

# Horizontal Electrophoresis Tank

Horizontal electrophoresis is a basic means in molecular biology research. It is widely used for DNA detection and separation, and molecular testing in the nucleic acid analysis, purification and preparation experiment.

## ET-H1 Horizontal Electrophoresis Tank

#### Features:

- \* Abundant buffer not only guarantees cooling effects, but also keeps the pH Value stable during the whole experiment process.
- \* Dismountable electrodes make maintenance easily.
- \* The PC transparent top lid prevents liquid volatilization and electricity leakage.
- \* Auto-switch-off when the lid is removed
- \* Recommended power supply: BPS-1/BPS-2



#### Technical Parameters:

Model	ET-H1	
Gel Trays(W*L)	48*75mm	
Buffer Volume	150ml	
Comb Thickness	1&1.5mm	
Comb Throughput	3, 5, 9 samples	
NO. of Samples	3~18	
Standard Accessories	Body tank with electrode*1, Gel tray 48*75mm*1, Gel box*1,  1.0mm thickness 3 wells comb*2, 1.5mm thickness 3 wells comb*2,  1.0mm thickness 5 wells comb*2, 1.5mm thickness 5 wells comb*2,  1.0mm thickness 9 wells comb*2, 1.5mm thickness 9 wells comb*2	
External Size(L*W*H)	250*95*50mm	
Package Size(L*W*H)	320*160*160mm	
Gross Weight	1kg	

# ET-H2 Horizontal Electrophoresis Tank

The ET-H2 is ideal for restriction fragment analysis, sample prep or checking of high numbers of samples.

#### Features:

- \* Abundant buffer not only guarantees cooling effects, but also keeps the pH Value stable during the whole experiment process.
- \* Dismountable electrodes make maintenance easily.
- \* Sample background color design, adding the sample conveniently.
- \* The PC transparent top lid prevents liquid volatilization and electricity leakage.
- \* Auto-switch-off when the lid is removed
- \* Recommended power supply: BPS-2/ BPS-3



### Technical Parameters:

Model	ET-H2	
Gel Trays(W*L)	60*60mm, 120*60mm, 60*120mm, 120*120mm	
Comb Thickness	1&1.5mm	
Comb Throughput	1, 2, 3, 6, 8, 11, 13, 18, 25 samples	
NO. of Samples	1~100	
Buffer Volume	550ml	
Standard Accessories	Body tank with electrode*1, Gel tray 120*120mm*1, Gel tray 120*60mm*1, Gel tray 60*120mm*1, Gel tray 60*60mm*2, Gel box*1, Leveling feet*1  1.5mm thickness 1/2/3 wells comb*1, 1.0mm thickness 6/13 wells comb*2  1.0mm thickness 8/18 wells comb*2, 1.0mm thickness 11/25 wells comb*2	
External Size(L*W*H)	300*160*75mm	
Package Size(L*W*H)	460*250*200mm	
Gross Weight	2kg	



# **Constant Temperature Water Tank**



### Features:

- \* Microprocessor control, LED display.
- \* Timing function and over-temperature protection.
- \* External material: Cold rolled steel with anti bacteria powder coating.
- \* Inner material: Stainless steel inner chamber.

### Technical Parameters:

Model	WT-42	WT-60
Temp. Range	RT-100℃	·
Temp. Fluctuation	≤±1°C	
Consumption	800W	1500W
Power Supply	AC110V/220V±10%, 50/60Hz	
Internal Size(L*W*H) mm	420*180*180	600*300*180
External Size(L*W*H) mm	580*300*270	760*410*270
Package Size(L*W*H) mm	630*350*310	820*480*310
Net Weight(kg)	10	15
Gross Weight(kg)	11	17

# Thermostatic Shaking Water Bath



#### Features:

- \* Microprocessor controller with LED display, high precision of controlling temperature.
- \* Advanced multipurpose stainless steel spring clip.

