Kgs	2.5Kgs	2.5Kgs
Motor Parameters	DC motor stepless speed regulation	DC external rotor motor	DC brushless motor
Platform Size	330x430mm	330x430mm	330x430mm
Beep Alarm	No	Yes	Yes
Voltage	AC110/220V,50/60Hz	AC110/220V,50/60Hz	AC110~220V,50/60Hz
Power	25W	30W	30W
Fuse	250V,1A,φ5x20	250V,1A,φ5x20	250V,1A,φ5x20
Dimension	W.330xD.490xH.145mm	W.330xD.490xH.145mm	W.330xD.490xH.145mm
Net Weight	9.5kgs	9.8kgs	10kgs

GS-10/20/30 Orbital Shaker

Shaker & Rocker

Introduction

Orbital Shaker is designed with compact appearance. It is used for any mixing applications in different industries. It is applied in different laboratories of molecular biology, microbiology, immunology, chemistry, etc.

Feature

1. DC brushless motor, safe, long life and maintenance-free. Operating is silent and stable.
2. Speed adjustable. Gentle shaking, applied in different industries.
3. Compact and clean designed, LED displays time and speed, streamlined fuselage, simple operation, easy clean.
4. Equipped with timing function, which can be set arbitrarily within the range of 1min~ 100h. The time controller can automatically alarm, realizing unmanned operation, and can be set to run continuously from time to time.
5. Different platforms to load different conical flasks and other sample containers for optional choices.



Accessories



Adjustable Bar Platform UP-12



Flask Platform P12-100



Platform PP-4



Universal platform with springs
PW-260



Flask Platform P6-250



Double Deck Platform PP-4A



Sticky Pad SPD-GS
used in the platform PP-4 or PP-4A

Parameter

Model	GS-10	GS-20	GS-30
Speed Range	50rpm~350rpm	50rpm~300rpm	50rpm~250rpm
Shaking Orbit	10mm	20mm	30mm
Time Range	1min~99h59min	1min~99h59min	1min~99h59min
Max. Loading Capacity	3kgs	3kgs	2kgs
Voltage	AC 100~230V, 50/60Hz	AC 100~230V, 50/60Hz	AC 100~230V, 50/60Hz
Power	50W	50W	50W
Fuse Protector	250V, 1A, Φ 5x20	250V, 1A, Φ 5x20	250V, 1A, Φ 5x20
Dimensions	W.284 x D.264 x H.108mm	W.284 x D.264 x H.108mm	W.284 x D.264 x H.108mm
Net weight	5.6kgs	5.6kgs	5.6kgs

HS-25/25A Rocking Shaker

Shaker & Rocker

Introduction

The rocking shaker is a desktop oscillator that can be used directly in the greenhouse or in the incubator. It is widely used in the fixation of various electrophoresis gels, Coomassie blue staining, oscillating shaking during decolorization, silver nitrate staining Fix, dye, develop, etc.

Feature

1. Platform is made of stainless steel and natural rubber, which is acid & alkali resistant, non-deformation, easy-clean and spill-prevention.
2. Real-time display of speed and diminishing time.
3. The bearing is articulated rotating, secure and no wear, suitable for long time use.
4. Compact designed, save space.
5. Simple and beautiful appearance, humanization design.
6. Adopt stepper motor, low noise.

Accessories



Flat platform with non-slip rubber mat



Double deck flat platform with non-slip rubber mat



HS-25A

Parameter

Model	HS-25	HS-25A
Speed Range	5~80rpm	5~80rpm
Swing Cycloid	25mm (up and down) / 10°	25mm (up and down) / 10°
Time Range	1min~99h59min	1min~99h59min
Max. Load	5.0kgs (single-deck platform)	5.0kgs (double-deck platform)
Platform Dimension	L.280 x W.228mm	L.280 x W.228mm
Voltage	AC 100~230V, 50/60 Hz	AC 100~230V, 50/60 Hz
Power	50W	50W
Fuse	250V, 1A, Φ5x20	250V, 1A, Φ5x20
Dimension	W.284 x D.264 x H.134mm	W.284 x D.264 x H.248mm
Net Weight	5.2kgs	6.0kgs



HS-25

RH-24 3D Gyrotory Rocker

Shaker & Rocker

Introduction

3D Gyrotory Rocker is an economical 3D gyrotory rocker with perfect 3-dimensional motion for gentle but thorough mixing. It is an ideal choice for mixing small sample. It suits for blood collection tubes and centrifuge tubes, applied for all blot related applications such as gel staining and destaining. The concave pad can firmly keep the tubes.

Feature

1. Gentle but thorough mixing.
2. Suits for blood collection tubes and centrifuge tubes.
3. Fixed speed and tilt angle.
4. Safe for use in cold rooms and incubators.

Parameter

Model	RH-24
Speed Range	20rpm (fixed)
Shaking Orbit	3D / 20 (fixed)
Max. Load	0.8kgs
Voltage	AC 220V/AC 110V, 50/60Hz
Power	45W
Dimension	W.240 x D.170 x H.150mm
Net Weight	1.6kgs



Remarks

RH-24 is available for 1.5mlx60, 3mlx30, 7mlx21, 15ml x17.
Also suitable for use in cold closet.



RH-18/RH-18+ 3D Rotating Mixer

Rotator, Mixer and Vortexer

Introduction

3D Rotating Mixer is a uniquely designed instrument which can mix samples by horizon, vertical and any angled rotation with a variety of sample tubes. It is widely used in molecular hybridization, blood and other samples that need to be mixed.

Feature

1. Unique combination of adjustable rotating frame.
2. A variety of rotation modes, from mild type to somersault type rotation mode.
3. Widely used in molecular biology, histo-chemistry, bio-chemistry, clinical applications, etc.
4. Provide three types of rotating frame.
5. RH-18: positive and negative rotation just gently press the rotating frame when instrument is working.
6. RH-18+: with reciprocating oscillation function from 20 angle to 99 angle.
7. Oil-free bearings are built in both ends of the bracket.

Accessories



RH-18

Cat #	Description
RH-A	5 centrifuge tubes of 10ml/15ml(Φ 15mm- Φ 16mm) +6 centrifuge tubes of 5ml / 7 ml(Φ 12mm- Φ 13mm)
RH-B	3 centrifuge tubes of 50ml +18 centrifuge tubes of 0.5ml
RH-C	18 centrifuge tubes of 1.5ml / 2.0ml

Parameter

Model	RH-18	RH-18+
Speed Range	18rpm (Fixed Speed)	10rpm ~40rpm (Adjustable)
Reciprocating Swing Angle Range	/	20°~99° (Adjustable)
Time Range	/	1s~999min/Continuously
Voltage	AC 220V/AC 110V, 50/60Hz	AC 100 ~230V, 50/60Hz
Power	4W	4W
Fuse	/	250V, 1A, Φ 5x20
Dimension (WxDxH)	W.240 x D.145 x H.210mm	W.240 x D.145 x H.210mm
Net Weight	1kgs	1.2kgs



RH-18+

VM-80 Vertical Rotating Mixer

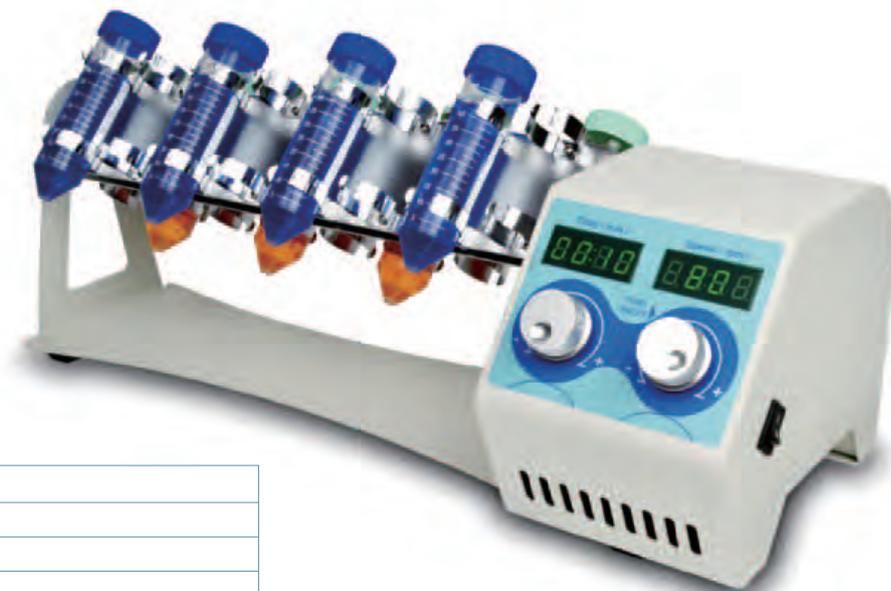
Rotator, Mixer and Vortexer

Introduction

Vertical Rotating Mixer provides efficient but soft mixing to keep the sample in a suspension status such as blood mixing. It is suitable for preventing blood clots, latex diagnosis, immunoprecipitation and similar applications.

Feature

1. Smart appearance, solid structure, simple operation. LED displays time and speed.
2. DC brushless motor, stable performance, low noise and long using life.
3. 360°vertical circulation rotation, operating smoothly and steadily.
4. Different tube holder frames for optional to suit for different kinds tubes.
5. Oil-free bearings are built in both ends of the bracket.



Parameter

Model	VM-80
Speed Range	10rpm~80rpm
Shaking Orbit	circle
Time Range	1min~99h59min
Voltage	AC 100~230V, 50/60Hz
Power	16W
Fuse	250V, 1A, Φ 5x20
Dimension	W.470 x D.190 x H.160mm
Net Weight	2.8kgs

Accessories



VM80-A Tube Holder Frame:
1.5ml Centrifuge x 64



VM80-B Tube Holder Frame:
15ml Sharp Bottom Tube x 22



VM80-C Tube Holder Frame:
50ml Sharp Bottom Tube x 16

YC-20/40/80 Rotary Mixing Solution

Mixer Series

Introduction

Rotary Mixing Solution is mainly used for tissue culture, sample extraction, sedimentation rate determination. It is also widely applied in biochemistry, organism, cellula, immune, chemistry, flora and fauna analysis, clinical experiments, etc.

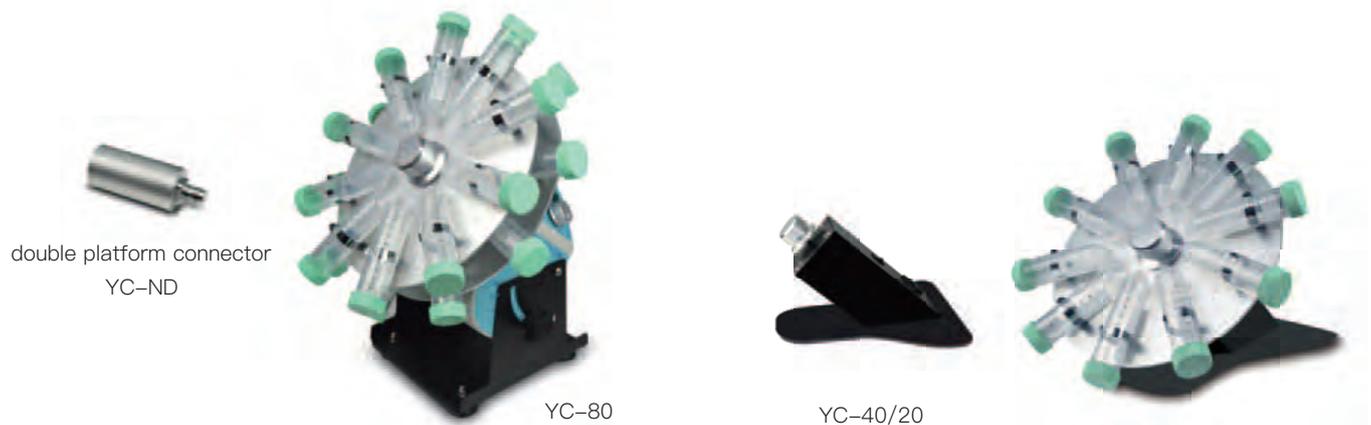
Feature

YC-80:

1. Humanized designed operation keyboard. LED display time and speed.
2. Several optional turntable supplied, suit for the tubes from 1.5ml to 50ml.
3. The turntables' gradient can be adjusted from 0 to 90°.
4. Timing function. Time range from 0 to 9999min, LED display remaining time. Beep alarm when program time ends.

YC-40/20:

1. It can be used in the humid environment such as refrigerator and refrigerated cabinet.
2. Several optional turntable supplied, suit for the tubes from 1.5ml to 50ml.
3. One button to start/stop, easy to operate, can run for a long time, running smoothly without noise.



Accessories



Parameter

Model	YC-80	YC-40	YC-20
Speed Range	10rpm~80rpm	40rpm	20rpm
Gradient Angle Range	0°~90°	45° (fixed angle)	45° (fixed angle)
Time Range	1min~9999min	/	/
Voltage	AC 100~230V, 50/60Hz	AC 220V/AC 110V, 50/60Hz	AC 220V/AC 110V, 50/60Hz
Power	35W	14W	14W
Fuse	250V, 1A, Φ5x20	250V, 1A, Φ5x20	250V, 1A, Φ5x20
Dimension	W.206 x D.260 x H.300mm	W.260 x D.300 x H.233mm	W.260 x D.300 x H.233mm
Net Weight	4.5kgs	1.8kgs	1.8kgs

Note:

Note: YC-D additional tray can be combined with YC-A\YC-B tray;
Note: The double-layer tray can be freely combined through the YC-ND double platform connector.

LSM-80/LSM-80D Tube Roller

Rotator, Mixer and Vortexer

Introduction

Tube Roller is widely used in mixing blood sample, sticky substance and solid-liquid suspension, etc. It provides two operation modes – rolling and swing, to improve mixing efficiency and safety. It is applied in preventing blood clots, immunoprecipitation, and other similar using.

Feature

1. Compact and firm design, simple operation, LED displays time and speed.
2. Two types for optional – rolling type and rolling & swing type. Continuous working mode, safe and stable.
3. With stable performance motor, operation speed adjustable. Max. speed is 80rpm. Low noise, long using life.
4. Compatible with different size of tubes. Wide range of application.



Parameter

Model	LSM-80	LSM-80D
Speed Range	5rpm~80rpm	5rpm~80rpm
Operation Mode	rolling and fluctuation	rolling
Amplitude	25mm	/
Roller Quantity	6	6
Roller Length	280mm	280mm
Max. Load	4kgs	4kgs
Time Range	1min~99h59min	1min~99h59min
Voltage	AC 100~230V, 50/60Hz	AC 100~230V, 50/60Hz
Power	25W	25W
Fuse	250V, 1A, Φ 5x20	250V, 1A, Φ 5x20
Dimension	W.450 x D.260 x H.120mm	W.450 x D.260 x H.120mm
Net Weight	3.7kgs	3.7kgs

MIX-25/25P/30S Mini Mixer

Rotator, Mixer and Vortexer

Introduction

Mini Mixer is used for vibration, blend and stirring of sample tissue, cell, bacteria liquid and chemical reagent in life science and physical and chemical analysis field.

Feature

1. Mini and compact appearance, powerful function, sucker type under-chassis, super shockproof, ideal for high speed operation.
2. Multiple mixing modes, touch-operation, continuous operation and timing set.
3. Speed adjustable, and wide speed range, Stable low speed, powerful high speed.
4. Shaking blocks convenient for replacement, stable and reliable, sturdy and durable eccentric bearing designed.
5. Various tube holders are for optional (Suitable for Eppendorf Tubes).



Module fastener



MIX-30S



MIX-25/25P

Parameter

Model	MIX-25	MIX-25P	MIX-30S
Operation	knob + scale	knob + scale	key + digital Display
Shaking Orbit	4mm	3mm	3mm
Shaking Mode	circle	circle	circle
Operation Mode	continuous or press running	continuous or press running	continuous running or short mix
Speed Range	0~2500rpm	0~2500rpm	300~3000rpm
Time Range	/	/	1s~999min
Voltage	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz	DC24V
Power	60W	60W	30W
Suitable Optional Accessories	MX-A and MX-B	all	all
Fuse	250V, 1A, Φ 5x20	250V, 1A, Φ 5x20	/
Dimension	W.132 x D.156 x H.150mm	W.132 x D.156 x H.150mm	W.132 x D.156 x H.150mm
Net Weight	2.5kgs	2.5kgs	2.2kgs

Accessories



Remark: The maximum speed of MX-F and MX-G must not exceed 900rpm.

