

# THERMAL CYCLER



# THERMAL CYCLER

Thermal Cyclers have become an essential tool for DNA amplification, and are considered by many as the workhorse of the laboratory. It provides outstanding performance in a compact and user friendly design. Better performance, efficiency and faster optimization makes it a perfect choice for any laboratory.

Used in Research, Development, Food Science, Pharmaceutical, Life Science, Animal Diagnostics, Analytical Laboratories, Cloning, Sequencing, Gene Expression, Gene Amplification..

Also known as DNA Amplifier, Thermocycler, PCR Machine, Laboratory Thermocycler, Laboratory PCR Machine, Laboratory DNA Amplifier..

## PCR41-099 THERMAL CYCLER

Adjustable pressure hot lid, to prevent volatilizing and dewing

Hot lid with pressure alarm device, to prevent damaging test tube by too much pressure

Convenient and flexible module replacement mode

Innovative module wire socket design achieves module replacement without wire

The unique left-right design for amplification area and operating area makes operator more convenient and safer



## SPECIFICATIONS

Model	PCR41-099
Temperature Range	0°C~99.9°C
Max.Heating Ramp Rate	4.0°C/s
Max.Cooling Ramp Rate	3.5°C/s
Block Formats	96x0.2 ml (A) / 54x0.5 ml (B) / 96x0.2 ml+77x05 ml (C) / 384well (D)
Display Interface	5.7' LCD
Heating/Cooling adjustable rate	0.1°C/s~4.0°C/s
Uniformity	≤±0.2°C(20~75°C)
Accuracy	≤±0.2°C
Hot Lid Temperature	30~115°C
Max.No.of Cycle	99
Communication	USB2.0 / RS 232 / RJ45
Temp Control Mode	Block, tube
Memory Capacity	200
Dimension (W×D×H)	380x270x250 mm
Weight	7.2 kg
Power Supply	85~264 V AC , 47~63 Hz

## ACCESSORIES

Accessory Code	Name	Description
LS53626	Block A	64×0.2 ml

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description
LS53530	Block B	36×0.5 ml

## PCR43-099 THERMAL CYCLER

It uses advanced Peltier Technology  
Hot-lid enables the oil-free operation  
Gradient function  
The menu software is more simple  
Cooling and heating speed can be set up  
RS232 Interface



## SPECIFICATIONS

Model	PCR43-099
Temperature Range	4°C~99.9°C
Max Heating Rate	≥4.0°C / sec
Max Cooling Rate	≥0.3°C / sec
Display Interface	320x240 LCD, 5.7"
Graph Display	Yes
Uniformity	≤±0.4°C
Accuracy	≤±0.3°C
Hot Lid Temperature	30°C~110°C
Height of hot Lid	Adjustable hot lid
Max.No.of Cycle	99
Program Storage	99 files
Max Program Steps	16
Max Segments	5
Temp Control Mode	Block, tube
Dimension (W×D×H)	340x470x260 mm
Weight	10 kg
Power Supply	100-240 V, 50-60 Hz

## PCR44-099 THERMAL CYCLER

It uses advanced Peltier Technology

Hot-lid enables the oil-free operation

Gradient function

The menu software is more simple

Cooling and heating speed can be set up

While block temperature is lower than set temperature or program ends, the hot lid will be automatically closed



## SPECIFICATIONS

Model	PCR44-099
Sample Capacity	24x0.2 ml 8-strip 24-microplate
Temperature Range	4°C~99.9°C
Max Heating Rate	≥5.0°C / sec
Max Cooling Rate	≥4.0°C / sec
Display Interface	320x240 LCD, 3.8'
Graph Display	Yes
Uniformity	≤±0.2°C
Accuracy	≤±0.2°C
Hot Lid Temperature	30°C~110°C
Height of hot Lid	Adjustable hot lid
Max.No.of Cycle	99
Program Storage	100 files
Max Program Steps	16
Max Segments	5
Temp Control Mode	Block, tube
Dimension (W×D×H)	212x297x200 mm
Weight	3.2 kg