### Technical Parameters:

Model	SWB-A	SWB-B	SWB-C
Temp. Range	RT~100℃		
Oscillation Amplitude	20mm		
Rotary Speed	60-280RPM		I.
Shaking Mode	Rotation oscillation, continuous	Rotation oscillation & reciprocating, continuous	Reciprocating, continuous
Timing	0-999 minutes		
Consumption	2000W		
Power Supply	AC 110/220V±10%, 50/60Hz		
Internal Size(L*W*H) mm	490*390*170		
External Size(L*W*H) mm	720*480*520		
Packing Size(L*W*H) mm	820*610*590	820*610*570	820*610*590
Gross Weight(kg)	45	50	45



# ET-V2 Vertical Electrophoresis Tank

#### Features:

- \* Easy installation \* Safety button for lid opening
- \* Auto-switch off when the lid is removed
- \* Precast gel core, do not affecting the operation of gel making while the electrophoresis.
- \* Abundant buffer not only guarantees cooling effects, but also keeps the PH value stable during the whole experiment process.
- With the gel making device of normal position, don't should to moving the glass plate from the process of making gel to electrophoresis, convenient for oberser vation the gel preparation from the glass on both sides, ensures fast set up times and leak-free operation.
- \* Recommended power supply: BPS-3



### **Technical Parameters:**

Model	ET-V2	
Glass Trays (W*L)	216*220mm	
Gel Trays (W*L)	186*205mm	
Comb Thickness	1.0mm	
Comb Throughput	25, 40, 52 samples	
Amount of Gel	1~2 pieces	
NO. of Samples	25~52	
Buffer Capacity	3500ml	
Standard Accessories	Body tank with electrode*1, Gel casting base*1, Notched glass plates*4,  1.0mm bonded glass spacer*4, 1.0mm thickness25 wells comb*2,  1.0mm thickness 40 wells comb*2, 1.0mm thickness 52 wells comb*2  25 well Guide sample device*2, 40 well Guide sample device*2,  52 well Guide sample device*2	
Optional Accessory	Cooling circulation device	
External Size(L*W*H)	280*140*250mm	
Package Size(L*W*H)	460*400*450mm	
Gross Weight	9kg	

# **Electrophoresis Appratus**



#### Features:

- \* Auto-switching function.
- \* Automatic memory function.
- \* Control: Intelligent microprocessor control unit
- \* Automatic detection of no-load, over-load, short circuit, rapid resistance change, ground leak and system overheating.

### Technical Parameters:

Model	BPS-1	
Output	Constant-voltage or current(adjustable)	
Output range	5300V, 1300mA, 90W (Maximum)	
Increment	1V, 1mA	
Timing	1min~9h59min	
Display	LED: constant-voltage, current and power values	
Power Supply	AC220V±10%, 50/60Hz; 110V±10%, 60Hz	
External Size(L*W*H)	280*237*118mm	
Package Size(L*W*H)	380*340*230mm	
Gross Weight	4kg	



### ET-H3 Horizontal Electrophoresis Tank

#### Features:

- \* Auto-switch-off when the lid is removed.
- \* Special gel caster, prevents the gel leakage.
- \* Dismountable electrodes make maintenance easily
- \* The PC transparent top lid prevents liquid volatilization and electricity leakage.
- \* Abundant buffer not only guarantees cooling effects, but also keeps the pH Value stable during the whole experiment process.
- \* Recommended power supply: BPS-2/BPS-3



#### Technical Parameters:

Model	ET-H3	
Gel Tray (W*L)	200*200mm, 200*150mm, 200*100mm	
Comb Thickness	1.0&1.8mm	
Comb Throughput	17, 22, 36, 44 samples	
NO. of Samples	17~264	
Buffer Volume	1800ml	
Standard Accessories	Body tank with electrode*1, Gel tray 200*200mm*1, Gel tray 200*150mm*1, Gel tray 200*100mm*1, Gel Caster*1, 1.0mm thickness 17 wells comb*2,  1.8mm thickness 17 wells comb*2, 1.0mm thickness 22 wells comb*2,  1.8mm thickness 22 wells comb*2, 1.0mm thickness 36 wells comb*4,  1.8mm thickness 36 wells comb*2, 1.0mm thickness 44 wells comb*2,  1.8mm thickness 44 wells comb*2, 1.0mm thickness 44 wells comb*2,	
External Size (L*W*H)	397*230*83mm	
Package Size(L*W*H)	530*390*220mm	
Gross Weight	5kg	

# Vertical Electrophoresis Tank

Vertical electrophoresis is used for separation, purification and preparation of nucleic acid and protein samples in life science research.