Accessory Parameters

Cat#	Description
MX-A	Standard head. Suit for tubes and containers with dia.<30mm
MX-P	Standard platform to hold foam tube holder
MX-B	Convex pad. Use with MX-P. Suit for tubes and containers with dia.<108mm
MX-C	Foam tube holder. Use with MX-P. For 0.2ml tubes, dia.5mm x 70 holes.
MX-D	Foam tube holder. Use with MX-P. For 0.5ml tubes, dia.6.6mm x 36 holes.
MX-E	Foam tube holder. Use with MX-P. For 1.5/ 0.2ml tubes, dia.9.8mm x 20 holes.
MX-F	Foam tube holder. Use with MX-P. For 15ml tubes, dia.14mm x 8 holes.
MX-G	Foam tube holder. Use with MX-P. For 50ml tubes, dia.26.2mm x 4 holes.
MX-H	Tube holder platform. For 1.5/2.0ml tubes x 22
MX-I	Tube holder platform. For 15ml tubes x 4
MX-J	Tube holder platform. For 50ml tubes x 2
MX-K	Plate holder platform. For all standard plates
MX-L	Universal platform (Suitable for different types of plates and tube stands, not include plate or stand).
	MIX-A 384-well PCR plates, microplates, deep well plates can be directly put into the stand without stand support.
	MIX-B 96x0.2ml tube stand. Applied to 0.2ml PCR tubes, PCR strips and 96-well PCR plates (semi-skirted and unskirted)
	MIX-C 24x0.5ml Tube stand
MIX-C 24x1.5/2.0ml Tube stand	
MX-M	Customized

MIX-28/28+/28S Touch Fairy Vortexer

Rotator, Mixer and Vortexer

Introduction

Touch Fairy Vortexer focuses on touch-to-mix (short mix) for a variety of tubes / centrifugal tubes. Its compact design makes it very attractive and welcome, while its touch-to-mix operation makes it very easy handling and quite convenient. Touch fairy vortexer becomes an essential experimental instrument with its prominent mixing effect.

Feature

1. The max. diameter of the tubes is up to 30mm. Suit for mixing tubes /centrifugal tubes with prominent mixing effect.
2. Outer shell and touch concave are made of plastic which is resistant to chemical attack. The thick base makes operation very steady and reliable.
3. 12V low voltage power adapter built in, smart and portable.



MIX-28



MIX-28S



MIX-28+

Parameter

Model	MIX-28	MIX-28+	MIX-28S
Speed Range	4000rpm	0~4000rpm	4000rpm
Switch mode	Jog switch	Jog switch+Knob adjust	Jog switch / One button long open
Shaking Orbit	4.5mm (circle)	4.5mm (circle)	4.5mm (circle))
Max. Sample Capacity	50ml	50ml	50ml
Power Input /Output	1.2W / 0.8W	1.2W / 0.8W	1.2W / 0.8W
Voltage	DC12V 1A	DC12V 1A	DC12V 1A
Power	12W	12W	12W
Dimension	W.110 x D.110 x H.86mm	W.110 x D.110 x H.86mm	W.110 x D.110 x H.86mm
Net Weight	1.1kgs	1.1kgs	1.1kgs

DMT-2500 Multi-Tube Vortex Mixer

Rotator, Mixer and Vortexer

Introduction

Multi-tube Vortex Mixer can process 50 samples at the same time. Variety of accessories can be selected to meet the mixing needs with different specifications of test tubes.

Feature

1. Max capacity can process 50 samples at the same time to make the experiment more convenient and efficient.
2. Microprocessor control, simplistic designed appearance, LED displays the speed and time.
3. Friendly program designed, built-in short mix, timing operation, impulse and continuous modes. Operation stable and silent.
4. A foam tube frame and tray pad configured at random. Various types of foam tube frames and pads to choose. tube frames and pads to choose.

Parameter

Model	DMT-2500
Speed Range	500~2500rpm
Speed Accuracy	±1rpm
Shaking Orbit	4mm
Time Range	1s~9999min
Interval timing between impulse	1~10s
Timing set for impulse working	1s~99min59S
Max Load	5kgs
Cover Plate Size	W.184 x L.311mm
Voltage	AC 100~230V, 50/60Hz
Power	60W
Fuse	250V, 1A, Φ5 x 20
Dimension	W.250 x D.426 x H.480mm
Net Weight	15kgs



Accessories



Cat #	Description	Number of holes	Dimension
DMT-A	Φ10mm foam tube frame	50	W.245 x D.132 x H.45mm
DMT-B	Φ12mm foam tube frame	50	W.245 x D.132 x H.45mm
DMT-C	Φ13mm foam tube frame	50	W.245 x D.132 x H.45mm
DMT-D	Φ16mm foam tube frame (suit for 15ml tube)	50	W.245 x D.132 x H.45mm
DMT-E	Φ25mm foam tube frame	15	W.245 x D.132 x H.45mm
DMT-F	Φ29mm foam tube frame (suit for 50ml tube)	15	W.245 x D.132 x H.45mm
DMT-G	Φ38mm foam tube frame (suit for 100ml tube)	10	W.245 x D.132 x H.45mm
DMT-H	tray pad set (up pad & base pad)	/	W.305 x D.178.5 x H.25mm
DMT-I	acrylic tube frame Φ11mm (suit for 1.5/2.0ml tube)	40	W.169 x D. 84 x H.41mm

MIX-3000 Smart Mixer

Rotator, Mixer and Vortexer

Introduction

The smart mixer is an high efficiency, multi-functional, compact and widely used table mixer, which integrates the functions of blending and oscillation with the design concept of intelligent operation, and can be applied to a variety of blending and vortex operations.

Feature

The perfect mixing radius combined with excellent 2D mixing technology and adjustable mixing speed ensures fast and perfect mixing of multiple samples.

3-in-1 blocks:

Plates	Micro centrifuge tubes	Vortexing various kinds of tubes
96 well PCR plates (skirted, semi skirted, unskirted)	0.2 ml PCR tubes and PCR strip	
384 hole PCR plate	0.5 ml Micro-test tube	
96- and 384- deepwell plates	1.5 ml Micro-test tube	
MTP miceroplate, ELISA plate	2.0 ml Micro-test tube	

Accessories



MIX-A

MIX-B

MIX-C

Cat#	Description
MIX-A	96x0.2ml tube stand. Applied to 0.2ml PCR tubes, PCR strips and 96-well PCR plates (semi-skirted and unskirted)
MIX-B	4x0.5ml Tube stand
MIX-C	24x1.5/2.0ml Tube stand

Note: 384-well PCR plates, microplates, deep well plates can be directly put into the stand without stand support.



Parameter

Model	MIX-3000
Speed Range	300 ~3000rpm
Touch Vortex Speed	3500rpm
Shaking Orbit	3mm
Time Range	1s~99h59min
Working Noise	<50dB
Voltage	AC 100~230V, 50/60Hz
Power	45W
Fuse	250V, 1A, Φ 5 x 20
Dimension	W.196 x D.270 x H.170mm
Net Weight	7.7kgs

Application

Controllable and fast mixing makes good experimental conditions unity between the hole and hole / tube and tube. The reproducibility is improved.

1	Preparation of PCR reaction system
2	Precipitation suspension (such as bacteria, DNA, cell culture precipitation)
3	Incubation (ELISA enzyme immunoassay analyzer)
4	Protein staining quantitative (such as Bradford, Lowry, BCA)
5	Report gene assays (such as β -galactosidase, luciferase analysis)
6	Premixed reaction system
7	Mixing various kind of tubes

DTC-100H/DTH-100H Dry Bath Incubator with Heated Lid

Dry bath series

INTRODUCTION

The Dry Bath Incubator with Heated Lid can be widely used in LAMP, NASBA, RPA, sample preservation and reaction and electrophoresis pre-denaturation, serum coagulation, nucleic acid and protein denaturation treatment.

FEATURE

1. Novel and unique appearance, simple interface operation, small size.
2. Using 5-inch TFT high-definition full-touch color screen, can quickly edit the required documents, temperature curve visual display, the setting is convenient and fast, real-time accurate display temperature curve and instrument operation process status.
3. Refrigeration type is based on semiconductor heating and cooling technology, and PID temperature control technology design, the rate of heating and cooling is excellent.
4. Ingenious elastic hot cover structure design, adaptive to different heights of the test tube, to ensure the consistency of the experiment, to achieve the best conditions of the experiment.
5. The hot cover temperature setting has two modes: independent setting mode, block temperature plus setting value.
6. Built-in 10 groups of programs, each group of programs can add or delete temperature steps or cycle steps.
7. Various types of blocks can be selected at need, easy to install and disassemble.



Editing Interface



Standby interface



Hot lid mode 1



Hot lid mode 2



Input Interface



Pause interface



Optional Block



Block Parameter

Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
DTA	0.2ml×96	6.7mm	Cone bottom	107×71×38mm
DTB	0.5ml×54	8mm	Cone bottom	107×71×35mm
DTC	1.5ml×35	10.8mm	Cone bottom	107×71×27mm
DTD	2.0ml×35	10.8mm	Round bottom	107×71×27mm

Technical Parameters

Model	DTC-100H(Cooling)	DTH-100H(Hesting)
Block temp. setting range	- 10°C~100°C	0°C~100°C
Block temp. control range	(R.T.-25°C)~100°C	(R.T.+5°C)~100°C
Hot lid temp. setting range(≤105°C)	0~105°C / Block+(0~105°C)	0~105°C / Block+(0~105°C)
Hot lid temp. control range	R.T.+5°C~105°C	R.T.+5°C~105°C
Time range	1s ~99m59S / 0 is ∞	1s ~99m59S / 0 is ∞
Max. number of steps	10	10
Max. number of cycles	99	99
Block temp. control accuracy	±0.5°C	±0.5°C
Hot lid temp. accuracy	±1.0°C	±1.0°C
Block temp. uniformity	±0.5°C	± 0.5°C
Display accuracy	0.1°C	0.1°C
Heating time (R.T.25°C)	Heating rate (37°C~100°C) ≥7°C/min	Heating rate (37°C~100°C) ≥7°C/min
Cooling time	Cooling rate (100°C~37°C) ≥8°C/min	Fan cooling
Dimension	W.185xD.280xH.160mm	W.185xD.280xH.160mm
Net weight	3.2Kgs	2.7Kgs

DKT200-1/2/2A/4 Dry Bath Incubator

Dry Bath Incubator Series

Introduction

Dry Bath Incubator with high precision of temperature control. It is good for sample preparation parallelism. And it is used as an alternative to the traditional water bath devices. It is widely used in the cultivation, preservation and reaction of various samples. Its applications of industry include pharmaceutical, chemical, food safety, environment, quality inspection, etc.

Feature

1. Fast heating speed, uniform heating, accurate temperature control, high stability, low energy consumption and no noise.
2. Built-in temperature deviation calibration function, automatic fault detection and buzzer alarm function.
3. Built in over-temperature protection device, safe and reliable, enhance the service life of the machine.
4. Product designed compact and tight, occupied little space, free and easy.
5. Continuous operation is optional. Various blocks for convenient replacement, easy for cleaning and disinfection.
6. DKT200-2A can achieve independent heating and incubating, unique two for one design, meet more lab requirements.



DKT200-1

DKT200-2

DKT200-4

DKT200-2A

Parameter

Model	DKT200-1	DKT200-2	DKT200-2A	DKT200-4
Temp.Control Range	R.T.+5°C~150°C	R.T.+5°C~150°C	R.T.+5°C~150°C	R.T.+5°C~120°C
Temp.Setting Range	5°C~150°C	5°C~150°C	5°C~150°C	5°C~120°C
Time Range	1min~99h59min	1min~99h59min	1min~99h59min	1min~99h59min
Temp.Stability @40~100°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C
Temp.Stability @ > 100°C	±1°C	±1°C	±1°C	±1°C
Block Temp.Uniformity@40°C	±0.3°C	±0.3°C	±0.3°C	±0.3°C
Block Temp.Uniformity@ > 100°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C
Temp.Display Accuracy	0.1°C	0.1°C	0.1°C	0.1°C
Heating Speed	≤30min(20°C to 150°C)	≤30min(20°C to 150°C)	≤30min(20°C to 150°C)	≤30min(20°C to 120°C)
Sample Capacity	1 standard block	2 standard block	2 block individually control	4 standard blocks
Voltage	AC 220V/AC 110V,50/60Hz	AC 220V/AC 110V,50/60Hz	AC 220V/AC 110V,50/60Hz	AC 220V/AC 110V,50/60Hz
Power	200W	400W	400W	600W
Fuse	250V,2A/3A,Φ5x20	250V,3A/6A,Φ5x20	250V,3A/6A,Φ5x20	250V,5A/10A,Φ5x20
Dimension	W.200 x D.230 x H.95mm	W.220 x D.260 x H.95mm	W.290 x D.260 x H.95mm	W.220 x D.360 x H.95mm
Net Weight	2.6kgs	3.3kgs	3.3kgs	4.7kgs

Accessories



DT01



DT02



DT03



DT04



DT05



DT06



DT07



DT08



DT09



DT10



DT11



DT12



DT13



DT14



DT15



DT16



DT17



DT18

Notice:

DT17/DT18 is unavailable for DKT200-1 and DKT200-2A.

Accessories Parameter

Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
DT01	6 mm x 42	6.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT02	7 mm x 42	7.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT03	10 mm x 20	10.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT04	12 mm x 20	12.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT05	13 mm x 20	13.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT06	15 mm x 12(7ml Centrifuge tube)	15.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT07	16 mm x 12(10ml/15ml Centrifuge tube)	16.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT08	19 mm x 12	19.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT09	20 mm x 6	20.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT10	26 mm x 6	26.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT11	28 mm x 4(50ml Centrifuge tube)	28.5 mm	Flat bottom	95.5 x 76.5 x 50 mm
DT12	40 mm x 2	40.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT13	0.5 ml x 42	8 mm	Cone bottom	95.5 x 76.5 x 50 mm
DT14	1.5 ml x 24	10.8 mm	Cone bottom	95.5 x 76.5 x 50 mm
DT15	2.0 ml x 24	10.8 mm	Round bottom	95.5 x 76.5 x 50 mm
DT16	0.2 ml x 48	6.1 mm	Cone bottom	95.5 x 76.5 x 50 mm
DT17	0.2 ml x 96	6.7 mm	Cone bottom	95.5 x 153.5 x 33.5 mm
DT18	Flat bottom plates	Top size 76 x 116 x 4 mm	Flat plate block	95.5 x 153.5 x 22.5 mm
DT19	Customized	Customized	Customized	Customized

MINIB-100/100F/100I/MINIC-100/100I Mini Dry Bath

Dry Bath Incubator Series

Introduction

Mini Dry Bath is a micro-processor controlled heating block with heater (heating types) or semiconductor refrigeration (cooling types) technology. It adapts onboard use, smart, light and convenient for movement, suit for any kind of occasions.

Feature

1. Automatic fault detection function with buzzer alarm.
2. Various of blocks for optional choice. Convenient for replacement. Easy cleaning and disinfection.
3. 24V DC input power, built-in over-temperature protection device.
4. Simultaneously display setting and actual time and temperature. Temperature calibration function.
5. Unique designed. Smart and light, convenient movement, suit for various occasions.
6. 100I series also have PCR hot cover technology, adding anti-evaporation function.
7. The 100F uses fan cooling to reduces the temperature quickly.



Parameter

Model	MINIB-100F	MINIB-100	MINIB-100I	MINIC-100	MINIC-100I
Temp. Control Range	R.T.+5°C~100°C	R.T.+5°C~100°C	R.T.+5°C~100°C	-10°C~100°C	-10°C~100°C
Temp. Max. Decrease	/	/	/	R.T. decreases 25°C	R.T. decreases 25°C
Temp. Setting Range	0°C~100°C	0°C~100°C	0°C~100°C	-10°C~100°C	-10°C~100°C
Temp. Stability@100°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C
Temp. Stability@40°C	±0.3°C	±0.3°C	±0.3°C	±0.3°C	±0.3°C
Block Temp. Uniformity	±0.3°C	±0.3°C	±0.3°C	±0.3°C	±0.3°C
Temp. Display Accuracy	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
Heating Speed	≤15min (20°C to 100°C)	≤15min(20°C to 100°C)	≤15min (20°C to 100°C)	≤15min (20°C to 100°C)	≤15min (20°C to 100°C)
Cooling Speed	fan cooling	natural cooling	natural cooling	≤30min (R.T. decreases 20°C) @R.T.26°C	≤30min (R.T. decreases 20°C) @R.T.26°C
Heating Cover	no	no	with	no	with
Time Range	1sec-999sec or 1min-999min	1sec-999sec or 1min-999min	1sec-999sec or 1min-999min	1sec-999sec or 1min-999min	1sec-999sec or 1min-999min
Voltage	DC24V adapter	DC24V adapter	DC24V adapter	DC24V adapter	DC24V adapter
Power	60W	60W	60W	120W	120W
Dimension	W.110 x D.156 x H.103mm	W.110 x D.156 x H.92mm	W.110 x D.156 x H.97 mm	W.110 x D.156 x H.103mm	W.110 x D.156 x H.108mm
Net Weight	1kgs	1kgs	1kgs	1.4kgs	1.4kgs

Accessories



MINI-A



MINI-B



MINI-C



MINI-D



MINI-E



MINI-F



MINI-G

Notice:

MINI-F/MINI-G is not standard block, cover can't be closed.



