



# Touch Thermal Cycler

(GRADIENT)  
LD-LTCG-A Series

## Touch Thermal Cycler (Gradient) LD-LTCG-A1 Series

Touch Thermal Cycler (Gradient) LD-LTCG-A1 Series comes with customized 8 pcs long service life Marlow (US) peltier heating units. With 5 °C/s maximum ramping rate, this cycler saves operation time of user. Its 8 inch TFT touch screen with graphical real time display. With Windows OS, PC control function, print function, large storage capacity, USB connection, this cycler meets latest experimental demands.

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### Features

- 8" TFT color screen for easy monitoring
  - High heating and cooling rate
  - Step less adjustable hot lid with pressure protection
  - Built in in 11 standard program file template for quick editing of files
  - Real time display to show running status of experiment
  - One-click quick incubation function to meet different experimental needs
  - Internal flash memory for 10000 typical PCR files
  - User-friendly setting for hot lid temperature and hot lid work mode
  - Auto restart after power failure
  - Easy view of actual and target temperatures in real time
  - Support USB and LAN to update software
  - Supports email alert function when experiment is over
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### Applications

Widely used in advanced PCR applications across research and development, animal and plant tissue culture, food science, pharmaceuticals, life science, and analytical laboratories.

## Specifications

Model	LD-LTCG-A10	LD-LTCG-A11	LD-LTCG-A12
Capacity	96 × 0.2 ml	60 × 0.5 ml	384 well
Block Temperature Range	0 to 100 °C		
Temperature Control Accuracy	≤ ± 0.1 °C		
Ramping Rate Adjustable	0.1 to 5 °C		
Temperature Uniformity	≤ ± 0.2 °C		
Heating Rate	5 °C/s		
Cooling Rate	4 °C/s		
Temperature Control Mode	Block\Tube		
Gradient Temperature Range	30 to 100 °C		
Gradient Uniformity	≤ ± 0.2 °C		
Gradient Accuracy	≤ ± 0.2 °C		
Gradient Spread	1 to 30 °C		
Hot-lid Temperature Range	30 to 110 °C		
Hot Lid Height Adjustable	Step less Adjustable		
Time Increment/Decrement	1 sec to 9 min 59 sec		
Temperature Increment/Decrement	0.1 to 9.9 °C		
Program	10000+(USB FLASH)		
Max No. of Steps	30		
Max No. of Cycles	99		
Pause Function	Yes		
Auto Data Protection	Yes		
Print	Yes		
LCD	8 inch, 800×600 Pixels, 16 colors TFT touch screen		
Communication	USB 2.0, LAN		
Power Supply	85 to 264 V AC, 47 to 63 Hz, 600 W		
Dimension ( L×W×H )	380 × 240 × 260 mm		
Weight	8.5 kg		

## Touch Thermal Cycler (Gradient) LD-LTCG-A2 Series

Touch Thermal Cycler (Gradient) LD-LTCG-A2 Series with customized 8 pcs long service life Marlow (US) peltier heating units, allows double block gradient function by forming 4 circuits to control 4 temperature zones. With 5 °C/s maximum ramping rate, this cycler saves operation time of user. Its 8 inch TFT touch screen with graphical real time display. With Windows OS, PC control function, print function, large storage capacity, USB connection, this cycler meets latest experimental demands.

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### Features

- 8" TFT color screen for easy monitoring
  - High heating and cooling rate
  - Two blocks independently control and runs 2 different PCR programs simultaneously
  - Step less adjustable hot lid with pressure protection
  - Built in 11 standard program file template for quick editing of files
  - Real time display to show running status of experiment
  - One-click quick incubation function to meet different experimental needs
  - Internal flash memory for 10000 typical PCR files
  - User-friendly setting for hot lid temperature and hot lid work mode
  - Auto restart after power failure
  - Easy view of actual and target temperatures in real time
  - Support USB and LAN to update software
  - Supports email alert function when experiment is over
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### Applications

Widely used in advanced PCR applications across research and development, animal and plant tissue culture, food science, pharmaceuticals, life science, and analytical laboratories.

## Specifications

Model	LD-LTCG-A20	LD-LTCG-A21
Capacity	Double (each block with) 48×0.2ml	48×0.2ml and 30×0.5ml
Block Temperature Range	0 to 100 °C	
Temperature Control Accuracy	≤ ± 0.1 °C	
Ramping Rate Adjustable	0.1 to 5 °C	
Temperature Uniformity	≤ ± 0.2 °C	
Heating Rate	5 °C/s	
Cooling Rate	4 °C/s	
Temperature Control Mode	Block\Tube	
Gradient Temperature Range	30 to 100 °C	
Gradient Uniformity	≤ ± 0.2 °C	
Gradient Accuracy	≤ ± 0.2 °C	
Gradient Spread	1 to 30 °C	
Hot-lid Temperature Range	30 to 110 °C	
Hot Lid Height Adjustable	Step less Adjustable	
Max No. of Steps	30	
Max No. of Cycles	99	
Time Increment/Decrement	1 sec to 9 min 59 sec	
Temperature Increment/Decrement	0.1 to 9.9 °C	
Program	10000+(USB FLASH)	
Pause Function	Yes	
Auto Data Protection	Yes	
Print	Yes	
LCD	8 inch, 800×600 Pixels, 416 colors TFT touch screen	
Communication	USB 2.0, LAN	
Power Supply	85 to 264 V AC, 47 to 63 Hz, 600 W	
Dimension ( L×W×H )	380 × 240 × 260 mm	
Weight	8.5 kg	