# ET-V1 Vertical Electrophoresis Tank

#### Features:

- \* Easy installation \* Auto-switch off when the lid is removed
- \* Sample background color design, adding the sample conveniently.
- \* Abundant buffer not only guarantees cooling effects, but also keeps the PH value stable during the whole experiment process
- \* With the gel making device of normal position, don't should to moving the glass plate from the process of making gel to electrophoresis, convenient for oberservation the gel preparation from the glass on both sides, ensures fast set up times and leak-free operation.
- \* Recommended power supply: BPS-2



#### **Technical Parameters:**

Model	ET-V1	
Glass Tray (W*L)	100*100mm	
Gel Tray (W*L)	82*88mm	
Comb Thickness	0.75, 1.0 &1.5mm	
Comb Throughput	11, 15 samples	
Amount of Gel:	1~2 piece	
NO. of Samples	11~30	
Buffer Volume	750ml	
Standard Accessories	Body tank with electrode*1, Gel casting base*1, Notched glass plates*4, 0.75mm bonded glass spacer*2, 1.0mm bonded glass spacer*2, 1.5mm bonded glass spacer*2, 0.75 mm thickness 11 wells comb*2, 1.0mm thickness 11 wells comb*2, 1.5mm thickness 11 wells comb*2, 0.75mm thickness 15 wells comb*2, 1.0mm thickness 15w ells comb*2, 1.5mm thickness 15 wells comb*2, Gel shovel*1, Clamp version*2, Dummy plate*	
External Size (L*W*H)	150*120*115mm	
Package Size(L*W*H)	370*300*220mm	
Gross Weight	2kg	



# Thermal Cycler

### Features:

- \* 7" color full touch screen, graphically display.
- \* Effortlessly interchangeable modules,swapped in seconds without tools
- \* Durable premium peltier element, ensure long life and high quality.
- \* Large storage of 10,000 programs on board,enhancing friendly operation.
- st Update software through USB flash drive.
- \* Outstanding block temperature uniformity, ensuring best possible experimental results.
- \* Global universal switch power(85V-265V),increasing safety & reliability.



### Technical Parameters:

Model	A100	A200	
Туре	Standard Thermal Cycler	Gradient Thermal Cylcer	
Standard Module	96 Module:96 wells*0.2ml or 9677 Module:9	96 wells*0.2ml+77 wells*0.5ml	
	48Module:48 wells*0.2ml+48 wells*0.5ml		
Optional Module	384 Module: 384 wells		
	Muoti-purpose Module: 9677 Module+In-situ Adaptor		
Heating and Cooling Technology	Newest generation Peltier-based technology, with long life up to 1,000,000 cycles		
Display	7° Color Touch Screen, graphical display of protocols and running status		
Language	English		
USB Flash Drive	Unlimited storage of protocols with USB flash drive		
Communications Ports	2 USB2.0 and LAN		
Temperature			
Block Temperature Range	0°C~100°C		
Max. Heating Rate	5°C/s		
Max. Cooling Rate	4°C/s		
Temperature Uniformity	≤ ±0.2°C (at 95°C)		
Temperature Accuracy	≤ ±0.2°C (35°C-100°C)		

Model	A100	A200
Mode Of Temperature Control	Sim-tube & Block mode	
Ramping Rate Adjustable	Yes	
Gradient		
Gradient Accuracy	1	≤ ±0.3°C (35°C~100°C)
Column Uniformity	1	≤ ±0.3℃ (at 95℃)
Gradient Range	1	35℃~99.9℃
Temp. Differential Range	1	1℃~30℃
Gradient Capability	1	12 Column
Heat LID		
Height of Heat lid	Steplessly Adjustable lid, accommodates all	kinds of PCR tubes,strips and plates
Open method	Innovative TOP-OPENTM technology realizes open and lift the lid in one step	
Heat Lid Temperature Range	30°℃~99.9°℃	
Auto Shut-off	Yes	
Software		
Max. Number of Programs	Max.10,000 programs onboard, unlimited storage of protocols with USB flash drive	
Max.Step&Max.Cycle	30 steps,100 typical cycles,max60,000nesting cycles	
Time & Temp. Increment/Decrement	Yes, available for long PCR & Touchdown PCR	
Auto Pause/Auto Restart	Yes	
Multi-user log in	Password-based authentication prevents from view,copy and alteration of protocols	
Tm calculator	Automatically calculates the melting and annealing temperature through input two primer sequence	
Hold At 4℃	Yes, an infinite incubation time at low temperature for overnight working	
Program wizard	Yes, create PCR protocols with only a few clicks	
Running Report	Yes, provide objective and precise information for the whole running process	
Other features		
Power	Global switch power supply: 85V-265V, 50-60Hz Max.600W	
Approvals	ISO 9001:2000, CE, RoHS	
Packing size(L*W*H)	430*344*345mm	
Gross Weight	9.8kg	



