

OptimaFlex Multi-Block Gradient PCR

Single-block/Dual-block/Triple-block

The OptimaFlex Multi-Block Gradient PCR System revolutionizes laboratory efficiency by combining high-throughput capabilities with unmatched flexibility. This system offers three interchangeable thermal blocks: 1 x 96-well for 0.2ml tubes, 2x 48-well for 0.2ml tubes and 3 x 32-well for 0.2ml tubes, allowing seamless transitions between different sample volumes and experimental needs. It is designed for researchers who demand precision and adaptability, providing high throughput in parallel operation in combination with the flexibility to run different protocols.





Features

- **Independent Block Operation**

Each block operates independently, maximizing experimental efficiency and equipment utilization.

- **Flexible Heated Lid**

Automatically adjusts to fit 0.2ml PCR tubes for optimal sealing.

- **Programmable Temperature Gradients**

Independently adjustable gradients for optimized annealing conditions.

- **Precise Temperature Control**

Utilizes Peltier elements for high accuracy and uniformity.

- **Space-Saving Design**

Independent front/rear air ducts enable close instrument placement, saving lab space.

- **User-Friendly Interface**

High-resolution 10.1-inch LCD touchscreen for intuitive operation and real-time monitoring.

- **Power Failure Recovery**

Automatically resumes interrupted protocols after power restoration.

- **Modular Flexibility**

Interchangeable blocks adapt to diverse experimental needs.

Part Number	PCR96GX1	PCR48GX2	PCR32GX3
Type	Single-block	Dual-block	Triple-block
Sample capacity	1x 96-well x 0.2ml	2 x 48-well x 0.2ml	3x 32-well x 0.2ml
PCR reaction volume	10~100µl		
Temperature control mode	Block or Tube		
Heating lid temperature	30~115°C		
Sample temperature range	0°C~100°C		
Max. Block ramp rate	5°C/s		
Max. Sample ramp rate	3°C/s		
Temperature accuracy	≤ 0.2°C (block temperature reaching 90°C)		
Temperature uniformity	≤ 0.4°C (20s after reaching 95°C, 10s after reaching 72°C, 10s after reaching 55°C)		
Maximum temperature difference between blocks	5°C		
Temperature difference between two adjacent blocks	0.1~5°C		
Max. Number of steps	50		
Time increment / decrement	1 ~ 120s		
Temperature increment / decrement	0.1~10°C		
Maximum number of cycles	999		
Long-range PCR	Yes		
Touchdown PCR	Yes		
Display	10.1-inch LCD touch screen (resolution 1024×800)		
Program storage capacity	Up to 100 programs		
Communication Interface	USB-A		
Power-off data protection	Yes		
Power supply	AC100~240V; 50/60Hz; 1000W		
Working temperature	10-30°C		
Working humidity	20-80% (Non-condensing)		
PCR thermal block replacement	Easy replacement without any tools		

Applicable Consumables

PCR96GX1	0.2ml tubes, 8-tube strips, 96-well PCR plates (non-skirted/semi-skirted)
PCR48GX2	0.2ml tubes, 8-tube strips
PCR32GX3	0.2ml tubes, 8-tube strips