

# Thermal Cycling



**mrc**

# THERMAL CYCLER PCR



## PCR-300, Polymerase Chain Reaction

### Features:

- Adjustable pressure hot lid, to prevent volatilizing & dewing
- Hot lid with pressure alarm device, to prevent damaging test tube by too much pressure
- Convenient & flexible module replacement mode.
- Innovative module wire socket design achieves module replacement without wire
- The unique left-right design for amplification area & operating area makes operator more convenient & safe.

Model	PCR-300
Capacity	64x0.2ml, 36x0.5ml
Temp. range	4°C-99°C
Maximum Heating rate	≥2.5°C/s
Uniformity	95°C <sub>h</sub> ±0.5°C (20 seconds later) 20°C~72°C <sub>h</sub> ±0.3°C (20 sec. later)
Maximum Cooling rate	≥2.5°C/s
Temp. display Accuracy	0.1°C
Accuracy	≤±0.2°C
Temperature fluctuation	≤±0.1°C
Heated lid temp.	105°C
Stored program no.	100
Max. program unit	9
Max. cycle steps	9
Max. no. of cycle	99
Max. constant temp. time	59m 59s
Max. constant temp. preservation time	99h 59m
Display	4.0" LCD
Size (mm)	370x249x180
Weight	4.8kg



## PCR-400, Gradient Thermal Cycler

### Features:

- Convenient and flexible module replacement mode.
- Large size super-high-definition LCD screen.
- Intuitive, friendly user interface makes program easier and faster.
- Memory function in case of power-down.
- Low noise, low energy consumption, long application life.
- Solemn, elegant appearance, innovative model.
- Unique rotating stall heat-regulating function.
- Optimal panel design for human ,more convenient operation.
- Hot lid could be stopped at any angle.
- Handle-module, more secure and convenient module replacement, improving using efficiency and expanding using years.

Model	PCR-400
Capacity	96x0.2ml, 54x0.5ml, 96x0.2ml+77x0.5ml, 384well
Temp. range	0°C-99°C (Rt≤30°C)
Maximum Heating rate	≥4.0°C/s
Heating/cooling rate	1.0°C/s-4°C/s (Adjustable)
Uniformity	≤±0.3°C (95°C) ≤0.2°C (20-75°C)
Maximum Cooling rate	≥3.5°C/s
Accuracy	≤±0.2°C
Gradient temp range	30~99°C
Gradient spread	2~30°C
Gradient Uniformity	≤0.2°C
Heated lid temp.	30~115°C
Environment model	Manually select
Temp control	block, tube, calculated
Stored program no.	200
Max. no. of cycle	99
Display	5.7" LCD
Communication	USB2.0, Rs232
Size (mm)	380(L) x 270(M) x 250(H)
Weight	7.2kg



### Instrument working condition:

- Ambient temperature: 5°C-30°C
- Relative humidity: <90%
- Power supply: AC110V±22V, 220V±22V, 250VA, 50Hz±10Hz.

### Instrument storage condition:

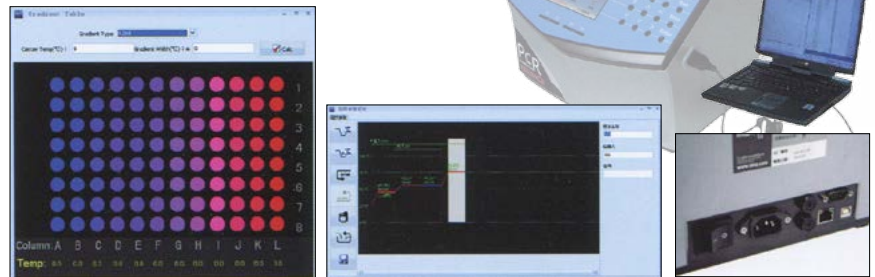
- Ambient temperature: -20°C-55°C
- Relative humidity: <90%.



**PCRSG-500**

## PCRSG-500, Smart Gradient PCR

- Features:** Convenient and flexible module replacement mode • Sealed sample design for low temperature preservation, clean and dry • Two-stage hot lid pressure regulator, ensures good sealing performance • Gold-plated or silver-plated module, improves the efficiency of heat conduction, makes the experiment more effective • Large size and color super-high-definition LCD screen • Intuitive and user-friendly interface, makes programming quick and easy • Infinitely adjustable lid knob, suitable for various types of the tube • Memory function in case of power-down • Low noise, low energy consumption, long application life • Hot lid could be stopped at any angle
- Metal material lid, more reliable and safe
  - Hard disk and mouse can be linked
  - Linked with PC for its multiple control
  - Windows operating system.
  - Convenient, free-charge program upgraded.
  - Long distance trouble judgment.
  - Achieve Circulation nesting.
  - 110-220v international general voltage.