# Small Capacity Thermostatic Shaking Incubator



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- \* USB data recording system automatically records the test process data throughout the whole process.
- \* The whole experiment data can be recorded by USB flash disk (temperature and rotation time can be recorded).
- \* Download data, automatically list, save and print, and easily playback the experimental process with a mouse click, which is convenient for optimizing reaction conditions, screening experimental methods and confirming the experimental process.
- \* Multi-stage speed temperature and time control system can set a variety of different speed temperature and time experiment modes at one time, and automatically change the operation mode during operation.
- \* Super low speed start, the speed is out of control, automatic lock, start speed adjustable unique dynamic balance design, to ensure smooth operation.
- \* Mute fan design and forced convection mode and unique air duct design to ensure a good temperature uniformity.
- \* Users can freely set up three operation modes of alternating forward, reverse, positive and reverse.
- \* LCD display, temperature, time, speed and interface display.

#### **Technical Parameters:**

Model	BJPX-100N	BJPX-200N
Controller	PID	
Display	LCD	
Circulation Mode	Forced convection	
Shaking Mode	Cyclotron	
Drive Mode	Unidimensional drive	
Temp. Range	RT+5-65℃	4~ 65℃
Temp. Accuracy	±0.1℃	
Temp. Uniformity	±0.5°C(at 37°C)	
Rotating Speed	20-450(r/min)	
Rotating Accuracy	±1(r/min)	
Vibration Range	26mm	CC
Refrigerant		Environmentally friendly refrigerant
Cooling Consumption	1	118W
Timing Range	0-9999h/min	
Shaking Plate Size	450*410mm	
Standard Capacity	50ml*4,100ml*4,250ml*3,500ml*3	50ml*5,100ml*5,250ml*4, 500ml*3
Max. Capacity	Clamp flask: 100ml*23or250ml*15 or 500ml*9,1000ml*6 or 2000ml*4;  Haftplatte: 100ml*30or250ml*20 or 500ml*9 or 1000ml*8 or 2000ml*4	
External Size(mm)	750*710*520	
Auxiliary Function	Ultra-low speed start, adjustable start speed, monitoring timer, parameter memory, upper and lower limits of overtemperature acousto-optic alarm, while opening the door automatically stop, monitoring temperature and environmental temperature for correction	
Consumption	550W	650W
Power Supply	Standard:AC220±10%, 50/60Hz; optional:110V±10%, 60Hz	
Internal Material	Stainless steel	
External Material	Stainless steel	
Package Size (mm)	881*875*715	
Gross Weight (kg)	110	130



# **UV-Transilluminator**

### Application:

UV Transilluminator is the necessary instrument for observed, photographed and cutting the electrophoresis gel.

### Features:

- \* With the operating port for cutting the gel.
- \* No need for dark room, can be used for all weather.
- \* Using the UV filter glass quartz ultraviolet lamp, long service life, light uniform.



### **Technical Parameters:**

Model	UVT-02S
Transmission Size(W*L)	200*150mm
Transmission UV Wavelength	302nm
Reflectance UV Wavelength	254, 365nm
Transmission UV Lamp Power	302nm(8W)
Reflectance UV Lamp Power	254nm(11W), 365nm(11W)
Power Supply	AC110/220V±10%, 50/60Hz
External Size(W*D*H)	435*295*490mm
Package Size(W*D*H)	700*640*810mm
Net Weight	17kg
Gross Weight	45kg

# Thermal Cycler



### TC-96/G/H(b)C Features:

- \* High gradient performance for exploring amplification conditions
- \* Multiple equipment connected operation can be realized through USB or network cable to adapt to batch test by enterprises scientific research labs
- \* Multiple temperature control modes
- \* Three modes of operation for your choice

### TC-96/G/H(b)B Features:

- \* Complete steel structure
- \* 5.7 inch touch screen
- \* High impermeability design of the sample reaction room prevents condensation of samples under long -time storage in low temperature
- \* Precise temperature control
- \* Fast heating and cooling rate