MINIB-100I/MINIC-100I



MINIB-100F/MINIB-100/MINIC-100

Accessories Parameter

Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
MINI-A	0.2 ml x 40	6.1 mm	Cone bottom	71 x 47 x 32 mm
MINI-B	0.5 ml x 24	8 mm	Cone bottom	71 x 47 x 32 mm
MINI-C	1.5 ml x 15	10.8 mm	Cone bottom	71 x 47 x 32 mm
MINI-D	2.0 ml x 15	10.8 mm	Round bottom	71 x 47 x 32 mm
MINI-E	cuvette x 8	8~12.5 mm(Maximum edge length 15mm)	No bottom	71 x 47 x 32 mm
MINI-F	15ml x 4	16.9mm	Flat bottom	71 x 47 x 82 mm
MINI-G	50 ml x 2	29.2mm	Flat bottom	71 x 47 x 82 mm

DKT-100 Dry Bath Incubator

Dry Bath Incubator Series

Introduction

DKT-100 is a dry bath incubator for economic choice. It's appreciated by lovely appearance, excellent performance and attractive price. Its good temperature accuracy makes this dry bath incubator extensively used for sample incubation, conservation and reaction in medicine, chemical, food safety, quality testing and environmental industries, etc.

Feature

1. Fast heating speed, accurate temperature heating, precise temperature control and stable.
2. Built-in temperature deviation calibration function, automatic fault detection, and beep alarm function.
3. Built-in over-temperature protection device, safe and reliable to extend equipment life.
4. Compact structure designed, small space occupied. Transparent cover to reduce error.
5. Series of round heating blocks for choosing. Easy exchange and clean for different types of tubes.
6. Can be set to continuous operation.

Parameter

Model	DKT-100
Temp. Control Range	R.T.+5°C~100°C
Temp. Setting Range	5°C~100°C
Temp. Stability@37°C	±0.3°C
Block Temp. Uniformity	±0.5°C
Temp. Display Accuracy	0.1°C
Heating Speed	≤15min (20°C to 100°C)
Time Range	1min~9999min
Voltage	AC 220V/AC 110V, 50/60Hz
Power	150W
Fuse	250V, 1A/2A, Φ5x20
Dimension	W.156 x D.176 x H.121mm
Net Weight	1.5kgs



Accessories



Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
A-100	0.2 ml x 96	6.1 mm	Cone bottom	Φ104.5 x 32 mm
B-100	0.5 ml x 59	8 mm	Cone bottom	Φ104.5 x 32 mm
C-100	1.5 ml x 39	10.8 mm	Cone bottom	Φ104.5 x 32 mm
D-100	2.0 ml x 39	10.8 mm	Round bottom	Φ104.5 x 32 mm
E-100	5.0 ml x 18	13.5 mm	Round bottom	Φ104.5 x 32 mm
F-100	0.5 ml x 24 + 1.5ml x 30	8 mm / 10.8mm	Cone bottom	Φ104.5 x 32 mm
G-100	6 mm x 59	6.5 mm	Round bottom	Φ104.5 x 32 mm
H-100	Customized	Customized	Customized	Φ104.5 x 32 mm

DTC-100/DTH-100/DTC-4 Dry Bath Incubator

Dry Bath Incubator Series

Introduction

DTC-100/DTH-100 has high precision of temperature control and good sample preparation parallelism with microprocessor-controlled thermostat to replace the traditional water bath devices. It can be widely used in the cultivation and preservation of samples , DNA amplification, the electrophoresis of denaturation and serum coagulation. Application sectors throughout pharmaceutical, chemical, food safety, environment, quality inspection, etc.

Feature

1. Fast heating speed, uniform heating, accurate temperature control, high stability, low energy consumption and no noise.
2. Built in temperature calibration function, automatic fault detection and buzzer alarm function.
3. Built in over-temperature protection device, safe and reliable, enhance the service life of the machine.
4. Product designed compact and tight, occupied little space. Using freer and easier.
5. Various blocks for convenient replacement, easy for cleaning and disinfection.
6. Power recovery function can restore the original run automatically after recovered.(DTC-100)
7. Programmable function. It can also set continuous operation by uncertain time (Except DTC-4) .
8. LCD display. Cool and compact designed appearance. Simultaneous display temperature and diminishing time (Except DTC-4).



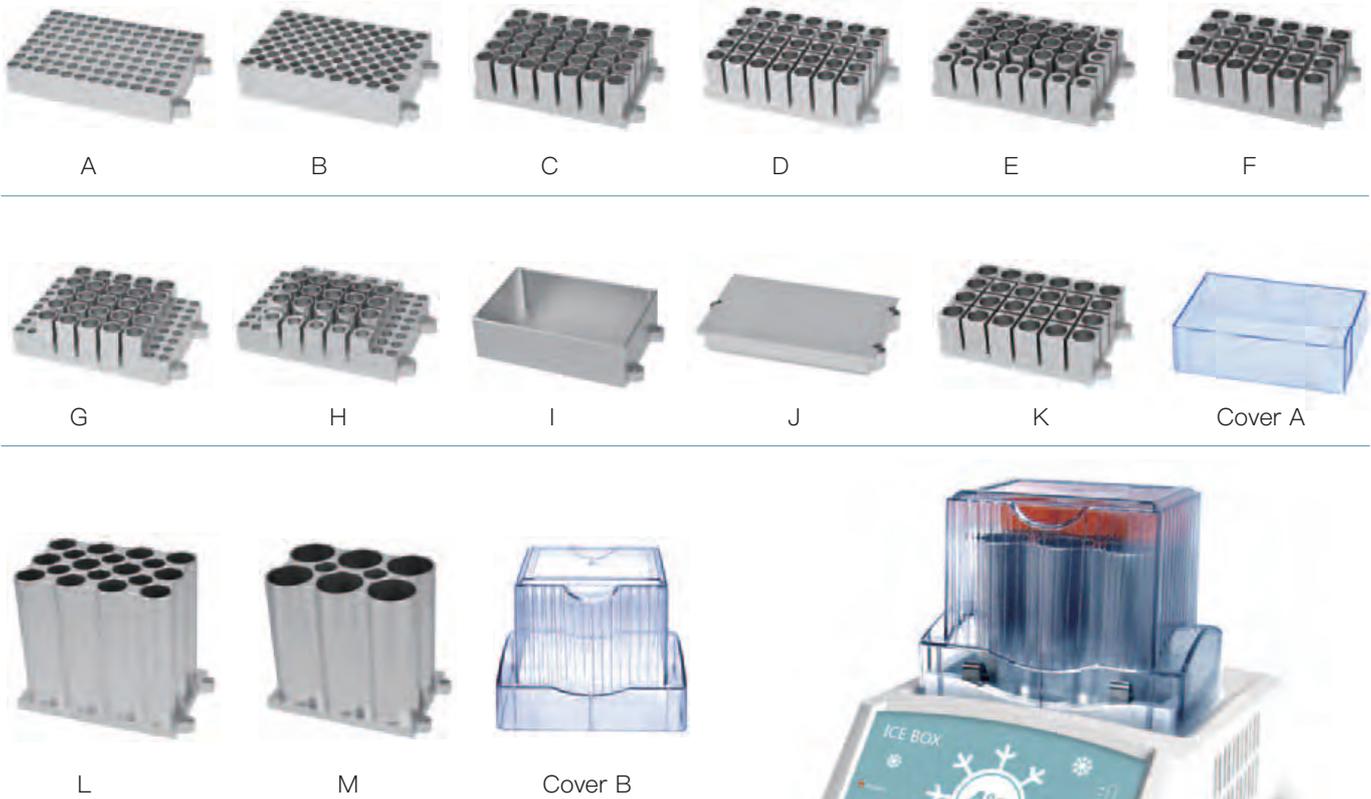
DTC-4

DTH-100/DTC-100

Parameter

Model	DTH-100	DTC-100	DTC-4
Temp. Control Range	R.T.+5°C~100 °C	-10°C ~100°C	4 °C constant
Temp. Max. Decrease	/	R.T. decreases 30°C	/
Temp. Setting Range	5°C~100 °C	-10°C ~100°C	4°C
Temp. Stability@100°C	±0.5°C	±0.5°C	/
Temp. Stability@40°C	±0.3°C	±0.3°C	/
Temp. Stability@4°C	/	/	±0.5°C
Block Temp. Uniformity	±0.3°C	±0.3°C	±0.5°C
Temp. Display Accuracy	0.1°C	0.1°C	/
Heating Speed	≤15min (20°C to 100°C)	≤15min (20°C to 100°C)	/
Cooling Speed	/	≤30min (R.T. decreases 30°C) @R.T. 26°C	≤10min(Depending on blocks)
Time Range	1min~99h59min or continuous	1min ~ 99h59min or continuous	/
Voltage	AC 220V / AC 110V, 50/60Hz	AC90~230V, 50/60Hz	AC90~230V, 50/60Hz
Power	150W	150W	100W
Fuse	250V, 1A/2A, Φ5x20	250V, 3A, Φ5x20	250V, 3A, Φ5x20
Dimension	W.196 x D.270 x H.170mm	W.196 x D.270 x H.170mm	W.196 x D.270 x H.170mm
Net Weight	2.2kgs	3.5kgs	3.5kgs

Accessories



Notice: K/L/M are not standard block.

Accessories Parameter

DTC-4

Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
A	0.2 ml x 96	6.7 mm	Cone bottom	107 x 71 x 20 mm
B	0.5 ml x 54	8 mm	Cone bottom	107 x 71 x 25 mm
C	1.5 ml x 35	10.8 mm	Cone bottom	107 x 71 x 32 mm
D	2.0 ml x 35	10.8 mm	Round bottom	107 x 71 x 32 mm
E	0.5 ml x 20 + 1.5ml x 15	8 mm / 10.8mm	Cone bottom	107 x 71 x 32 mm
F	≤Φ12mm x 24	12 mm	Flat bottom	107 x 71 x 32 mm
G	0.2 ml x 32 + 1.5ml x 25	6.1 mm / 10.8mm	Cone bottom	107 x 71 x 32 mm
H	0.2 ml x 32 + 0.5 ml x 10 + 1.5ml x 15	6.1 mm / 8 mm / 10.8 mm	Cone bottom	107 x 71 x 32 mm
I	Water Bath	103 x 67 x 30 mm	Flat bottom	107 x 71 x 32 mm
J	Flat bottom plates	Top size 69 x 107 x 12 mm	Flat plate block	116 x 71 x 15 mm
K	5 ml x 24	13.5 mm	Flat bottom	107 x 71 x 32 mm
L	15 ml x 12	16.9 mm	Flat bottom	107 x 71 x 100 mm
M	50 ml x 6	29.5 mm	Flat bottom	107 x 71 x 100 mm
N	Customized	Customized	Customized	Customized

BTH-100/100D/BTC-100D Dual temperature control dry bath incubator

Dry Bath Incubator Series

Introduction

Dual temperature control dry bath incubator is a microcomputer controlled constant temperature dry bath device, high temperature control accuracy, good parallelism of sample preparation, to replace the traditional water bath device, can be widely used in sample preservation and reaction, DNA amplification and electrophoresis pre-denaturation, serum coagulation and so on. Application industry throughout the pharmaceutical, chemical, food safety, quality testing, environment and so on.

Feature

1. Unique dual temperature control slot can individually control temperature to make sure noninterference. One equipment to meet the demands for more experiments.
2. OLED display, simple interface, double time and temperature setting, simultaneous temperature and diminishing time display.
3. Fast heating speed, uniform heating, accurate temperature control, high stability, low energy consumption and no noise.
4. Built in temperature calibration function, automatic fault detection and buzzer alarm function.
5. Built in over-temperature protection device, safe and reliable, enhance the service life of the machine.
6. Product designed compact and tight, occupied little space. Using freer and easier.
7. Various blocks for convenient replacement, easy for cleaning and disinfection.
8. Perfect high block sealing cartridge with cover can make 15 / 50ml high block totally enclosed with dry bath.



Parameter

Model	BTH-100D (Dual Heating)	BTC-100D (Dual Cooling)	BTH-100 (Heating Cooling Mixing Type)
Temp. Control Range	R.T.+5°C~105°C	-10°C~105°C	Heating: R.T.+5°C ~105°C Cooling: -10°C ~105°C
Temp. Stability@100°C	±0.5°C	±0.5°C	±0.5°C
Temp. Stability@40°C	0.3°C	0.3°C	0.3°C
Block Temp. Uniformity	±0.3°C	±0.3°C	±0.3°C
Temp. Display Accuracy	0.1°C	0.1°C	0.1°C
Heating Speed	≤15min (20°C to 100°C)	≤15min (20°C to 100°C)	≤15min (20°C to 100°C)
Max. temp.	105°C	105°C	105°C
Cooling Speed	/	≤25min (R.T. drop 25°C) (@A.T. ≤26°C)	≤25min (R.T. drop 25°C) (@A.T. ≤26°C)
Time Range	1min~99h59min or continuous	1min ~99h59min or continuous	1min ~99h59min or continuous
Voltage	AC 220V/AC 110V, 50/60Hz	AC 90~ 230V, 50/60Hz	AC 220V / AC 110V, 50/60Hz
Power	150W	200W	170W
Fuse	250V,2A/4A, Φ5×20	250V,2A/4A, Φ5×20	250V,2A/4A, Φ5×20
Dimension	W.240 x D.260 x H.168mm	W.240 x D.260 x H.168mm	W.240 x D.260 x H.168mm
Net Weight	2.6kgs	3.0kgs	2.6kgs

Accessories



BT-A



BT-B



BT-C



BT-D



BT-E



BT-F



BT-G



BT-HH High Block Holder
(Suitable for block BT-F & BT-G)



BT-SC Standard Transparent Cover
(Suitable for Block BT-A to BT-E)



BT-HC High Module Transparent Cover
(Suitable for High Module Insulation Cover)



Accessories Parameter

Cat#	Dia. of hole	Spec	Quantity of tube	Quantity can be Accommodated
BT-A	6.1mm	0.2ml tube	24x0.2ml	8 pieces
BT-B	8mm	0.5ml tube	12x0.5ml	8 pieces
BT-C	10.8mm	1.5ml tube	6x1.5ml	8 pieces
BT-D	10.8mm	2.0ml tube	6x2.0ml	8 pieces
BT-E	6.1mm	0.2ml tube/96-well PCR plate	96x0.2ml	2 pieces
BT-F	16.9mm	15ml tube	6x15ml	4 pieces
BT-G	29.2mm	50ml tube	3x 50ml	4 pieces
BT-H	Customized	Customized	Customized	Customized

WT100-1B/1/2/3 Thermostatic Water Bath

Water bath

Introduction

Thermostatic water bath is a temperature controllable thermostatic water bath experimental instrument, mainly used in large and medium-sized universities, industrial and mining enterprises and scientific research units for biological, biochemical, cell, bacteria and other liquid, solid compound culture.

Features

1. Unique and novel appearance, small size, powerful functions. All surface that contact with water adopt stainless steel material and PC material, with strong corrosion resistance.
2. Using a once punch-formed stainless steel inner liner, with unique sealing structure to eradicate water leakage; Three groups of water tanks postposition independent drain valves separately, can easily empty the sewage after clean the Inner container.
3. Using microcomputer program PID automatic temperature control, uniform temperature control, high precision.
4. Built-in water level sensor, to prevent the hidden dangers of dry burning, safe and reliable.
5. Dual digital tube digital holographic display temperature and timing time, parameter display is accurate and intuitionistic, with beep alarm prompt function.



WT100-1B



WT100-1



WT100-2



WT100-3

Parameters

Model	WT100-1B	WT100-1	WT100-2	WT100-3
Temp. range	RT.+5°C~100°C	RT.+5°C~100°C	RT.+5°C~100°C	RT.+5°C~100°C
Temp. accuracy	0.5°C	0.5°C	0.5°C	0.5°C
Temp. Uniformity@37°C	0.5°C	0.5°C	0.5°C	0.5°C
Number of holes	1	1	2	3
Volume	5L×1	2L×1	2L×2	2L×3
Workspace	276×118×98mm×1	140×126×95mm×1	140×126×95mm×2	140×126×95mm×3
Voltage	AC 220V 50Hz	AC 220V 50/60Hz	AC 220V 50/60Hz	AC 220V 50/60Hz
Power	700W	300W	600W	900W
Dimensions	W.360×D.286×H.245mm	W.198×D.290×H.240mm	W.363×D.290×H.240mm	W.510×D.290×H.240mm
Net weight	5.1kgs	2.3kgs	5.1kgs	6.7kgs

ET-60 Air Bath

Air Incubator

Introduction

The air bath is one multipurpose incubator built in micro-processor with PID controlling. It is suitable for sample incubating in micro-plates, Gel cards, beakers, culture dishes, etc.

