LABOCON

THERMAL CYCLER

THERMAL CYCLER GRADIENT LTCG-48 SERIES

Labocon Thermal Cycler Gradient LTCG-48 Series uses precise temperature control and rapid temperature changes to conduct the polymerase chain reaction. It has an advanced Peltier technology, LCD display and independent operation of dual modules for protocol optimization. It is capable of performing more than 200000 cycles to create multiple copies of sample DNA which can be used for further downstream procedures. A maximum of 1000 programs can be saved and run with a maximum of 99 cycles in each.

Features

- Highly durable solid metal exterior
- Advanced Peltier-based semiconductor technology
- Step less adjustable lid that can adapt to different heights in vitro
- Tightly sealed working chamber ensures stability and reliability of experiment
- Windows operating system for ease of operation
- Interface: Bilingual curve, graphical
- Data can be stored and recovered on power or system failure

Application

Labocon Thermal Cycler is used for clinical diagnosis, DNA sequencing, gene manipulation, gene expression study, genomics comparative study and also in gene cloning experiment

LTCG 48-101

LTCG 48-104

Specification

Model	LTCG-48-101	LTCG-48-102	LTCG-48-103	LTCG-48-104
Capacity	48x0.2mlx2	48x0.2ml+30x0.5ml	48x0.2mlx2	48x0.2ml+30x0.5ml
Peltier Quantity	8			
Block Material	Aluminium Alloy			
Temp. Range	0-100°C			
Temp. Accuracy	≤±0.1°C			
Temp. Uniformity	≤±0.2°C			
Heating Rate	5°C/s			
Cooling Rate	4°C/s			
Temp. Control	Block, Tube			
Average Ramping Rate	0.1～5°C			
Hot-lid Temp.	30-110°C			
Hot Lid Height	Stepless Adjustable			
Gradient Range	1-30°C			
Gradient Temp. Range	30-100°C			
Display	5.6 inch, 640×480 Pixels, TFT		8 inch, 800×600 Pixels, TFT, TOUCH	
Display Resolution	0.1°C			
Graphical Display	Yes			
Programs	1000 files +(USB Flash)		10000 files +(USB Flash)	
Optional Blocks	-		384 micro well, 60×0.5ml	
Max. No. of Step	30			

Max. No. of Cycle	99			
Built in interchangeable Programs	6		11	
Power-cut Recovery	Yes			
Temp. Acceleration/ Deceleration	0.1～9.9°C			
Time Acceleration/ Deceleration	1 Sec ～ 9 Min 59 Sec			
Pause Function	Yes			
Editing of file while running	Yes			
Support for USB Mouse	Yes			
Support for Touch Screen	No		Yes	
Connection	USB, Ethernet			
Network Control	Yes			
Auto-open Lid	No			
Auto Data Protection	Yes			
PC Control Software	Yes			
Interface	USB2.0, RS232			
Power	600W			
Power Supply	AC85-264V, 47-63Hz			
Dimension	380x240x260 mm			
Weight (Kg)	8.5 kg			
Catalog No.	9161101129	9161102129	9161103129	9161104129

THERMAL CYCLER GRADIENT LTCG-54 SERIES

Labocon Thermal Cycler Gradient LTCG-54 Series uses precise temperature control and rapid temperature changes to conduct the polymerase chain reaction. It has an advanced Peltier technology, LCD display and independent operation of dual modules for protocol optimization. It is capable of performing more than 200000 cycles to create multiple copies of sample DNA which can be used for further downstream procedures. A maximum of 1000 programs can be saved and run with a maximum of 99 cycles in each.

Features

- Highly durable solid metal exterior
- Advanced Peltier-based semiconductor technology
- Step less adjustable lid that can adapt to different heights in vitro
- Tightly sealed working chamber ensures stability and reliability of experiment
- Windows operating system for ease of operation
- Interface: Bilingual curve, graphical
- Data can be stored and recovered on power or system failure

Application

Labocon Thermal Cycler is used for clinical diagnosis, DNA sequencing, gene manipulation, gene expression study, genomics comparative study and also in gene cloning experiment.