## PCR45-099 THERMAL CYCLER

Software intuitive interface and user friendly

Powerful hardware configuration to meet your needs

Interchangeable five block for your choice

Extensive experiment application

Accurate Experimental Data

Suitable for many series of reagens and consumables, simplify experiments

While block temperature is lower than set temperature or program ends, the hot lid will be automatically closed



## SPECIFICATIONS

Model	PCR45-099
Sample Capacity	96-PCR plate (full-skirted) 96x0.2 ml tubes 12x8-strip
Temperature Range	4°C~99.9°C
Temperature Increment/Decrement	0~9.9°C, Suitable for touchdown PCR
Max. ramp rate	0.1°C~4°C
Max.Heating Ramp Rate	Upto 4.0°C/s
Max.Cooling Ramp Rate	Upto 4.0°C/s
Display Interface	LCD Display and touch screen (5.7')
Uniformity	±0.3°C
Accuracy	±0.1°C(55°C) ≤±0.2°C(≥90°C)
Gradient Temp Range	30~99°C
Hot Lid Temperature	RT +5°C-110°C(default 105°C)
Height of hot Lid	Automatic Adjusted
Max.No.of Cycle	99 Suitable for Nested PCR
Temp Control Mode	Block, tube
Memory Capacity	≥250 typical programs onboard, unlimited with USB flash drive expansion
Time Increment/Decrement	0~9 min 59 sec, suitable for Long PCR
Auto pause/ power protection	Yes
Soak Function	Yes
Network	USB
Dimension (W×D×H)	260x335x270 mm
Power	600 W
Weight	10 kg

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Heating speed of Ramping	Cooling speed of Ramping	Gradient Range	Gradient Range of Temperature Difference
LS52007	Block B	30x0.5 ml+48x0.2 ml	Upto 2.8°C / sec	Upto 2.8°C / sec		
LS52020	Block C	384-microplate	Upto 2.8°C / sec	Upto 2.8°C / sec	30°C~99.9°C	1°C~30°C
LS55065	Block A	48x0.2 ml, dual-block	Upto 4°C / sec	Upto 4°C / sec		
LS55077	Block D	96x0.2 ml, Gradient	Upto 4°C / sec	Upto 4°C / sec	30°C~99.9°C	1°C~30°C
LS55089	Block E	4 x standard in situ plates	Upto 1.8°C / sec	Upto 1.8°C / sec		

# PCR46-099 THERMAL CYCLER

- Software intuitive interface and user friendly
- Powerful hardware configuration to meet your needs
- Interchangeable five block for your choice
- Extensive experiment application
- Accurate Experimental Data
- Suitable for many series of reagents and consumables, simplify experiments
- While block temperature is lower than set temperature or program ends, the hot lid will be automatically closed



## SPECIFICATIONS

Model	PCR46-099
Temperature Range	4°C~99.9°C
Temperature Increment/Decrement	0.1°C~9.9°C, Suitable for touchdown PCR
Max. ramp rate	0°C~4°C
Display Interface	6.5", 262k-color LCD display and touch screen
Uniformity	±0.2°C
Accuracy	≤±0.1°C(55°C) ≤±0.2°C(≥90°C)
Thermal Gradient Accuracy	±0.4°C(35°C-99°C)
Hot Lid Temperature	30°C~110°C
Height of hot Lid	Automatic Adjusted
Max.No.of Cycle	99 Suitable for Nested PCR
Temp Control Mode	Block, tube
Memory Capacity	≥250 typical programs onboard, unlimited with USB flash drive expansion
Time Increment/Decrement	0~9 min 59 sec, suitable for Long PCR
Auto pause/ power protection	Yes
Soak Function	Yes
Network	LAN
Dimension (W×D×H)	160x140x120 mm
Power	600 W
Weight	10.5 kg
Power Supply	Ac 220 V, 50 Hz, 200 VA

# PCR47-099 THERMAL CYCLER

It uses advanced Peltier Technology

Hot-lid enables the oil-free operation

Gradient function

The menu software is more simple

Cooling and heating speed can be set up

While block temperature is lower than set temperature or program ends, the hot lid will be automatically closed