Feature

1. It looks neat and concise. Transparent cover makes experimentation visible. LED display temperature and time.
2. Various sample containers such as micro-plate, reagent cards frame, beaker, culture dish, etc, which can be put into the incubation space.
3. Micro-processor controls temperature and time. Temperature control with good linear, small fluctuation.
4. Safe and reliable. Beep alarm when time ends.
5. Incubate simultaneously for various containers to improve experiment efficiency.



Accessories



ET-PLT



ET-GCD

Cat#	Name	Capacity
ET-PLT	Stand for plates	2 standard plates
ET-GCD	Stand for Gel cards	12x2 Blood type reagent card

Parameter

Model	ET-60	Fan Speed Range	1200~3200rpm
Temp. Control Range	R.T.+5°C~60°C	Incubation Space Size	L.245 x W.215 x H.85mm
Temp. Setting Range	5°C~60°C	Voltage	AC 220V/AC 110V, 50/60Hz
Temp. Stability@37°C	±0.2°C	Power	300W
Temp. Uniformity	±0.5°C	Fuse	250V, 2A/4A, Φ5×20
Temp. Display Accuracy	0.1°C	Dimension	W.275 x D.395 x H.150mm
Time Range	1min~99h59min	Net Weight	8.1kgs

MTC-100/MTH-100 Thermo Shaker Incubator

Thermo Shaker

Introduction

Thermo shaker incubator has fast mixing speed. Combined with intelligent operation, it can not only mix various tubes, PCR plates, deep-well plates, micro plates and other laboratory supplies, but also equip the function of vortexing and heating (cooling) all kinds of tubes to meet different needs of different users.

Feature

1. Perfect radius and excellent 2 dimensional blend technology with adjustable mixing speed.
2. Programmable. Efficient shaking and temperature control.
3. Multiple safety protection. Fit for CE safe standard, safet and reliable.
4. Microprocessor and good linearity of temperature control. Shaking speed is accurate with small fluctuations.
5. Timing function. Time range is from 0 to 100hours. Non-stop operation time to run contiously is also available.
6. Various blocks to exchange, convenient for replacement.
7. Built-in temperature calibration function and short mixing function.
8. DC brushless motor drive, long life and free of maintenance.
9. Power recovery function. After power restored instrument can be set to automatically restore the original run.(MTC-100)



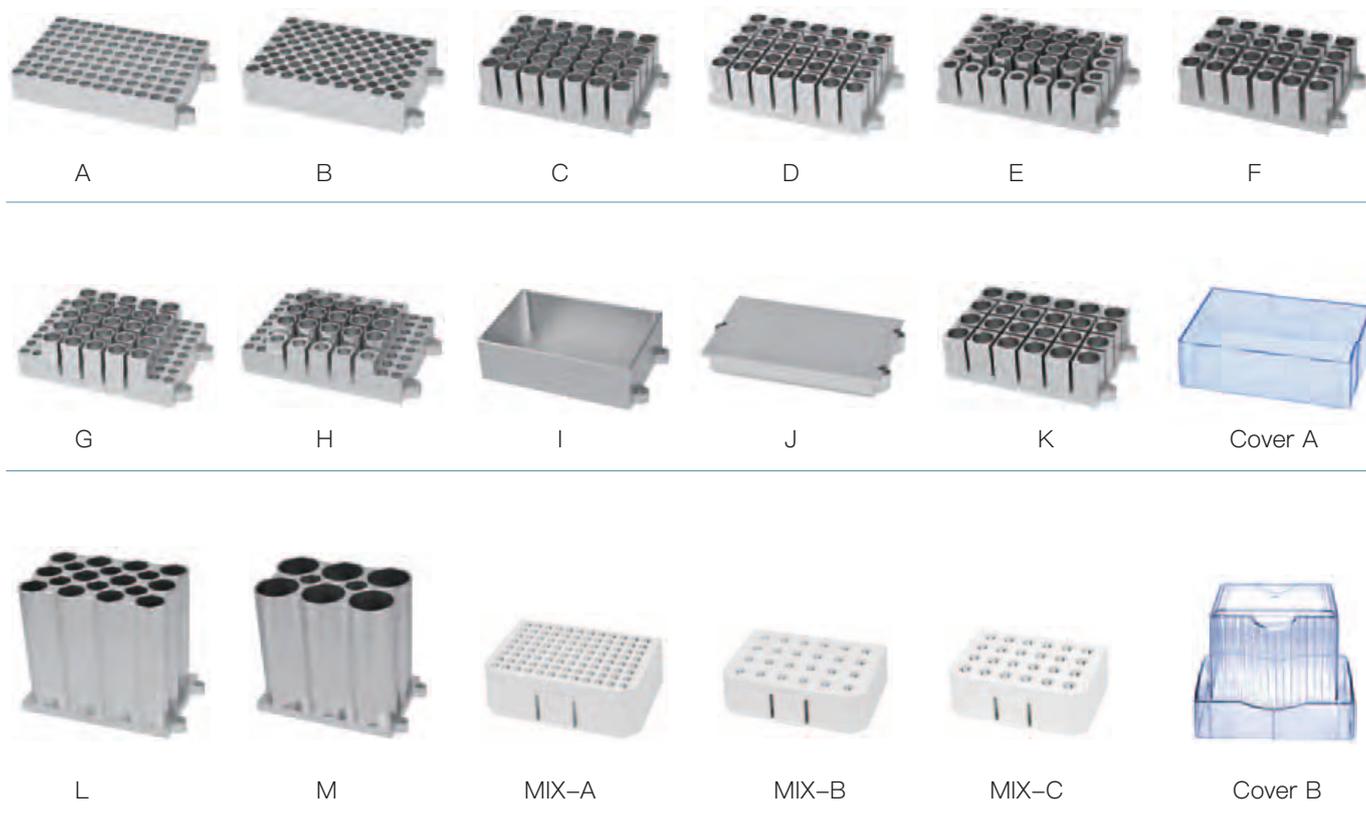
3-in-1 Shaking and Incubating Method

1. Plate (shaking and mixing)
96 holes PCR plates(skirted, semi-skirted, un-skirted)
384 holes PCR plates , 96 holes and 384 holes high plates,
MTP, enzyme labeled plates
2. Tube Stands (shaking and mixing) 0.2ml PCR tubes and strips stand,
PCR tubes and strips stand, 0.5ml micro tubes stand, 1.5ml/2.0ml micro tubes stand
3. Blocks (shaking, mixing, incubator)
Refer to "Exchangeable blocks for MTH-100/MTC-100 series"

Parameter

Model	MTH-100	MTC-100
Speed Range	300~2000rpm	300~1500rpm
Shaking Orbit	3mm (horizontal)	3mm (horizontal)
Temp. Control Range	R.T.+5°C~100°C	0°C~100°C
Temp. Max. Decrease	/	R.T. decreases 20°C
Temp. Setting Range	5°C ~100°C	0°C~100 °C
Temp. Stability	±0.3°C	±0.3°C
Block Temp. Uniformity	±0.3°C	±0.3°C
Temp. Display Accuracy	0.1°C	0.1°C
Heating Speed	≤15min (20°C to 100°C)	≤15min (20°C to 100°C)
Cooling time	/	≤30min (R.T. decreases 20°C) @R.T. 26°C
Cooling speed	/	≥7°C/min (100°C drop to 20°C) ≥1.2°C/min (R.T. decreases 10°C)
Time Range	1min~99h59min	1min~99h59min or continuous
Voltage	AC 220V / AC 110V, 50/60Hz	AC 100V~230V, 50/60Hz
Power	200W	200W
Fuse	250V, 2A/3A, Φ5×20	250V, 3A, Φ5×20
Dimension	W.196 x D.270x H.170mm	W.196 x D.270x H.170mm
Net Weight	8.2kgs	8.8kgs

Accessories



Notice: K/L/M are not standard blocks, Max speed is 600rpm.
MIX-A/MIX-B/MIX-C are tubes stands.

Accessories Parameter

Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
A	0.2 ml x 96	6.7 mm	Cone bottom	107 x 71 x 20 mm
B	0.5 ml x 54	8 mm	Cone bottom	107 x 71 x 25 mm
C	1.5 ml x 35	10.8 mm	Cone bottom	107 x 71 x 32 mm
D	2.0 ml x 35	10.8 mm	Round bottom	107 x 71 x 32 mm
E	0.5 ml x 20 + 1.5ml x 15	8 mm / 10.8mm	Cone bottom	107 x 71 x 32 mm
F	≤Φ12mm x 24	12 mm	Flat bottom	107 x 71 x 32 mm
G	0.2 ml x 32 + 1.5ml x 25	6.1 mm / 10.8mm	Cone bottom	107 x 71 x 32 mm
H	0.2 ml x 32 + 0.5 ml x 10 + 1.5ml x 15	6.1 mm / 8 mm / 10.8 mm	Cone bottom	107 x 71 x 32 mm
I	Water Bath	103 x 67 x 30 mm	Flat bottom	107 x 71 x 32 mm
J	Flat bottom plates	Top size 69 x 107 x 12 mm	Flat plate block	116 x 71 x 15 mm
K	5 ml x 24	13.5 mm	Flat bottom	107 x 71 x 32 mm
L	15 ml x 12	16.9 mm	Flat bottom	107 x 71 x 100 mm
M	50 ml x 6	29.5 mm	Flat bottom	107 x 71 x 100 mm
N	Customized	Customized	Customized	Customized
MIX-A	0.2ml x 96	/	/	122 x 80.5 x 35 mm
MIX-B	0.5ml x 24	/	/	122 x 80.5 x 41mm
MIX-C	1.5ml/2.0ml x 24	/	/	122 x 80.5 x 41mm

ST70-2/ST60-4 Micro-plate Shaker Incubator

Micro-plate Instruments

Introduction

Micro-plate Shaker Incubator adopts micro-processing techniques combined with PID control, low profile and nice exterior, low noise and easy handling. It is mainly used in mixing and incubating samples in micro-plates, cell culture plates and other standard plates at proper temperature.

Feature

1. LCD displays the setting and actual temperature, time and shaking speed simultaneously.
2. Simple touch operation interface, streamlined fuselage, pretty appearance and convenient for cleaning.
3. Both cover and bottom two-sides heating makes sample in each plate hole be heated uniformly.
4. Micro-processor controls temperature and shaking speed. Good linearity of temperature control. Precise control of shaking speed.
5. Configure 2 plates (for type ST70-2) or 4 plates (for type ST60-4). Beep alarm when operation ends.
6. DC brushless motor drive, long life and free of maintenance.



Parameter

ST70-2

ST60-4

Model	ST70-2	ST60-4
Speed Range	200~1200rpm	200~1200rpm
Shaking Orbit	3mm (horizontal)	2mm (horizontal)
Temp. Control Range	R.T.+5°C ~70°C	R.T.+5°C ~70°C
Temp. Setting Range	5°C~70°C	5°C~70°C
Temp. Stability@37°C	±0.2°C	±0.2°C
Platform Temp. Uniformity	±0.5°C	±0.5°C
Temp. Display Accuracy	0.1°C	0.1°C
Heating Speed Range	<25min (20°C to 70°C)	<25min (20°C to 70°C)
Time Range	1min~99h59min or short mix	1min ~99h59min or short mix
Sample Capacity	2 Pieces of Plates (Height < 35mm)	4 Pieces of Plates(Height < 40mm)
Voltage	AC 220V/AC 110V, 50/60Hz	AC 220V/AC 110V, 50/60Hz
Power	150W	250W
Fuse	250V, 1A/2A, Φ5x20	250V, 3A/5A, Φ5x20
Dimension	W.284 x D.264 x H.157mm	W.345 x D.310 x H.178mm
Net Weight	6.7kgs	10.5kgs

MT70-2/MT60-4 Micro-plate Incubator

Micro-plate Instruments

Introduction

Micro-plate incubator is a well-designed micro processing techniques incubator which well combined with PID controlling. It is mainly used for solution incubation of ELISA plate (96-well/384-well), cell culture plate (24-well / 48-well / 96-well) at proper temperature.

Feature

1. LCD display. Setting temperature and actual temperature simultaneously displayed. Diminishing time displayed.
2. Friendly human-machine operation interface. Streamline shape, pretty and elegant. Convenient for cleaning.
3. Uniformly upper & down heating for samples in micro plates. The experiment effect is exact correspondence of the setting and actual temperature.
4. Microprocessor controls temperature and time, good temperature control linear, small fluctuations.
5. 2/4 standard ELISA plates and microplates can be placed, and sound alarm signal after the program finished.



Parameter

MT70-2

MT60-4

Model	MT70-2	MT60-4
Temp. Control Range	R.T.+5°C ~70°C	R.T.+5°C ~70°C
Temp. Setting Range	5°C ~70°C	5°C~70°C
Temp. Stability@37°C	±0.2°C	±0.2°C
Platform Temp. Uniformity	±0.5°C	±0.5°C
Temp. Display Accuracy	0.1°C	0.1°C
Heating Speed	<25min (20°C to 70°C)	<25min (20°C to 70°C)
Time Range	1min~99h59min	1min~99h59min
Sample Capacity	2 Pieces of Plates(Height < 35mm)	4 Pieces of Plates(Height < 40mm)
Voltage	AC 220V/AC 110V, 50/60Hz	AC 220V/AC 110V, 50/60Hz
Power	150W	250W
Fuse	250V, 1A/2A, Φ5x20	250V, 3A/5A, Φ5x20
Dimension	W.284 x D.264 x H.157mm	W.345 x D.310 x H.178mm
Net Weight	3.3kgs	4.9kgs

MIX-1500 Micro-plate Shaker

Micro-plate Instruments

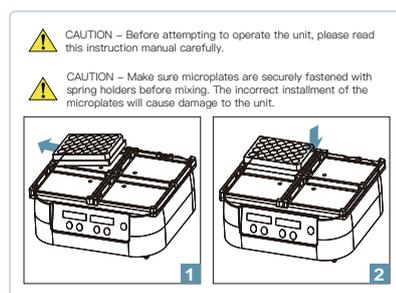
Introduction

Micro Plate Shaker is mainly applied in solution mixing and shaking with PCR plate (96-holes/384-holes), cell culture plate (24-holes/48-holes/96-holes etc.) for immunoassay and dyeing experiments. It is safe used in low temperature environment or low temperature incubator. MIX-1500 is designed compactly with simple and convenient operation and low noise.

Feature

1. Simple and easy operation panel. LED display time and speed accurately.
2. Microprocessor controls speed and time, safe, stable and low noise.
3. Can accommodate 4 standard PCR plates or micro plates, mixing sample efficiently.
4. DC brushless motor, long life and free of maintenance. Provides both gentle and powerful shaking.
5. Timing function. Alarm after program finishes. Continuous working can be set.

Installation diagram



Note: When using deep hole plate, the instrument speed should not exceed 1000rpm.



Parameter

Model	MIX-1500
Speed Range	200 ~1500rpm – standard (increment: 10 rpm), 200 ~1000 rpm – deep-well plate (increment: 10 rpm)
Shaking Orbit	3mm (horizontal)
Time Range	1min ~99h59min or continuously
Sample Capacity	4 standard plates
Voltage	AC 100V~230V, 50/60Hz
Power	50W
Fuse	250V, 1A, Φ 5x20
Dimension	W.284 x D.264 x H.121mm
Net Weight	5.2kgs

PS-200 Semi-automatic Thermal Sealer

Micro-plate Instruments

Introduction

Semi-automatic Thermal Sealer is a kind of film sealer to prevent evaporation and leakage of various microplates (PCR plates, deep-well storage plates, microplates and cell culture plates) during the detection process by heat sealing various special heat sealers. Sealing instrument for sample loss and space cross-contamination. It is an indispensable assistant for PCR instruments and quantitative PCR machines.