LTCG 54 - 101

Specification

Model	LTCG-54-101
Capacity	54x0.5ml
Peltier Quantity	6
Block Material	Aluminium alloy
Temp. Range	0-99.9°C
Temp. Accuracy	≤±0.2°C
Temp. Uniformity	≤±0.3°C
Heating Rate	4°C/sec
Cooling Rate	3°C/sec
Temp. Control	Block, Tube
Average Ramping Rate	0.1～2.5°C
Hot-lid Temp.	30-110°C
Hot Lid Height	Stepless Adjustable
Gradient Range	1-30°C
Gradient Temp. Range	30-99°C
Display	5.7 inch,320x240 pixels
Display Resolution	0.1°C
Graphical Display	Yes
Programs	200
Max. No. of Segment	9
Max. No. of Step	9

Max. No. of Cycle	99
Built in interchangeable Programs	-
Power-cut Recovery	Yes
Temp. Acceleration/ Deceleration	0.1～9.9°C
Time Acceleration/ Deceleration	1 Sec ～ 9 Min 59 Sec
Pause Function	Yes
Editing of file while running	No
Support for USB Mouse	No
Support for Touch Screen	No
Connection	No
Network Control	No
Auto-open Lid	No
Auto Data Protection	Yes
PC Control Software	No
Interface	USB2.0, RS232
Power	600W
Power Supply	AC85-264V, 47-63Hz
Dimension	380x260x250 mm
Weight (Kg)	10 kg
Catalog No.	9161105129

THERMAL CYCLER GRADIENT LTCG-60 SERIES

Labocon Thermal Cycler Gradient LTCG-60 Series uses precise temperature control and rapid temperature changes to conduct the polymerase chain reaction. It has an advanced Peltier technology, LCD display and independent operation of dual modules for protocol optimization. It is capable of performing more than 200000 cycles to create multiple copies of sample DNA which can be used for further downstream procedures. A maximum of 1000 programs can be saved and run with a maximum of 99 cycles in each.

Features

- Highly durable solid metal exterior
- Advanced Peltier-based semiconductor technology
- Step less adjustable lid that can adapt to different heights in vitro
- Tightly sealed working chamber ensures stability and reliability of experiment
- Windows operating system for ease of operation
- Interface: Bilingual curve, graphical
- Data can be stored and recovered on power or system failure

Application

Labocon Thermal Cycler is used for clinical diagnosis, DNA sequencing, gene manipulation, gene expression study, genomics comparative study and also in gene cloning experiment.

LTCG 60-101

LTCG 60-102

Specification

Model	LTCG-60-101	LTCG-60-102	LTCG-60-103	LTCG-60-104
Capacity	60x0.5ml	60x0.5ml	60x0.5ml	60x0.5ml
Peltier Quantity	8	6	8	6
Block Material	Aluminium Alloy			
Temp. Range	0-100°C			
Temp. Accuracy	≤±0.1°C			
Temp. Uniformity	≤±0.2°C			
Heating Rate	5°C/s	4°C/s	5°C/s	4°C/s
Cooling Rate	4°C/s	3°C/s	4°C/s	3°C/s
Temp. Control	Block, Tube			
Average Ramping Rate	0.1～5°C			
Hot-lid Temp.	30-110°C			
Gradient Range	1-30°C			
Gradient Temp. Range	30-100°C			
Display	5.6 inch, 640×480 Pixels, TFT		8 inch, 800×600 Pixels, TFT, TOUCH	
Display Resolution	0.1°C			
Graphical Display	Yes			
Programs	1000 files +(USB Flash)		10000 files +(USB Flash)	
Max. No. of Segment	-			
Max. No. of Step	30			
Max. No. of Cycle	99			

Built in interchangeable Programmes	6		11	
Power-cut Recovery	Yes			
Temp. Acceleration/ Deceleration	0.1～9.9°C			
Time Acceleration/ Deceleration	1 Sec ～ 9 Min 59 Sec			
Pause Function	Yes			
Editing of file while running	Yes			
Support for USB Mouse	Yes			
Support for Touch Screen	No		Yes	
Connection	USB, Ethernet			
Network Control	Yes			
Auto-open Lid	No			
Auto Data Protection	Yes			
PC Control Software	Yes			
Interface	USB2.0, RS232			
Power	600W			
Power Supply	AC85-264V, 47-63Hz			
Dimension	380x240x260 mm			
Weight(Kg)	8.5 kg			
Catalog No.	9161106129	9161107129	9161108129	9161109129

THERMAL CYCLER GRADIENT LTCG-96 SERIES

Labocon Thermal Cycler Gradient LTCG-96 Series uses precise temperature control and rapid temperature changes to conduct the polymerase chain reaction. It has an advanced Peltier technology, LCD display and independent operation of dual modules for protocol optimization. It is capable of performing more than 200000 cycles to create multiple copies of sample DNA which can be used for further downstream procedures. A maximum of 1000 programs can be saved and run with a maximum of 99 cycles in each.