## SPECIFICATIONS

Model	PCR47-099
Sample Capacity	96-PCR plate (full-skirted) 96x0.2 ml tubes 12x8-strip
Temperature Range	4°C~99.9°C
Temperature Increment/Decrement	0~9.9°C, Suitable for touchdown PCR
Max. ramp rate	0.1°C~4°C
Max.Heating Ramp Rate	Upto 4.0°C/s
Max.Cooling Ramp Rate	Upto 4.0°C/s
Display Interface	6.25" , 262, 144 color LCD display and touch screen
Uniformity	±0.2°C
Accuracy	±0.1°C(55°C) ±0.2°C(≥90°C)
Gradient Temp Range	30~99°C
Hot Lid Temperature	RT +5°C-110°C(default 105°C)
Height of hot Lid	Automatic Adjusted
Max.No.of Cycle	99 Suitable for Nested PCR
Temp Control Mode	Block, tube
Memory Capacity	≥250 typical programs onboard, unlimited with USB flash drive expansion
Time Increment/Decrement	0~9 min 59 sec, suitable for Long PCR
Auto pause/ power protection	Yes
Soak Function	Yes
Network	LAN
Dimension (W×D×H)	260x335x270 mm
Power	600 W
Weight	10 kg
Power Supply	100-240 V, 50-60 Hz

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description
LS52046	Block A	96x0.2 ml,6 independent modules Noble gold-plated block
LS52059	Block B	96x0.2 ml,6 independent modules Nickle plated block

# PCR48-099 THERMAL CYCLER

It uses advanced Peltier Technology

Reinforced aluminum module with anodizing technology can keep rapid heating-conducting property and have enough corrosion resistance

Scalable hot lid fits tubes of different heights

TFT color capacitive touch screen ( 5 inches, 800x480 pels), graphical menu navigation interface, very easy to operate

Built-in 11 standard program file template, can quickly edit the required files

Folder management, user can build directory

The running program and left time can be displayed in real time , allow to edit file when program is running

One-click quick incubation function can meet experiment's needs such as denaturation, enzyme cutting/enzyme-link and ELISA

While block temperature is lower than set temperature or program ends, the hot lid will be automatically closed

Automatic restart after power failure. When power is restored it can continue to run unfinished program

Support USB to store and copy PCR data, user can control PCR by USB mouse

Update software by USB and LAN

WiFi module built-in, one unit can control multiple PCR machine through computer or cell phone with internet connection

Support email-alert function when experiment is over

Mobile phone App available



## SPECIFICATIONS

Model	PCR48-099
Sample Capacity	96-PCR plate (full-skirted) 96x0.2 ml tubes 12x8-strip
Temperature Range	4°C~99.9°C
Temperature Increment/Decrement	0.1°C~9.9°C, Suitable for touchdown PCR
Temperature difference range of lines	0.1°C~6.0°C
Max. ramp rate	0.1°C~4°C
Max.Heating Ramp Rate	Upto 5°C/s
Max.Cooling Ramp Rate	Upto 4°C/s
Display Interface	10.4' , 262k-color LCD display and touch screen
Uniformity	±0.2°C
Accuracy	±0.1°C(55°C) ±0.15°C(≥95°C)±0.15°C(≥72°C)
Gradient Function	Yes
Hot Lid Temperature	30°C~110°C
Height of hot Lid	Automatic Adjusted
Max.No.of Cycle	99 Suitable for Nested PCR
Communication	RS232 / LAN and Bluetooth
Temp Control Mode	Block, tube
Memory Capacity	≥250 typical programs onboard, unlimited with USB flash drive expansion
Timer Range	0~9 min 59 sec, suitable for Long PCR
Auto pause/ power protection	Yes
Soak Function	Yes
Dimension (W×D×H)	316x457x309 mm



Power	600 W
Weight	14 kg
Power Supply	100-240 V, 50-60 Hz

# ***Centrifugen***

## **Centrifugen**

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