Features

1. Compact appearance, small occupied space, simple operation.
2. OLED display screen, high light and no visual angle limit, more energy saving and eco-friendly.
3. Adjustable sealing plate temp.:80-200°C, real temp. displays, rapid heating, reaching 170°C in 300 seconds, rapid cooling down with fan cooling.
4. Sealing plate pressure can be adjusted according to the real result, various kinds of micro plates and heat sealing films to replace.
5. The microprocessor controls temperature with good accuracy. The ingenious uniform structure of heat sealing plate ensures consistent sealing results.
6. Variable temperature and time settings for accurate optimization. Temperature can be precisely set in increments of 1.0°C, and time in increments of 0.1s.
7. Advanced ceramics platen heating technology avoids adhesion of sealing films due to excessive high temperature.
8. Two sides of the body is equipped with windows, which is convenient to clean and extend using life of the heating plate.
9. When instrument is not working more than 60min, it automatically switches into stand-by mode during which the temperature of the heating element will reduce to 60°C to save energy.
- 10.10. When instruments is not working for more than 120min, it switches off automatically for safety. It switches off the display and heating. With slight current provided for central element, the sealer will restart once pressing any button.
- 11.11. The drawer is controlled by humanized design if hands or other objects impede the drawer when it's closing, the motor will automatically reverse drawer. This feature prevents injury to the user and sample.
12. Anti-misoperation function. Press "OPEN" key to stop immediately working when it is working.



Accessories



Copper sheet for fixing film
optional when sealing film



Block for microplate(1)



Block for 96-well PCR plate



Block for microplate(2)

Parameters

Model	PS-200
Temp. Range	80°C ~200°C, (increment: 1°C)
Temp. Display Accuracy	±1°C
Temp. Uniformity	±1°C
Sealing Time Range	0.5 ~10sec. (increment: 0.1sec)
Sealing Pressure Range	1 ~5grade
Compatible Plate Material	PP (Polypropylene) / PS (Polystyrene) / PE (Polyethylene)
Compatible Plate Types	standard microplates: PCR plate(skirted, semi-skirted, non-skirted), deep-well plate, ELISA plate.
Sealing Plate Height	9mm ~48mm
Compatible Sealing Plate Film	1.foil polypropylene material
	2.transparent polyester fiber – polypropylene material
	3.transparent polymer material
	4.thin layer transparent polymer material
	5.foil material
Front Panel Material	fireproof ABS
Sealing Plate Material	Ceramics
Voltage	AC 220V / AC 110V switchable, 50/60Hz
Power	300W
Fuse	250V, 8A, Φ5 x 20
Dimension	W.180 x D.350 x H.380mm
Net Weight	12kgs



NDK200-1N/2N Sample Concentrator

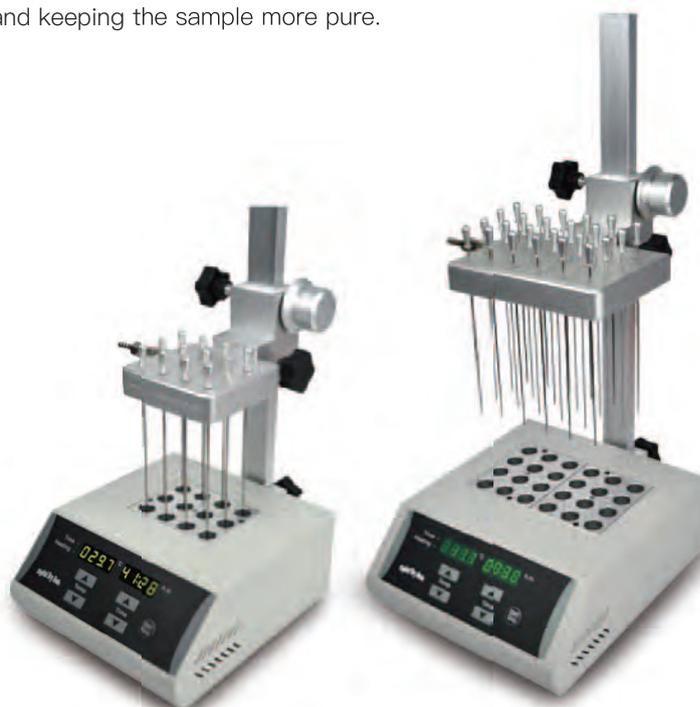
Concentrator Series

Introduction

The sample concentrator is mainly used for the concentration or preparation of bulk samples (such as drug screening, hormone analysis, liquid phase, and sample preparation in mass spectrometry). Working principle: By blowing nitrogen into the surface of the heated sample, the solvent in the sample is quickly evaporated and separated, thereby achieving the purpose of anaerobic concentration of the sample and keeping the sample more pure.

Feature

1. The height of the air chamber plate can be adjusted. The length of a standard gas needle is 150mm.
2. LED displays immediate temperature and diminishing time. Operation is simple and convenient.
3. Built in overheat protection, automatic fault detection and fault beep alarm devices.
4. The entire equipment can be put into ventilation cabinet when the concentration sample is in toxic solvents.
5. Synchronously working with heating by dry bath in the bottom and nitrogen blowing on the surface accelerates liquid evaporation and sample concentration.
6. Unique patented design for air channel control system, enhances air tightness and reduces potential leakage; easy to operate, lift/press air needle to realize channel switch; the switching status of each channel is clear at a glance.
7. Standard configured air cavity and adjustable bracket.



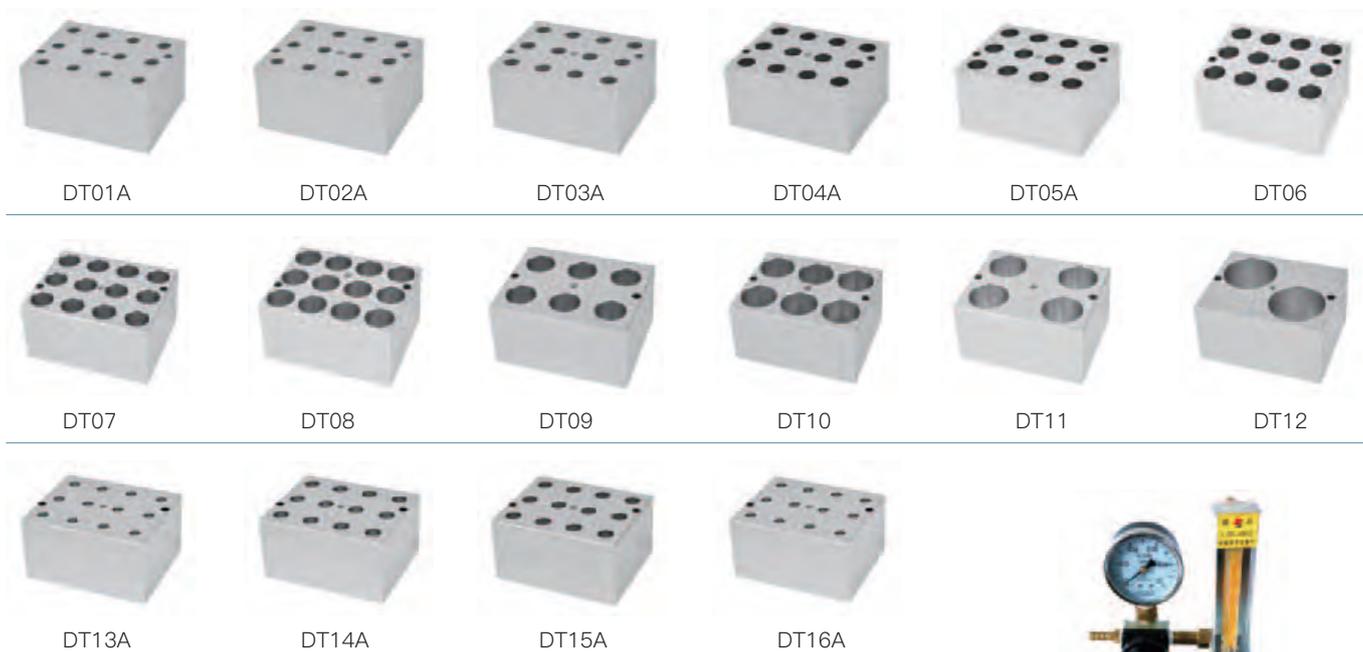
NDK200-1N

NDK200-2N

Parameter

Model	NDK200-1N	NDK200-2N
Temp. Control Range	R.T.+5°C ~150°C	R.T.+5°C~150°C
Temp. Setting Range	5°C ~150°C	5°C~150°C
Temp. Stability@40~100°C	±0.5°C	±0.5°C
Temp. Stability@100~150°C	±1°C	±1°C
Block Temp. Uniformity@100°C	±0.5°C	±0.5°C
Block Temp. Uniformity@150°C	±1 °C	±1 °C
Temp. Display Accuracy	0.1°C	0.1°C
Heating Speed	≤30min (40°C to 150°C)	≤30min (40°C to 150°C)
Time Range	1min ~99h59min	1min~99h59min
Needle Plate Max. Lift Stroke	285mm	285mm
Gas-in Joint Outer Diameter	Φ7mm	Φ7mm
Nitrogen Pressure	≤0.1MPa	≤0.1MPa
Nitrogen Flow Rate	0~10L/min	0 ~10L/min
Needle Length	150mm	150mm
Sample Capacity	1 standard block	2 standard block
Voltage	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz
Power	200W	400W
Fuse	250V, 2A/3A, Φ5×20	250V, 3A/6A, Φ5×20
Dimension	W.200 x D.230 x H.525mm	W.200 x D.260 x H.525mm
Net Weight	5.1kgs	6.1kgs

Accessories



NDK-GV
Gas Control Valve

Notice

Flow control valve is optional.

While choose blocks for NDK200-2N, choose two blocks with the same hole quantity.

DT01A、DT02A、DT16A needs to be customized in advance.

Accessories Parameter

Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
DT01A	6 mm x 12	6.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT02A	7 mm x 12	7.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT03A	10 mm x 12	10.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT04A	12 mm x 12	12.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT05A	13 mm x 12	13.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT06	15 mm x 12(7ml tube)	15.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT07	16 mm x 12(10ml/15ml tube)	16.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT08	19 mm x 12	19.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT09	20 mm x 6	20.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT10	26 mm x 6	26.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT11	28 mm x 4(50ml tube)	28.5 mm	Flat bottom	95.5 x 76.5 x 50 mm
DT12	40 mm x 2	40.5 mm	Round bottom	95.5 x 76.5 x 50 mm
DT13A	0.5 ml x 12	8 mm	Cone bottom	95.5 x 76.5 x 50 mm
DT14A	1.5 ml x 12	10.8 mm	Cone bottom	95.5 x 76.5 x 50 mm
DT15A	2.0 ml x 12	10.8 mm	Round bottom	95.5 x 76.5 x 50 mm
DT16A	0.2 ml x 12	6.1 mm	Cone bottom	95.5 x 76.5 x 50 mm
DT19	Customized	Customized	Customized	Customized

NK200-1B Sample Concentrator (visible)

Concentrator Series

Introduction

Sample Concentrator (visible) is mainly used for concentrating or preparing sample in batch. Such as drug screening, hormone analysis, liquid phase and mass spectrometry in the analysis of sample preparation. It works by blowing nitrogen in the surface of sample which is being heated to accelerate evaporating and separating the solvent in the samples without oxygen.

Feature

1. Synchronously working with heating by dry bath in the bottom and nitrogen blowing on the surface accelerates liquid evaporation and sample concentration.
2. The length of a standard gas needle is 150mm.
3. The height of the air chamber plate can be adjusted. The unique characteristics: Sample surface in the tube can be observed while concentrating.
4. Gas needle is controlled independently. Separately blow of each needle and flow regulating of each needle are available to avoid gas waste.
5. The entire equipment can be put into ventilation cabinet when the concentration sample in toxic solvents.
6. Built in overheat protection, automatic fault detection and fault beep alarm devices.
7. LED displays immediate temperature and diminishing time. Operation is simple and convenient.
8. Standard configured air cavity and adjustable bracket.

Parameter

Model	NK200-1B
Temp. Control Range	R.T.+5°C~150°C
Temp. Setting Range	5°C~150°C
Temp. Stability@40~100°C	±0.5 °C
Temp. Stability@100~150°C	±1°C
Block Temp. Uniformity@100°C	±0.5 °C
Block Temp. Uniformity@150°C	±1 °C
Temp. Display Accuracy	0.1 °C
Heating Speed	≤30min (40°C to 150°C)
Time Range	1min~99h59min
Needle Plate Max. Lift Stroke	285mm
Gas-in Joint Outer Diameter	Φ7mm
Nitrogen Pressure	≤0.1MPa
Nitrogen Flow Rate	0~10L/min
Needle Length	150mm
Sample Capacity	1 Standard Visible Block
Voltage	AC 220V/AC 110V, 50/60Hz
Power	400W
Fuse Protector	250V, 3A/6A, Φ5×20
Dimension (WxDxH)	W.220xD.260xH.525mm
Net Weight	5.8kgs



Accessories



NK01



NK02



NK03



NK04



NK05



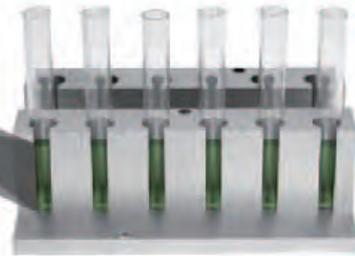
NK06



NK07



Visible Blocks Picture:



Notice

Optional blocks from NK01—NK07. Blocks can be interchanged easily. Commonly used configuration NK05 block.

Accessories Parameter

Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
NK01	10 mm x 12	10.5 mm	Round bottom	153.5 x 95.5 x 50 mm
NK02	12 mm x 12	12.5 mm	Round bottom	153.5 x 95.5 x 50 mm
NK03	13 mm x 12	13.5 mm	Round bottom	153.5 x 95.5 x 50 mm
NK04	15 mm x 12(7ml tube)	15.5 mm	Round bottom	153.5 x 95.5 x 50 mm
NK05	16 mm x 12(10ml/15ml tube)	16.5 mm	Round bottom	153.5 x 95.5 x 50 mm
NK06	19 mm x 12	19.5 mm	Round bottom	153.5 x 95.5 x 50 mm
NK07	20 mm x 12	20.5 mm	Round bottom	153.5 x 95.5 x 50 mm

NDK200-1A Sample Concentrator (96-gas-needles)

Concentrator Series

Introduction

Sample Concentrator (96-gas-needles) is mainly used for concentrating or preparing sample in batch. Such as drug screening, hormone analysis, liquid phase and mass spectrometry in the analysis of sample preparation. It works by blowing nitrogen in the surface of sample which is being heated to accelerate evaporating and separating the solvent in the samples without oxygen.

Feature

1. The heater heats the sample rapidly to the evaporation temperature, and at the same time, the gas is blown to the surface of the solution through the gas needle, which promotes rapid evaporation of the solution and concentration of the sample.
2. The height of the air cavity can be adjusted. The length of a standard gas needle is 80mm.
3. The entire equipment can be put into ventilation cabinet when the concentration sample in toxic solvents.
4. Built in overheat protection, automatic fault detection and fault beep alarm devices.
5. LED displays immediate temperature and diminishing time. Operation is simple and

Accessories



DT17



DT18



NDK-GV
Gas Control Valve



Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
DT17	0.2ml x96	6.7mm	Cone bottom	95.5 x 153.5 x 33.5mm
DT18	Flat bottom plates	Top size 76x 116 x 4mm	Flat plate block	95.5 x 153.5 x 22.5mm

Notice: User can choose any block from DT17 or DT18 and block can be changed easily. Optional flow regulating valve.

Parameter

Model	NDK200-1A	Gas-in Joint Outer Diameter	Φ7mm
Temp. Control Range	R.T.+5°C~150°C	Nitrogen Pressure	≤0.1MPa
Temp. Setting Range	5°C~150°C	Nitrogen Flow Rate	0 ~10L/min
Temp. Stability@40~100°C	±0.5 °C	Needle Length	80mm
Temp. Stability@100~150°C	±1 °C	Sample Capacity	1 Standard Plate Block
Block Temp. Uniformity@100°C	±0.5 °C	Voltage	AC 220V/AC 110V, 50/60Hz
Block Temp. Uniformity@150°C	±1 °C	Power	400W
Temp. Display Accuracy	0.1 °C	Fuse	250V, 3A/6A, Φ5×20
Heating Speed	≤30min (40°C to 150°C)	Dimension (WxDxH)	W.220 x D.260 x H.445mm
Time Range	1min ~99h59min	Net Weight	5.5kgs
Air cavity Max. Lift Stroke	275mm		

MINI-100N MINI Sample Concentrator

Concentrator Series

Introduction

The mini sample concentrator is mainly used for the concentration or preparation of bulk samples (such as drug screening, hormone analysis, liquid phase, and sample preparation in mass spectrometry). Working principle: By blowing nitrogen into the surface of the heated sample, the solvent in the sample is quickly evaporated and separated, thereby achieving the purpose of anaerobic concentration of the sample and keeping the sample more pure.