Features

- Highly durable solid metal exterior
- Advanced Peltier-based semiconductor technology
- Step less adjustable lid that can adapt to different heights in vitro
- Tightly sealed working chamber ensures stability and reliability of experiment
- Blocks can be interchangeable (One block of 96 wells or two blocks of 48 wells)
- Windows operating system for ease of operation
- Interface: Bilingual curve, graphical, Non touchscreen models are also available with Coloured Touchscreen interface
- Data can be stored and recovered on power or system failure

Application

Labocon Thermal Cycler can be used for clinical diagnosis, DNA sequencing, gene manipulation, gene expression study, genomics comparative study and also in gene cloning experiment.

LTCG 96-101

LTCG 96-104

Specification

Model	LTCG-96-101	LTCG-96-102	LTCG-96-103
Capacity	96x0.2ml	96x0.2ml+77x0.5ml	96x0.2ml
Peltier Quantity	6		
Block Material	Aluminium Alloy		
Temp. Range	0-99.9°C		0-100°C
Temp. Accuracy	≤±0.2°C		≤±0.1°C
Temp. Uniformity	≤±0.3°C		≤±0.2°C
Heating Rate	4°C/s		4°C/s
Cooling Rate	3°C/s		3°C/s
Temp. Control	Block, Tube		
Average Ramping Rate	0.1～2. 5°C	0.1～5°C	
Hot-lid Temp.	30-110°C		
Hot Lid Height	Stepless Adjustable		
Gradient Range	1-30°C		
Gradient Temp. Range	30-99.9°C		30-100°C
Display	5.7 inch, 320x240 pixels LCD display		5.6 inch, 640×480 Pixels, TFT
Display Resolution	0.1°C		
Graphical Display	Yes		
Programs	200 files		1000 files +(USB Flash)
Max. No. of Segment	9		-
Max. No. of Step	9		30

Max. No. of Cycle	99		
Built in interchangeable Programmes	-		6
Power-cut Recovery	Yes		Yes
Temp. Acceleration/ Deceleration	0.1～9.9°C		
Time Acceleration/ Deceleration	1 Sec ～ 9 Min 59 Sec		
Pause Function	Yes		Yes
Editing of file while running	No		Yes
Support for USB Mouse	No		Yes
Support for Touch Screen	No		No
Connection	No		USB,Ethernet
Network Control	No		Yes
Auto-open Lid	No		No
Auto Data Protection	Yes		
PC Control Software	No		Yes
Interface	USB2.0, RS232		
Power	600 W		
Power Supply	AC85-264V, 47-63Hz		
Dimension	390x260x250 mm		390x240x260 mm
Weight(Kg)	10 kg		8.5 kg
Catalog No.	9161110129	9161111129	9161112129

THERMAL CYCLER

Model	LTCG-96-104	LTCG-96-105	LTCG-96-106
Capacity	96x0.2ml	96x0.2ml	96x0.2ml
Peltier Quantity	6	8	
Block Material	Aluminium Alloy		
Temp. Range	0-100°C		
Temp. Accuracy	≤±0.1°C		
Temp. Uniformity	≤±0.2°C		
Heating Rate	4°C/s	5°C/s	
Cooling Rate	3°C/s	4°C/s	
Temp. Control	Block, Tube		
Average Ramping Rate	0.1～5°C		
Hot-lid Temp.	30-110°C		
Hot Lid Height	Stepless Adjustable		
Gradient Range	1-30°C		
Gradient Temp. Range	30-100°C		
Display	8 inch, 800×600 Pixels, TFT, TOUCH	5.6 inch, 640×480 Pixels, TFT, TOUCH	8 inch, 800×600 Pixels, TFT, TOUCH
Display Resolution	0.1°C		
Graphical Display	Yes		
Programs	10000 files +(USB Flash)	1000 files +(USB Flash)	10000 files +(USB Flash)
Max. No. of Segment	-		384 micro well, 48×0.2ml +30×0.5ml, 60×0.5ml
Max. No. of Step	30		

Max. No. of Cycle	99		
Built in interchangeable Programmes	11	6	11
Power-cut Recovery	Yes		
Temp. Acceleration/ Deceleration	0.1～9.9°C		
Time Acceleration/ Deceleration	1 Sec ～ 9 Min 59 Sec		
Pause Function	Yes		
Editing of file while running	Yes		
Support for USB Mouse	Yes		
Support for Touch Screen	Yes	No	Yes
Connection	USB,Ethernet		
Network Control	Yes		
Auto-open Lid	No		
Auto Data Protection	Yes		
PC Control Software	Yes		
Interface	USB2.0, RS232		
Power	600 W		
Power Supply	AC85-264V, 47-63Hz		
Dimension	390x240x260 mm		
Weight(Kg)	8.5 kg		
Catalog No.	9161113129	9161114129	9161115129

THERMAL CYCLER GRADIENT LTCG-384 SERIES

Labocon Thermal Cycler Gradient LTCG-384 Series uses precise temperature control and rapid temperature changes to conduct the polymerase chain reaction. It has an advanced Peltier technology, LCD display and independent operation of dual modules for protocol optimization. It is capable of performing more than 200000 cycles to create multiple copies of sample DNA which can be used for further downstream procedures. A maximum of 1000 programs can be saved and run with a maximum of 99 cycles in each.