### Reliable guarantee for the accuracy of the temperature

Temperate extended control mode which is closer to required experiment temperature control and is able to effectively avoid the system error caused by the disaccord of the temperature points among the instrument's display temperature, actual block temp. and the temperature required for reagents. So as to improve the accuracy of the experiment and ensure the high efficiency. Strict temperature control debugging program makes sure that each instrument can meet the needs of different experiment. 12 channel temp. probes detect simultaneously, which ensure the homogeneity of sample temp. The hermetic-space technique can efficiently eliminate PCR margin reaction. The technique of outside temperature probe tracing the inside curve testing can effectively ensure the accuracy of sample temperature.

Model	PCRSG-500
<b>Capacity</b>	96x0.2mL(A) ,54x0.5mL(B), 96x0.2mL+77x0.5mL(C), 384well(D)
<b>Temp range</b>	0°C-99°C (Rt≤30°C)
<b>Max. Heating rate</b>	≥ 4.5°C/s
<b>Max. Cooling rate</b>	≥ 4°C/s
<b>Heating / Cooling rate</b>	0.1°C/s ~ 4°C/s (Adjustable)
<b>Uniformity</b>	≤ ±0.2°C (After 10s)
<b>Accuracy</b>	≤ ±0.1°C
<b>Gradient temp rang</b>	30~99°C
<b>Gradient spread</b>	1~30°C
<b>Hot lid temp</b>	20~110°C
<b>Environment model</b>	automatic identification
<b>Temp control</b>	block, tube (10~100µl can be used), calculated
<b>Stored program</b>	1000
<b>Max. no. of cycle</b>	999
<b>Display</b>	5.7"LCD
<b>Communication</b>	USB2.0, Rs232, RJ45, LAN
<b>Size (mm)</b>	380mm(L)x270mm(M)x250mm(H)
<b>Weight</b>	7.8kg



**PCR-200**

## PCR-200, Mini PCR

- Features:** Small-sized and easy to program with intuitive user interface • The lid adopts the high temperature resistant material and applicable to various types of test tube • Memory function in case of power-down • Two control mode: PCR or control through PC operation software • It is benefit for students to understand with the animation presentation capabilities of the PC operating software • Achieve Circulation nesting.

Model	PCR-200
<b>Capacity</b>	25x0.2mL(A), 9x0.5mL(B), 16x0.2mL+9x0.5mL(C).
<b>Temp range</b>	0°C~99.9°C(Rt≤30°C)
<b>Max. Heating rate</b>	≥2°C/s
<b>Max. Cooling rate</b>	≥2°C/s
<b>Uniformity</b>	≤ ±0.3°C(constant 20s)
<b>Accuracy</b>	±0.2°C
<b>Temp control</b>	block
<b>Stored program</b>	3
<b>Max. no. of cycle</b>	99
<b>Display</b>	12864LCD
<b>Communication</b>	Serial Port
<b>Size (mm)</b>	160mm(L)x140mm(M)x120mm(H)
<b>Weight</b>	2.2kg



# THERMAL CYCLER PCR



RPCR-M8

## RPCR-M8, Real-Time PCR system

RPCR-M8 Real-Time PCR System is a robust, unique and as precise as any large-scale apparatus. Our system provides you with precise test results quickly and cost-effectively anywhere, anytime.

### Operation System:



### Work Flow:



PCR reaction mix preparation

Running Real-time PCR

Setting program

Analysis

Model	RPCR-M8	
<b>Optical</b>	Light Source	High power LED
	Detector	Photodiode
<b>Thermology Parameters</b>	Heating/cooling model	Peltier
	Ramping Rate (Max.)	3°C/S
	Thermal Uniformity	±0.2°C
	Thermal Accuracy	±0.2°C
	Temperature Range	4-100°C
	Sample Format	8 Wells
<b>Operational</b>	Reaction Volume	10-150µL
	Warm Up Time	1 Min
	Sensitivity of Detection	1 Copy
	High Resolution Melt	Supported Resolution to 0.5°C
	Multiplexing	Detect Upto 2Dyes Simultaneously. 470/520nm (SYBR/FAM) and 565/625nm (ROX/Texas Red)
<b>Physical</b>	Dimensions (LxWxH)	205x190x98mm
	Net Weight	2.1kg
<b>Computer Configuration</b>	PC Requirement	WIN2000; XP; WIN7; WIN8
<b>Environmental Requirement</b>	Ambient Temperature	Operation Temp: 15-30°C Storage Temp: 10-60°C
	Ambient Humidity	Operation Humidity: 15-90% Storage Humidity: 5-95%
	Power Supply	12V, 10A

### Features:

- Portable: 12V DC, energy efficient.
- User friendly: Simple interface.
- Small footprint: From desktop to laptop, only 2.1 Kg.
- High sensitivity: As low as 1 copy.
- Sample capacity: 8x0.2ml PCR tubes
- Two channels: SYBR/FAM, ROX/Texas Red
- Open system: Compatible with most commercial reagents.