Feature

1. Unique air circuit control patent design, enhance air tightness and reduce the risk of air leakage; Easy to operate, lift/press air needle to realize channel switch; the switching status of each channel is quite clear.
2. The heater heats the sample rapidly to the evaporation temperature, and at the same time, the gas is blown to the surface of the solution through the gas needle, which promotes rapid evaporation of the solution and concentration of the sample.
3. The height of the air chamber plate can be adjusted. The length of a standard gas needle is 150mm.
4. Separately blow of 6 needles and flow regulating of each needle are available to avoid gas waste.
5. The entire equipment can be put into ventilation cabinet when the concentration sample in toxic solvents.
6. Built in overheat protection, automatic fault detection and fault beep alarm devices.
7. LED displays immediate temperature and diminishing time. Operation is simple and convenient.
8. Standard configured air cavity and adjustable bracket.

Accessories



MiniP-C



MiniP-D

Cat#	Tube Quantity & Dia.of hole
MiniP-C	6 x ϕ 15mm
MiniP-D	6 x ϕ 16mm
MiniP-F	Customized

Blocks can be optional and exchanged.

Optional flow regulating valve.

NDK-GV

Flow regulating valve

Optional



Parameter

Model	MINI-100N
Temp. Range	R.T.+5°C~100°C
Heating Time	≤12min(From 40°C to 100°C)
Temp. Accuracy (100°C)	±0.5°C
Temp. Accuracy (40°C)	±0.3°C
Blocks Quantity	1Block
Time Range	1sec~999s or 1min0~999min
Nitrogen Flow Rate	0~10L/min
Nitrogen Pressure	≤0.1MPa
Power	60W
Dimensions	W.110 x D.156 x H.400 mm
Net weight	1.2kgs

WT-12 Water Bath Concentration

Concentrator Series

Introduction

Water Bath Sample Concentrator is mainly used for concentrating or preparing sample in batch. Such as drug screening, hormone analysis, liquid phase and mass spectrometry in the analysis of sample preparation. It works by blowing nitrogen in the surface of sample which is being heated to accelerate evaporating and separating the solvent in the samples without oxygen.

Feature

1. Elegant appearance, with elevation operation panel, embedded flowmeter, waterproof button, safe and reliable.
2. Good compatibility, suitable for test tubes (diameter 10 ~ 29mm), conical flask, centrifuge tube, the sample capacity of 1 ~ 50ml.
3. Free up and down needle valve tube, independent adjustable needle valve, controls gas flow at each sample location
4. Circular turntable structure, 360-degree rotation, convenient sample support into and out of the water bath, easy to operate.
5. 12 position, each sample position are numbered, spring tube clamp fixed position.
6. LED real-time displays temperature and time, water bath temperature: RT +5 °C ~ 100 °C.
7. All use of stainless steel, all components are anti-corrosion and resistant to organic solvents.
8. When concentrated toxic solvents, the entire system can be placed in a fume hood.
9. Built-in level sensor, anti-dry protection.

Application

1. Pharmaceutical drug testing: Chinese medicine and drug testing.
2. Food and beverage: milk, wine, liquid beverages.
3. Biological analysis: serum, plasma, blood, urine.
4. Commodity inspection: test dioxin, croft etc.
5. Environmental analysis: drinking water, groundwater, polluted water, etc.
6. Pesticide analysis: vegetables, fruits, cereals, plant tissues, etc.

Parameter

Model	WT-12	Gas-in Joint Outer Diameter	Φ7mm
Temp. Control Range	R.T.+5°C~100°C	Maximum gas pressure	0.2MPa
Temp. Setting Range	5°C~100°C	Maximum gas flow	15L/min
Temp. Uniformity@60°C	±1 °C	Needle Length	100mm
Temp. Display Accuracy	0.1 °C	Inner dimension	Φ260×150mm
Heating Speed	≤30min (40°Cto100°C)	Voltage	AC 220V, 50/60Hz
Time Range	1min~99h59min	Power	1000W
Accommodates samples	12个	Fuse	250V, 8A, Φ5×20
Test tube range	Φ10~29mm/ Liquid volume1~50ml	Dimension	W.390 x D.300 xH. 850mm
Needle Plate Max. Lift Stroke	200mm	Net Weight	9.5kgs



SP-16/18/25 Magnetic Stirrer

Magnetic Series

Introduction

The intelligent digital magnetic stirrer adopts magnetic stirrer mixing technology and is designed with humanized operation. This product is mainly used in the fields of medicine, bioengineering, chemistry, medicine, food, and other research fields. It is a routine instrument necessary for the biological laboratory to stir and mix various reagents, solutions and chemical substances.

Feature

1. Can stir 50ml–20L standard or non–standard reaction bottles.
2. Equipped with silicone pad upon the working surface, the shell is made of metal, high strength, high temperature resistance, corrosion resistance.
3. Brushless DC motor, stable performance, low noise, long life and no sparks.
4. Exquisite and compact design of the whole machine , 30° bevel control panel is suitable for sitting and standing viewing angles. Digital display speed and time.
5. High magnetic flux design, strong mixing ability, adopt no motor drive mode, low noise.



SP-16



SP-18



SP-25

Parameters

Model	SP-16	SP-18	SP-25
Platform Size	Φ137mm	154x163mm	154x163mm
Platform material	Silicone pad	Stainless Steel	Silicone Pad
Speed Range	200~1600rpm	300~1200rpm	300~1200rpm
Timing Range	0~99h59min	1min~99h59min	1min~99h59min
Stirring Point Quantity	1	1	1
Max. Stirring Volume	20L	20L	20L
Max. Length of stirring bar	80mm	80mm	80mm
Voltage	AC220V 50/60Hz	AC100~230V, 50/60Hz	AC100~230V, 50/60Hz
Power	20W	30W	30W
Fuse	250V, 1A, Φ5x20	250V, 1A, Φ5x20	250V, 1A, Φ5x20
Dimension	W.160xD.270xH.70mm	W.156 x D.270 x H.70mm	W.156 x D.270 x H.70mm
	1.88kgs	1.6kgs	1.6kgs

FMS-15 Ultra-thin magnetic stirrer

Magnetic Stirrer

Introduction

Ultra-thin magnetic stirrer allow precise and stable stirr of liquids over a wide range, especially for small volume samples, It is a necessary tool for petroleum, chemical industry, environmental protection, education and scientific research, etc.

Feature

1. Ultra-light and Ultra-thin, easy to store and save laboratory space.
2. Advanced non-wearing magnetic coil technology, quieter and more stable operation, longer service life.
3. Portable power supply, convenient for outdoor use, not limited by experimental conditions.
4. Counterclockwise and clockwise stirring functions can be switched to make the stirring more uniform and meet a variety of experimental needs.
5. The LCD screen displays the parameters in real time, the LED indicator shows the working status, and the instrument running status is more intuitive.
6. Touch buttons and sliding touch adjustment, durable, novel and stylish.
7. Dust and water proof, high protection level (IP65).



Parameters

Model	FMS-15
Max. stirring amount(H ₂ O)	1L
Motor output power	3W
Speed adjustable range	20 ~ 1500rpm
Clockwise/counterclockwise stirring intermittent time (except single direction stirring)	45s/5s
Timing Range	0 ~ 9hours (0 is forever)
Display method	LCD
Platform material	PVC
Platform Size	Φ110
Dimensions	W.110xD.180xH.14.5mm
weight	0.18Kgs
Voltage	DC 5V 1A
IP Rating	IP65



TP-350 Digital Display Heating Plate

Heating Plate

Introduction

TP-350 Intelligent digital display heating plate adopts special ceramic plate heating technology, and the maximum surface temperature can reach 340°C. Humanized operation design, can meet a variety of heating experimental needs.

Feature

1. Temperature control adopts fuzzy PID control algorithm, with high precision and small impact temperature (within $\pm 5^{\circ}\text{C}$).
2. 50ml ~ 20L standard or non-standard reaction bottles can be heated.
3. Internal and external PT1000 temperature measurement, thyristor control output, and with break protection function.
4. DC brushless motor makes stable operation, low noise, long using life and no spark.
5. It is heated by ceramic heating plate, which is beautiful and easy to clean.
6. The 30° bevel control panel is suitable for sitting and standing viewing angles. Digital display temperature and time.
7. Shell adopts sheet metal shell, high strength, high temperature resistance, corrosion resistance.
8. Special heating technique, the heating plate can reach temperature up to 340°C.

Parameters

Model	TP-350
Platform size	$\Phi 137\text{mm}$
Platform Material	Ceramic
Temp. Control Range(surface)	R.T.+5°C ~340°C
Temp. Setting Range(surface)	30°C ~340°C
Temp. Stability	$\pm 3^{\circ}\text{C}$
Time Range	1min ~99h59min
External Interface Temp. Sensor	PT1000
Adjustable Safety Loop Min. Temp	50°C
Adjustable Safety Loop Max. Temp	350°C
Voltage	AC 220V/ AC 110V, 50/60Hz
Power	600W
Fuse	250V, 4A/8A, $\Phi 5 \times 20$
Dimension (W.D.H)	W.156 x D.270 x H.90mm
Net weight	2.5kgs



Low Overshoot



TP-350E/350E+/350+ Digital Magnetic Stirrer Hot Plate Series

Magnetic Series

Introduction

The heating plate of the Digital Magnetic Stirrer Hot Plate Series is made of special Ceramic. Magnetic stirring technology and humanized design is convenient for operation to meet various heating and stirring experimental needs.

Feature

1. PID for temperature control. Two display windows. High precision measurement. Low overshoot($\leq \pm 5^{\circ}\text{C}$). Single button operation.
2. Inner and outer PT1000 for thermometry. Silicon controlled for output. With couple broken protection function.
3. Stirring types are available for heating or stirring standard/non-standard reaction flasks from 50ml to 20L
4. DC brushless motor makes stable operation, low noise, long using life and no spark.
5. Using specially made ceramic disc heating surface, beauty, anti-corrosion and easy to clean.
6. 30° slope control panel, suitable for seated and standing point of view.
7. Adopt aluminum alloy shell, high strength, quick heat dissipation, anti - corrosion.
8. Unique heating method, the surface maximum temperature can reach 340°C .
9. Magnetic stirring technology, low speed steady, high speed strong.
10. TP-350+ , 10 programs can be preset.
11. TP-350+ Adopts 4.3-inch color screen holographic display, which is convenient and intuitive.



TP-350E



TP-350E+



TP-350+

Parameters

Model	TP-350E	TP-350E+	TP-350+
Platform size	$\Phi 137\text{mm}$	$\Phi 137\text{mm}$	$\Phi 137\text{mm}$
Platform Material	Enamel	Enamel	Enamel
Speed Range	0~1800rpm	200~1200rpm	80~1800rpm
Temp. Range	R.T. $+5^{\circ}\text{C}$ ~ 340°C	R.T. $+5^{\circ}\text{C}$ ~ 340°C	R.T. $+5^{\circ}\text{C}$ ~ 340°C
Temp. setting range	30°C ~ 340°C	30°C ~ 340°C	30°C ~ 340°C
Temp. stability	$\pm 3^{\circ}\text{C}$	$\pm 3^{\circ}\text{C}$	$\pm 3^{\circ}\text{C}$
Time Range	/	0~99h59min	1min~99h59min
Stirring Point Quantity	1	1	1
Max. Stir Capacity	20L	20L	20L
Max. Size of Stirrer Stick	80mm	80mm	80mm
External Interface Temp. Sensor	/	PT1000	PT1000
Adjustable Safety Loop Min. Temp	50°C	50°C	50°C
Adjustable Safety Loop Max. Temp	350°C	350°C	350°C
Voltage	AC 220V/AC 110V, 50/60Hz	AC220V, 50/60Hz	AC 220V/AC 110V, 50/60Hz
Power	600W	600W	600W
Fuse	250V, 4A/8A, $\Phi 5 \times 20$	250V, 4A/8A, $\Phi 5 \times 20$	250V, 4A/8A, $\Phi 5 \times 20$
Dimension (W.D.H)	W.156 x D.270 x H.90mm	W. 160x D.270 x H.90mm	W.160 x D.270 x H.90mm
Net weight	2.6kgs	2.3kgs	2.4kgs

SP-100/200/300/200T Multi-Position Magnetic Stirrer

Magnetic Series

Introduction

Multi-position Magnetic Stirrer is designed for the high-efficiency experiments and has 4/8/12 stirring bar configurations to choose. It can use laboratory space efficiently. DC brushless motor makes the model, low speed but stable, high speed but powerful with low noise. Stainless steel is coated by silicone resin film disk. Non-slip and anti-corrosion.

Features

1. Digital display stirring speed at real-time, stirring bars operate synchronously and provide uniform agitation reaction conditions.
2. Efficient multi-position magnetic stirrers configure 4/8/12 stirring positions to use lab space efficiently.
3. DC brushless motor. Low speed but stable, high speed but powerful. Low noise and free maintenance.
4. Stainless steel is coated by silicone resin film pad. Non-slip and anti-corrosion.
5. Model SP200-2T applies special heating technology, Surface temperature up to 120 °C.



SP-100

SP-200

SP-300

SP-200T

Parameters

Model	SP-100	SP-200	SP-300	SP-200T
Stirring Point Quantity	4	8	12	8
Size of Stirring Bars	Φ8×46mm	Φ8×46mm	Φ8×46mm	Φ8×46mm
Max. Capacity	400ml×4	400ml×8	400ml×12	400ml×8
Digital Display	Speed Display	Speed Display	Speed Display	Temp. & speed
Speed Range	200~1200rpm	200~1200rpm	200~1200rpm	200~1200rpm
Temp. Control Range (surface)	/	/	/	R.T.+5°C~120°C
Platform Material	stainless steel with silicon pad			
Motor	DC brushless motor	DC brushless motor	DC brushless motor	DC brushless motor
Voltage	AC100-230V, 50/60Hz	AC100-230V, 50/60Hz	AC100-230V, 50/60Hz	AC 220V/ AC 110V, 50/60Hz
Power	20W	20W	20W	400W
Fuse	250V,1A, Φ5×20	250V,1A, Φ5×20	250V,1A, Φ5×20	250V,5A/3A, Φ5×20
Dimension	W.115×D.480×H.50mm	W.205×D.480×H.50mm	W.295×D.480×H.50mm	W.205×D.480×H.50mm
Net Weight	3kgs	4kgs	5kgs	5.3kgs

TP-4 4 Heads Magnetic Hot Plate Stirrer

Magnetic Series

Introduction

4 Heads Magnetic Stirrer has single-point and multi-point simultaneous stirring function, with mechanical timing, easy operation and stepless speed regulation, which can stably and precisely stir the liquid in a wide range. It is a common tool in petroleum, chemical industry, medical and health, environmental protection, biochemical laboratories, analysis rooms, and education departments.

Features

1. Four heating plates independently control temperature and speed, independent display.
2. The outer casing is made of metal, with high strength, high temperature resistance and corrosion resistance.
3. The temperature control adopts PID control algorithm, digital display, high precision, small flushing temperature (within $\pm 5^{\circ}\text{C}$), and internal and external PT1000 temperature measurement.
4. Can heat or stir 50ml~20L standard or non-standard reaction bottles.
5. Brushless DC motor, stable performance, low noise, long life and no sparks.
6. Heated by an enamel heating plate and the maximum surface temperature can reach 340°C .
7. The 30° level control panel is suitable for sitting and standing angles.
8. Magnetic stirring technology, stable at low speed, strong at high speed.



Parameters

Model	TP-4	Size of stirring bar	$\phi 8 \times 46\text{mm}$
Platform Size	$\phi 137\text{mm}$	External temp. sensor	PT1000
Platform Material	enamel	Adjustable safety min. temp. loop	50°C
Speed Range	200~1200rpm	Adjustable safety max. temp. loop	350°C
Temp. Control Range	R.T.+ 5°C ~ 340°C	Voltage	AC 220V, 50/60Hz
Temp. setting range	30°C ~ 340°C	Power	1600W
Temp. stability	$\pm 3^{\circ}\text{C}$	Fuse	250V, 10A, $\phi 5 \times 20$
Stirring Point Quantity	4	Dimension	W.610xD.272xH.86mm
Max. stirring capacity(H ₂ O)	2Lx4	Net weight	8.5Kgs

MINIP-25 Mini Magnetic Stirrer

Magnetic Series

Introduction

Mini Magnetic Stirrer is a mini-sized and portable magnetic stirrer with high standard reliability and durability. It has wide range of application.

Features

1. Distinct designed. Small and exquisite. Simple
2. operation.
3. Long using life with no carbon brush motor.
4. Speed regulation stepless, large range of speed.
5. Strong magnetism to avoid stirrer jumping.
Convenient and portable. Meet different kinds of experimental demands.