Features

- Highly durable solid metal exterior
- Advanced Peltier-based semiconductor technology
- Step less adjustable lid that can adapt to different heights in vitro
- Tightly sealed working chamber ensures stability and reliability of experiment
- Windows operating system for ease of operation
- Interface: Bilingual curve, graphical
- Data can be stored and recovered on power or system failure

Application

Labocon Thermal Cycler can be used for clinical diagnosis, DNA sequencing, gene manipulation, gene expression study, genomics comparative study and also in gene cloning experiment.

LTCG 384-101

LTCG 384-104

Specification

Model	LTCG-384-101	LTCG-384-102	LTCG-384-103	LTCG-384-104	LTCG-384-105
Capacity	384 well				
Peltier Quantity	6			8	
Block Material	Aluminium Alloy				
Temp. Range	0-99.9°C	0-100°C			
Accuracy	≤±0.2°C	≤±0.1°C			
Uniformity	≤±0.3°C	≤±0.2°C			
Heating Rate	4°C/s	3°C/s		4°C/s	
Cooling Rate	3°C/s	2°C/s		3°C/s	
Temp. Control	Block, Tube				
Average Ramping Rate	0.1～2.5°C	0.1～5°C			
Hot-lid Temp.	30-110°C				
Hot Lid Height	Stepless Adjustable				
Gradient Range	1-30°C				
Gradient Temp. Range	30-99.9°C	30-100°C			
Display	5.7 inch, 320x240 pixels LCD display	5.6 inch, 640×480 Pixels, TFT	8 inch, 800×600 Pixels, TFT, TOUCH	5.6 inch, 640×480 Pixels, TFT	8 inch, 800×600 Pixels, TFT, TOUCH
Display Resolution	0.1°C				
Graphical Display	Yes				
Programs	200 files	1000 files +(USB Flash)	10000 files +(USB Flash)	1000 files +(USB Flash)	10000 files +(USB Flash)
Max. No. of Segment	9	-			
Max. No. of Step	9	30			

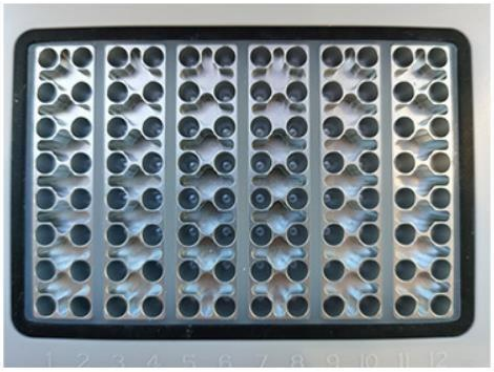
Max. No. of Cycle	99				
Built in interchangeable Programmes	-	6	11	6	11
Power-cut Recovery	Yes	Yes			
Temp. Acceleration/ Deceleration	0.1～9.9°C				
Time Acceleration/ Deceleration	1 Sec ～ 9 Min 59 Sec				
Pause Function	Yes	Yes			
Editing of file while running	No	Yes			
Support for USB Mouse	No	Yes			
Support for Touch Screen	No	No	Yes	No	Yes
Connection	No	USB,Ethernet			
Network Control	No	Yes			
Auto-open Lid	No	No			
Auto Data Protection	Yes				
PC Control Software	No	Yes			
Interface	USB2.0, RS232				
Power	600 W				
Power Supply	AC85-264V, 47-63Hz				
Dimension	390x260x250 mm	390x240x260 mm			
Weight (Kg)	10 kg	8.5 kg			
Catalog No.	9161116129	9161117129	9161118129	9161119129	9161120129

Thermal Cycler LABO-A & B Series

Labocon LABO-A& B Series thermal cycler has Android operation system and 10.1-inch capacitive touch screen. Operation is very smooth and simple. Air channel is in front and back and it allows machine placed side by side. Self-adapting pressure hot lid makes closing lid and tightening lid in one step. It has long service life peltier heating units and max. ramping rate is 8℃/S and cycle times is more than 1000,000. WIFI unit is built in and user can control many units of PCR through