### **Technical Parameters:**

Model	TC-96/G/H(b)C	TC-96/G/H(b)B
Sample Capacity	96-wellx0.2ml,96-well full-skirt,semi-skirt,universal none-skirt,12x8 connected tube	
Display	LCD display and touch screen(5.7 inch)	6.5 inch, 262 144 color touch screen from Japan
Temp. Range	4.0~105°C	
Max temperature Heating rate	≥4°C/s	
Temp. Uniformity	≤±0.3°C	≤±0.2°C
Temp. Accuracy	≤±0.1°C	
Gradient temperature range	30~105℃	
Gradient Range Of Temp. Difference	e 1~30°C	
Max. No. Of Cycle	99. Suitable for nested PCR experiment	
Memory	≥250 typical programs onboard, unlimited with USB flash drive expansion	
Time increment/decrement	0~9 min59s, suitable for long PCR experiment	
Temp.increment/decrement	0~9.9°C,suitable for touchdown PCR experiment	
Auto Pause/Power Protection	Yes	
Soak Function	Yes	
Hot-lid Temp. Range	30°C~110°C(adjustable,minimum control temperature:ambient temperature +5°C)	
Height Of Hot-lid	Automatic Adjusted	
Auto Shut-off Function Of Hot Lid	While block temperature is lower than set temperature or program ends, the hot-lid will be automatically closed	
Communication Interface	USB	Internet port(LAN)
Power Supply	100~240V, 50/60Hz, 600W	
Dimension	345*250*270mm	345*250*270mm
Packing Size(L*W*H)	495*410*395mm	495*410*395mm
Gross Weight	10.5kg	12.5kg
Certificates	Ferrotec Peltier/MET/CE/EMC/RoHS2.0/PICC Product Quality Liability Insurance	



# Thermal Cycler



### Features:

- $\*$  Newest generation peltier-based technology, more steady, reliable and durable.
- $\*$  7 inche color full touch screen, graphical display of protocols.
- $* \ \ {\sf Effortlessly\ interchangeable\ reaction\ modules\ that\ swap\ in\ seconds\ without\ tools.}$
- st 15000 protools storable on board and unlimited storage of protocols with USB flash drive.

#### **Technical Parameters:**

Model		A300
Gradient Module	96 Module	96 wells*0.2ml
	9677 Module	96 wells*0.2ml+77wells*0.5ml
	384 Module	384 wells
	Multi-purpose	9677 Module+In-situ adapter
	Display	7 inche color touch screen, graphical display of protocols and running status
	Communications	2 USB 2.0 and LAN
Temperature	Block Temperature Range	0 °C~105°C
	Max. Heating/Cooling Rate	6°C/s
	Temperature Uniformity	≤±0.2°C (at 95°C)
	Temperature Accuracy	≤±0.1°C (35°C~100°C)
	Display Resolution	0.1°C
	Mode of Temperature Control	Sim-tube & Block mode
Gradient	Gradient Accuracy	≤±0.1°C (35°C~100°C)
	Column Uniformity	≤±0.2°C (at 95°C)
	Gradient Range	30°C~105°C
	Temp. Differential Range	1~30℃
	Gradient Capability	12 Column
	Gradient Capability	Max. 15,000 programs onboard, unlimited storage of
	Max. No. of Programs	protocols with USB flash drive
	Max. Step	30 steps
Software	Max. Cycle	100 typical cycles, max. 60,000 nesting cycles
	Time & Temp. Increment/Decrement	Yes, available for Long PCR & Touchdown PCR
	Auto Pause / Auto Restart	Yes
	Multi-user Log in	With password-based authentication prevents from view, copy and alteration of protocols
	Tm Calculator	Automatically calculate the melting and annealing temperature with two primer sequences
	Hold at 4℃	Yes, an infinite incubation time at low temperature for overnight working
	Program Wizard	Yes, create PCR protocols with only a few clicks
	Running Report	Yes, provide objective and precise information for the whole experiment
	PC Connection	PC remote control to manage more than 120 units of A30 across the network
Heat Lid	Height of Heat Lid	Steplessly adjustable Lid, accommodates all kinds of PCI tubes, strips and plates
	Open Method	Innovative "TOP-OPEN" technology realizes open and lift in one step
	Heat Lid Temperature Range	30~112℃
	Auto Shut-off	Yes
Others	Power Supply	85~265V, 50~60Hz Max, 600W
	Package Size(W*D*H)	362*256*255mm
	Gross Weight	10kg