Parameters

Model	MINIP-25
Platform Size	Φ88mm
Platform Material	Plastic
Speed Range	0~2500 rpm
Max. Capacity	250ml
Stirring bar Dimension	Φ8x46mm
Motor Input/Output	1.2W/0.8W
Voltage	DC12V 1A
Power	≤12W
Dimension	W.110 x D.110 x H.70mm
Net Weight	1.2kg



SP200-1 Cell Magnetic Stirrer

Magnetic Series

Introduction

Cell Magnetic Stirrer is designed for research universities, laboratories and factories, used to culture and stir cells.

Features

1. Metal plate shell, firm and durable, thermostability and anti-corrosion.
2. TFT-LCD displays speed, starting time & end time, cycle numbers and programing pegments.
3. DC brushless motor makes stable operation, low noise, long using life.
4. Various working modes, including fixed speed stirring and cycle stirring.
5. Programmable. It can store and memorize nine frequently used settings S1~S9. One key to switch.
6. The control panel designed 30°slopes for convenient operation.
7. Magnetic stirring technology, stable running. Specially designed for cell culture with low speed.
8. Accelerate and decelerate gradually with low shear, keep cells growing safely.

Parameters

Model	SP200-1
Stirring Point Quantity	1
Max. Stir Capacity	3L
Speed Range	5~200rpm,step:1 rpm
Platform Material	stainless stee
Dimension	W.180 x D.283 x H.88mm
Voltage	AC 100~240V, 50/60Hz
Net weight	2.2kgs



MS-40 Digital Overhead Stirrer

Overhead Stirrer

Introduction

Digital Overhead Stirrer is suitable for middle and high viscosity liquid or solid-liquid mixture. It is mainly used in chemical synthesis, pharmaceutical, physical and chemical analysis, petrochemical, cosmetics, health products, food, biotechnology and so on.

Features

1. LED with backlit displays real-time speed and time. It is convenient and accurate for readings, easy to operate.
2. Precise control speed. Control accuracy is ± 3 rpm. Accurately display the actual speed actual value / set value.
3. Constant rotation speed, the torque can be automatically adjusted according to the change of sample viscosity to maintain the set rotation speed.
4. Anti-spill samples, smooth start, effectively prevent spilling.
5. Clockwise & counterclockwise stirring exchange mode. Stirring effect is better.
6. Closed shell to prevent liquid from entering the machine interior for corrosion circuit, ensure safe operation. Long time continuous and stable operation.
7. Overload protection and motor protection. When overload, short circuit and abnormal speed occur, it will cut off the circuit and alarm automatically to ensure safe running and lab safety.

Accessories



Cat#	Stir Propeller Style	Spec	Dia. of the Propeller	Dia. of the Stir Rod	Length of the Stir Rod	Max. Speed
MS-A	Straight type	1 blades	60mm	8mm	400mm	2000rpm
MS-B	Centrifugal type	2 blades	90mm	8mm	400mm	2000rpm
MS-C	Propeller type	4 blades	50mm	8mm	400mm	2000rpm
MS-D	Fan type	1 blades	68mm	8mm	400mm	1000rpm
MS-E	Customized	customized	customized	customized	customized	customized

Parameters

Model	MS-40	Max. Viscosity	50000mPas
Max Stir Capacity (H2O)	40L	Drill Chuck Clamping	0.5~10mm
Time Range	30s~999min	Diameter Range	VD 24V, 50/60Hz
Speed Range	50~2200rpm	Voltage	130W
Speed Control Accuracy	± 3 rpm	Power	W.240 x D.380 x H.830mm
Speed Display Accuracy	± 1 rpm	Dimension	8.9kgs
Max. Torque	180N.cm	Net Weight	

DUT-48 Blue Light Transilluminator

Gel instruments

Introduction

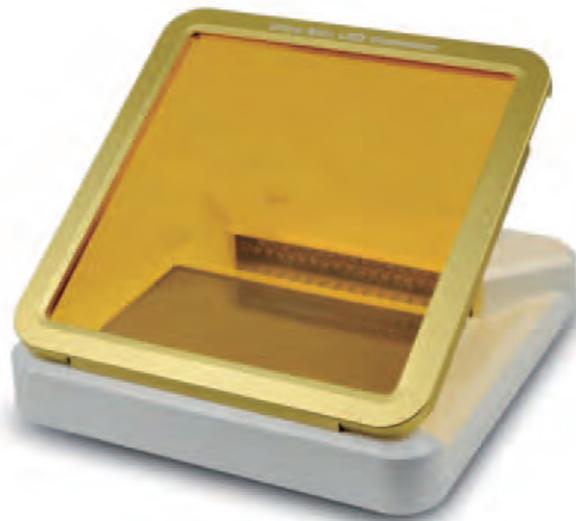
Blue Light Transilluminator is used for the observation of gel electrophoresis. It uses LED light to observe or shoot various dyes. LED light is strong illumination with no harm. It is long life, smart and portable.

Features

1. Blue light prevent users' easily exposed parts from uv damage.It's also no damage for DNA fragments.
2. With 108 pieces of LED light, long life and strong illumination. Suitable for observation of large range of fluorochrome. High luminance, high sensitivity and good homogeneity.
3. It can be used individually as blue light platform while It can also be used matching up multimagager.
4. Uniform transillumination blu-ray module. Low background values. No side.
5. Screen plate fixed at random. Angle adjustable ,Single hand can operate, which makes it's more easily watch gel.
6. Compared with the traditional uv transmission instrument: uniform transillumination blu-ray module, sample observation more symmetrical and photo's effect is better.
7. Import good quality LED bead. Long-term energy conservation and environmental protection. No need to replace bulbs. Free maintenance and long service life of LED can reach to 50000 hours.
8. Perfect observation with full size transparent optical filter. Safe operation, no need to wear safety glasses or other protection device.

Parameters

Model	DUT-48
Wavelength	470nm
Max.Gel Size	100x150mm
Voltage	DC 24V Power Adapter
Dimension	W.210 x D.210 x H.30mm
Net Weight	1.4kgs

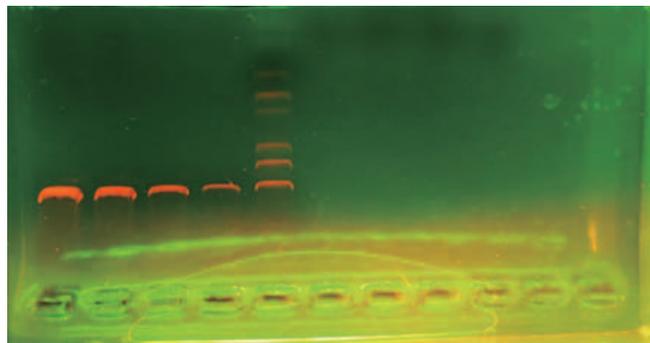
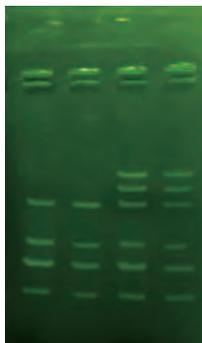


Application effect

The same gel
Under UV light:



The same gel under
blue-ray instrument:



UV-6 UV Transilluminator

Gel instruments

Introduction

UV Transilluminator is mainly used to observe the results of nucleic acid (DNA/RNA) gel electrophoresis and gel cutting operation. It can be widely used in scientific research institutions and enterprises in the fields of molecular biology, molecular genetics, medicine and health, biological products, agriculture and other research institutes and enterprises in the field of life science research.

Features

1. Humanized design of the whole machine, the UV protection board can be stepless adjust at any Angle and positioning, to ensure the best protection of ultraviolet light, and does not affect the observation.
2. Compact sealing structure design ensures that the cutting operation and the cleaning and cutting platform are free of leakage, which greatly reduces the possibility of gel contamination and internal damage caused by leakage, and greatly improves the service life of the ultraviolet cutting instrument.
3. The special UV filter glass has good permeability to specific wavelength UV, which can ensure higher detection sensitivity and enhance the signal capture capability of the weak band.
4. Reasonable structural design and high-quality UV lamp ensure uniform UV light intensity in the detection area of the UV transmission table.
5. Compact shape, easy operation and sealed structure make the maintenance of the instrument simpler. Self-contained fan cooling device, extend the service life of the machine.
6. Single wavelength standard 302nm UV lamp, and 254nm/365nm multiple wavelengths or combinations can be selected to match the gel observation of different dyes. Users can choose UV lamps with different wavelengths according to the experiment need.

Parameters

Model	UV-6
Transmission wavelength	302nm,254nm,365nm optional. (Standard 302nm)
Filter size	197 x 147 mm
Voltage	AC 220V 50Hz
Power	8Wx6
Dimensions	W.335 x D.280 x H.137mm
Net weight	5.4kgs



BTU-6 Black-box type UV Analyzer

Gel instruments

Introduction

Black-box type UV analyzer can send out long and short wave uv light with high UV intensity ,good stability and easy operation. It's reliable and popular among customers. Mainly used in scientific research, production and other fields.Use widely available in biochemistry, medicine, samples of DNA, RNA electrophoresis gel observation analysis, detection of protein, nucleotide, etc.

Features

1. Equipment can be installed with digital camera to shoot and take photos.
2. 302nm wavelength has small less damage to the sample with high sensitivity.
3. Fully enclosed with high quality metal black-box. No need to operate in darkroom. Convenient to use, simple to operate.
4. Drawer type objective table is convenient to take samples. Left and right sides of the opening door is convenient for visual operation.
5. The transmission ultraviolet light source adopts 302nm ultraviolet light source, which is closely arranged and equipped with fluorescent light source. There are also two wavelengths of 254nm/365nm, or a combination of which can be selected to match the gel observation of different dyes. Users can choose UV lamps with different wavelengths according to the experimental needs.

Parameters

Model	BTU-6
Transmission Wavelength	302nm,254nm,365nm optional. (standard configuration is 302nm)
Transmission Filter Size	200x150mm
Observation Window Size	140x60mm
Camera lens aperture	54mm
Voltage	AC 220V, 50Hz
Power	8Wx6
Dimension	W.350xD.315xH.520mm
Net Weight	13kgs

Application

It can be widely used in genetic engineering, molecular genetics, microbiology, biological products, animal husbandry and medicine and health, pharmaceutical drug research and verification. It is also applicable to epidemic prevention departments, food industry, textile, rubber oil prospecting industry, archaeological identification marks inspection, verification counterfeit fake tickets. Apply for fluorescence analysis and verification department. It's the necessary instrument to be engaged in the modern scientific research departments and inspection supervision department .



TU-6 Handheld UV Analyzer

Gel instruments

Introduction

Handheld UV Analyzer is used for detection of nucleic acid dye, such as Ethidium bromide, Acridine orange, in fluorescence dyes. The handheld UV analyzer is widely used for nucleic acid testing (observe fluorescence) in many industries including molecular biology, biological chemistry, medical science, forensic autopsy examination as well as biological agent.

Features

1. Compact designed, simple operation, one-key switch the wavelength.
2. Lamp wavelength 365nm or 254nm, long life.
3. With a battery, can be used for a long time without electricity.
4. Optional H-type stand fix the UV analyzer to meet special operational needs.
5. H-type stand for optional to fix the instrument, meet the demand of special operations. It can adjust height and angle.

Parameters

Model	TU-6
Wavelength	254nm, 365nm combine
UV Window	150x50mm
Voltage	DC12.6V Lithium battery charger
Power	≤6W
Dimension	W.440 x D.75 x H.51mm
Net Weight	0.7kgs (don't include H-type stand)

Attention

1. Do not brush or press the UV color filter. Keep it clean and dry. Clean the UV color filter by gauze after use.
2. Ultraviolet radiation takes a toll on health, shut off the instrument when it is not in use. Do not point TU-6 at people when using.



MINIE-135 Horizontal Gel Electrophoresis

Gel instruments

Introduction

Horizontal Gel Electrophoresis is a one-body electrophoresis Unit, which has compact design, stable performance, easy operation and good reproducibility and cost performance. It is widely used in chemical field, ideal for teaching, scientific research, food and medical treatment. Horizontal gel electrophoresis unit is mainly used for separation and test of nucleic acid.

Features

1. New and unique appearance, mini and portable; The electrophoresis tank and power can be separated.
2. The cover with safety design, flip cover immediately power off, to ensure safety; Transparent cover and open hole design, easy to heat dissipation and observation; Top handle design, easy to pick and place.
3. With seven output voltages, it can be called with one button, which is convenient and fast, saving standby consumption.
Specially designed Electrophoresis shape, reducing the temperature difference between the buffer, while the heat benefit is improved. Put the gel into a limited position without drift.
4. position without drift.
5. With the pause function, timing function, can leave after press the start button, with Alarm function, buzzer alert at the end.
6. Highlight digital tube displays the set parameters, default remember the output voltage and time Settings of the previous operation.
7. When the electrophoresis current exceeds the peak current, will automatically adjust the voltage to reduce the current value, improve the experimental reproducibility.
8. Equipped with variety of specifications of gel trays / combs, compatible with a variety of experimental needs, compatible with high-throughput electrophoresis and multi-channel pipette operation.

Accessories



Cat#	Description	Specifications/dimensions	Quantity
MINIE-A	Small size plate for gel	60mm(W)×60mm(L)	2
MINIE-B	Medium size plate for gel	120mm(W)×60mm(L)	1
MINIE-C	big size plate for gel	120mm(W)×120mm(L)	1
MINIE-D	Gel Comb 1	1.0mm thickness 25/11 teeth (Can used multichannel gun to add sample)	4
MINIE-E	Gel Comb 2	1.5mm thickness 18/8 teeth	1
MINIE-F	Gel Comb 3	1.5mm thickness 13/6 teeth	1
MINIE-G	Gel Comb 4	2.0mm thickness 3/2 teeth	1
MINIE-H	Base for gel making (double side)	138mm(W)×138mm(L)×36mm(H)	1

Parameters

Model	MINIE-135	Storage function	Automatically memorize the previous operating voltage and time
Capacity	Max.500ml	Input power	AC110V, 50/60Hz
Inner diameter dimension	W.150×D.150×H.47mm	Output voltage	Constant peak voltage (140V) , impulse control
Multi-channel suitability	Suitable for multi-channel pipettor	Dimensions	W.260×D.170×H.68mm
Timing function	1min~99h59min or continu, with pause function	Optional output voltage	135V 100V 70V 50V 35V 25V 18V
Security Settings	The power is automatically paused when the cover is lifted	Net weight	0.78kgs

HY-800/800D Bacti-cinerator Sterilizer

Sterilizer

Introduction

Bacti-cinerator Sterilizer uses infrared heat sterilization, because it is easy to use, simple to operate, no open flame, no fear of wind, substitute alcohol lamp, safe to use, can be widely used in the environment of biosafety cabinet, purification workbenches, suction fans, and mobile vehicles, for microbiological experiments.

Features

1. Based on the principle of electronic infrared, the products are widely used in the sterilization of inoculation rings or inoculation needles, completely replacing alcohol lamps.
2. The temperature inside the heating hole can reach 800 °C or above, sterilization takes only 5-7 seconds and sterilization is thorough. The product can be used in an anaerobic chamber.
3. Small volume, light weight, appearance and easy to clean. Heating body can adjust angle, easy operation.
4. Organic substances in the ceramic funnel pipe depths ashing prevent infectious spatter and cross contamination.
5. Precise temperature control technology, avoid the heating components work overload, long life.



HY-800D



HY-800

Parameters

Model	HY-800	HY-800D
Center Max. Temp.	825°C±50°C	825°C±50°C
Low Level Temp.	480°C	480°C
Heating Speed	20min (to max. temp.)	20min (to max. temp.)
Max. Sterilize Diameter	Φ14mm	Φ35mm
Heating Element Length	140mm	100mm
Adjustable Angle	75°~120°	75°~120°
Voltage	AC 220V / AC 110V, 50/60Hz	AC 220V / AC 110V, 50/60Hz
Power	230W	400W
Fuse	250V, 2A/3A, Φ5x20	250V, 3A/5A, Φ5x20
Dimension	W.87 x D.151 x H.160mm	W.92 x D.101 x H.170mm
Net Weight	1kgs	1.1kgs

HY-300/300D Glass Beads Sterilizer

Sterilizer

Introduction

Glass Beads Sterilizer uses heated glass beads for fast sterilization of small lab equipments. The model is usually used for forceps, scissors, forceps, scalpels, needles, ring vaccination and inoculation needle and commonly used in research labs.

Features

1. Small volume, light weight, simple operation, long working life.
2. Inner temperature of container is equipped with high temperature sterilization beads can be heated to about 300 °C.
3. Randomly configurate glass bead with diameter 1.5~2.0mm.
4. Compact appearance design, digital displays temperature at real-time. It can be used in ultraclean workbench.
5. Stainless steel inner container, built-in high-performance heating element, high precision of temperature controller and overtemperature protection.