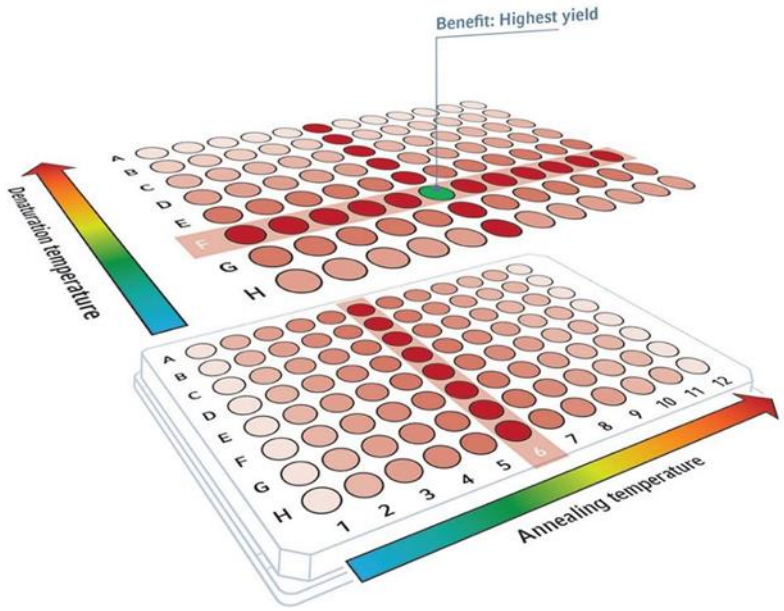
Features

- Long service life Peltier heating units.
- Reinforced aluminum module with anodizing technology can keep rapid heating conducting property and have enough corrosion resistance.
- High heating and cooling rate, max. Ramping rate 8 ℃/s, can save your precious time with 8 Peltier Element.



- Self-adapting pressure hot lid makes closing lid and tightening lid in one step.
- Air channel is in front and back and it allows machine placed side by side.
- It has Android operation system and 10.1-inch capacitive touch screen. It has graphical menu navigation interface and operation is very simple.
- Built-in 11 standard program file template, can quickly edit the required files.

- 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.
- Hot lid temperature and hot lid work mode can be set to meet different experiment's need.
- 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 with internet connection.
- Email notification after experiment is over.



Specification

Model	LABO-A-100	LABO-A-200	LABO-A-300	LABOB-100	LABO-B-200
Capacity	96×0.2ml	96×0.2ml	384 well	96×0.2ml	96×0.2ml
Tube	0.2ml tube, 8 strips, Half skirt96 wells plate, No skirt 96 wells plate	0.2ml tube, 8 strips, Full 96 wells plate, Half skirt96 wells late, No skirt 96 wells plate	384 PCR microplate	0.2ml tube, 8 strips, Half skirt96 wells plate,z No skirt 96 wells plate	
Temperature Range	0-105℃				
Max. Ramping Rate	5℃/s	6℃/s	5℃/s	6℃/s	8℃/s
Uniformity	≤±0.2℃				
Accuracy	≤±0.1℃				
Display Resolution	0.1℃				
Temperature Control	Block Tube				
Ramping Rate Adjustable	0.1-5℃	0.1-6℃	0.1-5℃	0.1-6℃	0.1-8℃
Gradient Temp. Range	30-105℃				
Gradient Type	Normal Gradient			Dynamic Gradient	Two Dimensional Gradient
Gradient Spread	1-42°C			six zone, each zone is 0.1-5°C	Horizontal：1-30°C Vertical: 1-24°C
Hot Lid Temperature	30-115℃				
Number of Programs	20000 + (USB FLASH)				
Max. No. of Step	30			40	
Max. No. of Cycle	100				
Time Increment / Decrement	1 Sec - 600 Sec				
Temp. Increment / Decrement	0.1-10.0°C				
Pause Function	Yes				
Auto Data Protection	Yes				
Hold at 4°C	Forever				
Touchdown Function	Yes				
Long PCR Function	Yes				
Language	English				
Computer Software	Yes				
LCD	10.1 inch, 1280×800 pels				
Communication	USB2.0, WIFI				
Dimensions	385mm× 270mm× 255mm (L×W×H)				
Weight	10kg			10kg	17kg
Power Supply	100-240VAC, 50/60Hz, 600 W			100-240VAC, 50/60Hz, 600 W	100-240VAC, 50/60Hz 1200 W

LABOCON SCIENTIFIC LIMITED

18 A Melton Road, Leicester LE4 5EA, United Kingdom

+44 203 3724877 | info@labocon.com | www.labocon.com