Parameters

Model	HY-300	HY-300D
Temp. Control Range	100°C~300°C	100°C~300°C
Temp. Stability	±5°C	±5°C
Heating Speed	≤25min	≤25min
Heating Well Volume (diameterx depth)	Φ40 x 80mm	Φ40 x 150mm
Glass Beads Capacity	300g	600g
Cover Material	Stainless Steel	Stainless Steel
Insulation Material	Green Mineral Wool	Green Mineral Wool
Voltage	AC 220 / AC 110V, 50/60Hz	AC 220 / AC 110V, 50/60Hz
Power	120W	300W
Fuse	250V,2A/3A, Φ5x20	250V,2A/3A, Φ5x20
Dimension	W.130 x D.150 x H.200mm	W.130 x D.150 x H.240mm
Net Weight	2kgs	2.5kgs

MT-30K Handheld Homogenizer

Homogenizer

Introduction

The homogenizer MT-30 is smart hand held instrument for fast organization homogeneous, separation and emulsification. Its working principle is making the sample circularly loop into a narrow space between the high speed and relative motion stator to shear and break the sample. It is applied in various territories such as bio-pharmaceuticals, gene research, organization broken, cell slurring, clinicopathologic analysis, emulsions, nanometer materials scattering, polymerization reaction, cosmetics, ink & paint, fine chemical engineering, pesticide, prospection, environmental protection, energy sources, etc.

Features

1. Designed smart and light. Can operate in one hand.
2. Speed adjustable, digital display speed. Speed precisely controlled to avoid splashing.
3. Suitable for homogeneous dispersion of a small amount of sample in small container.
4. High quality stainless steel dispersing head, anti-corrosion, high temperature resistance for disinfecting.
5. Easy to take off the dispersing head for cleaning.
6. High speed and high efficiency motor, long life.
7. Optional H-type stand, height and angle can be adjusted, convenient to take and store.

Accessories



MT-30K-A



MT-30K-B



MT-30K-C



Cat#	Handling Capacity	Diameter of Outer Head	Diameter of Inner Head	Gap between Outer and Inner Head	Min/Max.Dipping Depth	Length of the Head	Material
MT-30K-A	0.5-50ml	6mm	3.9mm	0.1mm	20/90mm	150mm	316L
MT-30K-B	1-100ml	8mm	6.1mm	0.3mm	20/107mm	167mm	
MT-30K-C	1-250ml	10mm	7.9mm	0.3mm	20/120mm	180mm	
MT-30K-D	H-type stand; used to hold the homogenizer; height and angle are adjustable						

Parameters

Model	MT-30K
Speed Range	8krpm~35Krpm(1krpm Increment)
Rotor Line Speed	6.3m/sec~14m/sec
Working Noise	72dB
Voltage	AC 220V,50Hz
Power Input/Output	160W/110W
Dimension	W.46xD.55xH.230mm
Net Weight	0.8kgs



MT-13K-L Mini Handheld Homogenizer

Homogenizer

Introduction

The mini homogenizer MT-13K-L is hand-held designed. It is smart and light, easy to operate. With DC motor to drive the grinding pestle, configure 1.5ml centrifugal tube, efficiently grind trace tissue. The grinding pestle is light and reusable, convenient to be dismantled.

Features

1. Light and easy to operate.
2. Use micro DC motor for grinding trace tissue, grinding microstructure, short time and quick effect.
3. Grinding pestle is light and reusable, suitable for various sterile ways, convenient to be dismantled.

Application

1. Suitable for grinding various plant tissue sample such as root, stem, leaf, flower, fruit, seed, etc.
2. Suitable for grinding various animal tissue sample such as cerebrum, heart, lung, stomach, liver, thymus, kidney, intestine, lymphonodus, muscle, etc.
3. Suitable for homogenate.



Grinding pestle



Parameters

Model	MT-13K-L
Speed Range	18000rpm Fixed speed
Working Noise	55dB
Battery Non-loaded Working Time	2 hours (Idle)
Battery Charging time	≥ 2 hours
Voltage	2.4V
Battery	AA battery x 2
Dimension(WxDxH)	W.143mmxD.25mmxH.143mm
Net Weight	0.18kgs

ZK-26E/35/42/8/8+ Liquid suction vacuum pump

Vacuum Pump

Introduction

The liquid suction filtration vacuum pump series is mainly used for separation of culture fluid and culture tissue after biochemical culture, extraction of cell culture waste liquid, and suction of various waste liquids in the laboratory. Different flow specifications are available to meet more experimental needs, and it is the best experimental assistant indispensable for the laboratory aseptic workstation.

Feature

1. Pumping filter brackets are equipped on both sides of the instrument, easy to store and select the suction filter accessories.
2. Standard equipped with multi-function suction filter handle and 5 kinds of suction head accessories to meet more requirements of suction experiments.
3. Sealed waste liquid bottle cap design, quick-insertion sealing joint, convenient to get out of the fuselage bottle and clean up waste liquid.
4. Normally open control mode and foot switch control mode, to meet more experimental requirements.
5. Waste liquid bottle, suction filter fittings and dish filter can all be used for autoclave sterilization.
6. There is a liquid level protection switch in the waste liquid bottle to prevent the waste liquid from overflowing and being sucked into the pump chamber to ensure no troubles in suction filtration.
7. There is a PTFE dish shape filter between the bottle and the pump to protect the environment from harmful gas pollution.
8. The self-locking quick connector can be quickly and easily separated from the pipeline, which is convenient for safely cleaning the waste bottle.
9. Built-in high quality oil-free vacuum pump, no maintenance, low noise and long life.



ZK-8

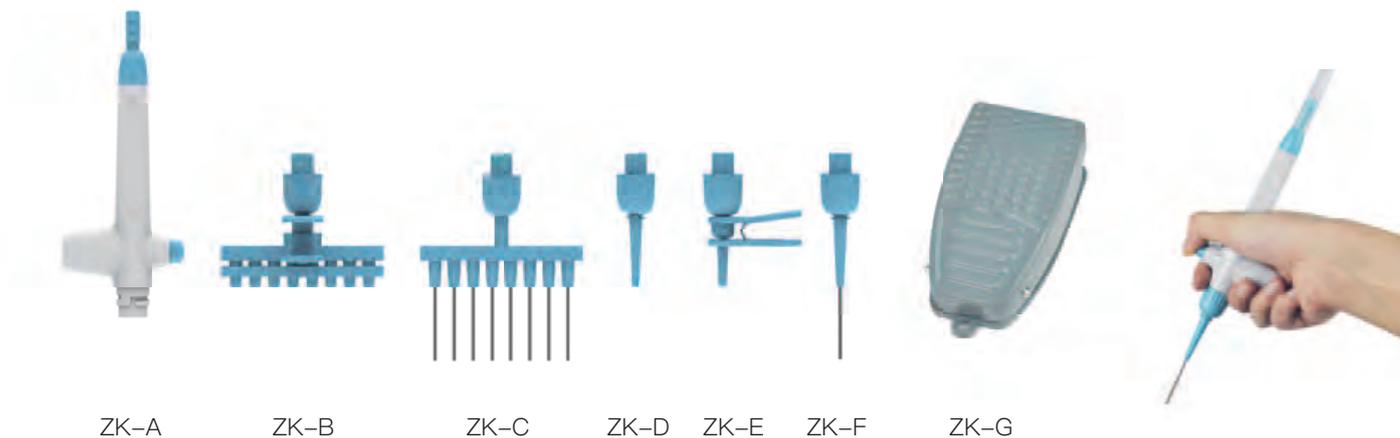


ZK-8+



ZK-26E

Accessories



ZK-A

ZK-B

ZK-C

ZK-D

ZK-E

ZK-F

ZK-G

Accessory parameters

Model	Name	Material	Quantity
ZK-A	Hand-held operator	POM	1
ZK-B	Eight-channel retractable tip plastic extraction head	POM	1
ZK-C	Eight channel stainless steel extraction head	POM+SUS304	1
ZK-D	Single channel plastic extraction head	POM	1
ZK-E	Single channel retractable tip plastic extraction head	POM	1
ZK-F	Single channel stainless steel extraction head	POM+SUS304	1
ZK-G	Foot switch (For ZK-26E/35/42 use only)	Al	1

Parameters

Model	ZK-26E	ZK-35	ZK-42	ZK-8	ZK-8+
Max. flow rate	26L/min	35L/min	42L/min	8L/min	8L/min
Vacuum degree	-0.08Mpa	-0.08Mpa	-0.08Mpa	-0.06Mpa	-0.06Mpa
Vacuum display mode	Vacuum gauge	Vacuum gauge	Vacuum gauge	Vacuum gauge	Digital display
Negative pressure adjustment range	0~-0.08Mpa	0~-0.08Mpa	0~-0.08Mpa	0~-0.08Mpa	0~-600mbar
Waste liquid bottle capacity	2500mL	2500mL	2500mL	1000mL	1000mL
Foot switch	Yes	Yes	Yes	/	/
Voltage	AC220V/AC110V 50/60Hz	AC220V/AC110V 50/60Hz	AC220V/AC110V 50/60Hz	DC24V 0.8A	DC24V 0.8A
Power	60W	140W	180W	8W	8W
Fuse	250V1A, φ5x20	250V 1A, φ5x20	250V 1A, φ5x20	/	/
Dimension	W.248xD.475xH.350mm	W.248xD.475xH.350mm	W.248xD.475xH.350mm	W.130xD.288xH.300mm	W.130xD.288xH.300mm
Net Weight	7.8kgs	9.2kgs	9.2kgs	1.6kgs	1.4kgs

SPE-12 Solid phase extraction instrument

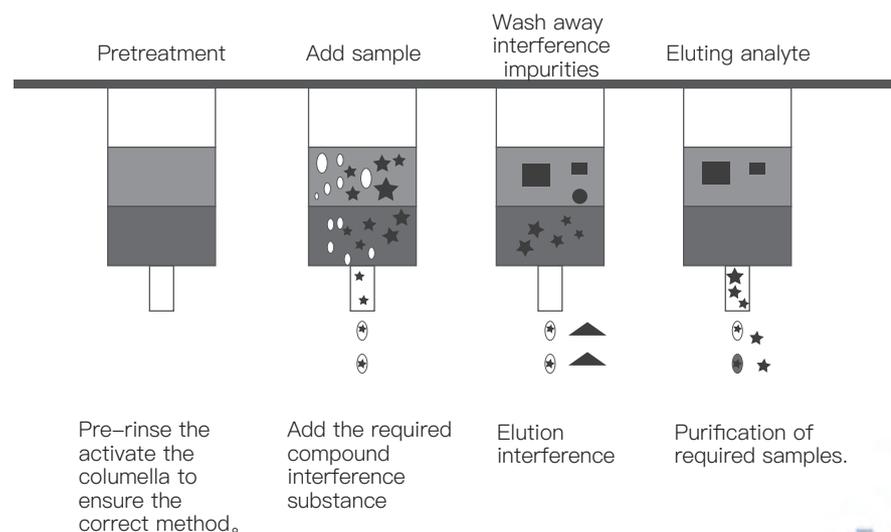
Others

Introduction

Solid phase extraction instrument SPE-12 Solid phase extraction (SPE) is a widely used and popular sample pretreatment instrument. The instrument used solid adsorbent to adsorb the target compounds in the liquid sample and separate them from the matrix and interfering compounds of the sample. Then it is eluted with eluent or desorbed by heating to achieve the purpose of separating and enriching the target compounds. Solid phase extraction instruments are widely used in environmental water quality analysis, food safety analysis, pharmaceutical analysis, bioengineering and other fields.

Features

1. Good sealing, high consistency, anti-cross pollution and anti-atomization vacuum tank design.
2. Simple and rapid operation; no phase separation; easy to collect analysis components and process small sample.
3. Can be equipped with large-capacity collection containers, can process samples in batches or can process samples individually.
4. The vacuum tank is made of special hard and thick acrylic, and its wall thickness is uniform, which can withstand high negative pressure above -0.08Mpa .
5. The internal test tube racks are made of high polymer materials, which are beautiful and corrosion resistant and will not be deformed under high pressure for long-term use.
6. The liquid circuit switch adopts high-quality valves, each valve independent control, durable and easy to operate.



Parameters

Model	SPE-12
Handling sample type and quantity	10mm tube X12 12mm tube X12 15mm tube X12
Vacuum degree	$\leq -0.08\text{Mpa}$
Vacuum tank internal dimensions	215x57x140mm
Dimension	W.280xD.150xH.214mm
Net Weight	2.8kgs



LEP-100 Large Capacity Pipette

Others

Introduction

LEP-100 Large capacity pipette is suitable for pipetting from 0.1ml to 100ml. It can control the whole process from absorb fluid to pipetting with two buttons. The pipette speed can be adjusted easily. Liquid pipetting fast and accurate, super liquid crystal display, unique ergonomic design, light weight, strong power, durable, fully furnished, is your lab favorite assistant.

Features

1. Ergonomic design, exquisite appearance, comfortable and convenient operation, can be adapted to super-long pipette. Easy to use, precise control.
2. Adjust the pipetting speed with the button, 6 kinds of aspirate fluid 5 dispense speeds adjustable, unique gravity drainage mode, especially useful for small volume pipetting.
3. New pipetting pump, large power, can remove the large-capacity liquid rapidly. With a strong blow function to prevent residual droplets, to ensure the accuracy of pipetting.
4. Top large LCD display screen shows the current aspirate and dispense speed or gravity dispense; display battery power, when the battery power is low, the beep sounds prompt charging.
5. The entire electric pipette is light weight, maximum to prevent muscle strain. Equipped with a desktop pipette holder, can be placed on the desktop, achieve seat charging.
6. New built-in lithium battery, using a special circuit design, to prevent the battery from overcharging. One time charge, can intermittent work 8 hours, charging time 2-3 hours.
7. Equipped with hydrophobic filter. Effectively prevent excessive liquid into the gun body, to prevent cross-contamination.



Parameters

Model	LEP-100
Aspirate Speeds	6 speed adjustable
Dispense Speeds	6 speed adjustable with gravity dispense
Battery	Replaceable lithium battery
Battery Service Life	Intermittently at least 8 hours of normal use
Charging time	About 2 hours
Pipette type	0.1 ~ 100ml glass and plastic pipette, Pasteur pipette
Filtration membranes	0.45µm hydrophobic membranes
Charging power supply	DC4.2V 500mAh
Dimensions	W.30 x D.161 x H.147 mm
Net weight	0.65kgs

MINIB-100P Biological Indicator Incubator

Others

Introduction

Biological Indicator Incubator is supporting equipment for bio-indicator. It is small size, light weight, and is suitable for pressure steam sterilizer biological indicator, ethylene oxide sterilization biological indicator, and other biological indicator sterilization effect detection and cultivation.

Features

1. Unique designed. Small size, light weight, portable, and suit on various occasions.
2. LCD display. Temperature and time display simultaneously.
3. Auto fault detect and buzzer alarm. Temperature calibration function.
4. 24V DC power supply input, low energy consumption. Built-in over-temperature protection device, safe and reliable.
5. Variety of standard sample blocks for choice. Convenient for replacement. Block can be customized.
6. Timing function. Time range from 1 to 999min.



Accessories



MINIP-A



MINIP-B



MINIP-C



MINIP-D



MINIP-E

Cat#	Spec	Dia. of hole	Hole bottom shape	Block dimension
MiniP-A	φ10mm×15	10.5mm	Flat bottom	71x47x32mm
MiniP-B	φ12mm×12	12.5mm	Flat bottom	71x47x32mm
MiniP-C	φ15mm×6	15.5mm	Flat bottom	71x47x32mm
MiniP-D	φ16mm×6	16.5mm	Flat bottom	71x47x32mm
MiniP-E	φ9mm×18	9.5mm	Flat bottom	71x47x32mm

Parameters

Model	MINIB-100P
Temp. Control Range	R.T. +5°C~100°C
Temp. Setting Range	5°C~100°C
Temp. Stability@56°C	±0.5°C
Temp. Display Accuracy	0.1°C
Heating Speed	<6min (20°C to 56°C)
Time Range	1sec~999sec or 1min~999min
Voltage	DC 24V adapter
Power	60W
Dimension	W.110 x D.156 x H.92mm
Net Weight	1kgs





PT-8 PCR Strip Assistant

Other

Introduction

PCR strip assistant PT-8 is special desigend for 0.2ml PCR strip (with cover gap). It make opening the strip and covering the strip much more easy and convenient. It used before and after PCR strip spin down, PCR yield, and so on.



Press

Easy Close

Push

Easy Open



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