

Gentier-96E/96R Real-time PCR System

Introduction

The Gentier 96E/96R Real-Time PCR System is designed to meet the experimental needs of high-end laboratories. With the 6 (96E)/4 (96R) fluorescence channels, Gentier 96E/96R can process 96 samples in one run. With the powerful and efficient temperature control system, easy-to-use software, user-friendly operational designs, Gentier 96E/96R can provide maximal reliability and efficiency for all your real-time PCR needs.

CH1	CH2	CH3	CH4	CH5	CH6
FAM SYBR Green I SYTQ 9 Eva Green LC Green	HEX VIC TET JOE	Texas Red ROX	CyS	Alexa Fluor 680	FRET TAMRA Cy3



Features

1. 96 samples to be scanned in 7s

Only 7s for all 96 wells of fluorescence scanning can significantly reduce testing time and improve efficiency for lab professionals.

2. Efficient temperature control

Based on the Peltier heating/colling method, the maximum heating ramp rate is $>6.1^{\circ}\text{C/s}$ and the maximum cooling ramp rate is $>5.0^{\circ}\text{C/s}$.

3. Power failure protection design

Power failure protection design can recover the experiment automatically, with no more concern about instantaneous power failure.

4. More convenient with two configurations

Standalone configuration: 10.4-inch touch screen, PC control configuration: PC software control via connection

5. Powerful software analysis

Gentier 96 E/R offers various data analysis functions , including absolute quantitative analysis, relative quantitative analysis, SNP analysis, melting curve analysis, etc.

Specifications

Model	Gentier 96E	Gentier 96R
Thermal Block		
Sample capacity(wells)	96	
Reaction Volume	0-100 μL	
Consumables	0.2ml 96-well Plates (unskirt) ; 0.2ml 8-strip tubes ,0.2ml PCR single tube (Optical flat cap,clear, frosted, white tube)	
Temperature range	0°C - 100°C	
Heating/cooling method	Peltier	
Max heating rate	6.1°C/sec	
Average heating rate	4.5°C/sec	
Max cooling rate	5.0°C/sec	
Average cooling rate	5.0°C/sec	

Gradient Range	1°C-40°C	1°C-40°C
Gradient block	12 row	12 row
Special temperature protocol	Gradient PCR, Long PCR, Touch Down PCR	Gradient PCR, Long PCR, Touch Down PCR
Heat Lid		
Temperature range	Room Temperature–110°C	
Optical System		
Excitation Source	6 LEDs	4 LEDs
Detector	Photodiode	
Detection Position	Excitation and scan at top	
Detection method	6 channels scanning at the same time, no edge effect.	
Detection time	7 seconds for 96 wells for all channels	
Range of excitation/emission wavelengths (nm)	1. 465 /510 (FAM,SYBR Green I, SYTO9 , EvaGreen , LC Green) 2. 527/ 563(HEX,VIC,TET,JOE) 3. 580 /616 (ROX,Texas Red) 4. 632/ 664(Cy5) 5. 680 /730 (Alexa Fluor680) 6. 465 /616 (FRET)	1.465 /510 (FAM,SYBR Green I , SYTO9 , EvaGreen , LC Green) 2.527/ 563 (HEX,VIC,TET,JOE) 3.580 /616 (ROX,Texas Red) 4.632/ 664(Cy5)
Probe	Taqman Probe, Molecular beacons probe, Scorpion probe , FRET	Taqman Probe, Molecular beacons probe, Scorpion probe
Multiplexing	Up to 6 targets	Up to 4 targets
Fluorescence Linearity	r≥0.990	
Fluorescence Dynamic Range	Adjustable	
Performance		
Sample Linearity	/r/≥0.999	
Sample repeatability	Ct value CV≤0.5%	
Sample Dynamic Range	1-1010 copies	
Software Functions		
Data Analysis modes	Qualitative analysis,Absolute quantification, Relative quantification, Genotyping analysis,Endpoint analysis , Melt curve analysis, High Resolution Melting	
Control modes	1.10.4' touch screen 2. PC direct control 3. WLAN control(One PC can control max 10 units, and device can be controlled by any PC in the WLAN)	
Sample Drawer	Touch screen commend	
Data Stroage	Upload and download through USB disk, 1000 results can be stored in machine	
Power failure protection	Automatically start running experiments after power supply, no need wait PC software	
Customize Report	Templates reserved ,report can customized	
Administration Management	Administrator can set functions limits for users	
Transport Locker	Automatically detect transport locker	
Fault Management	Fault report and analysis, solution instruction	
LIS connection	CSV,Excel,TXT format data output,open port for LIS connection	
Others		
PC operating system	Win 7, Win 10	
Communication Port	1 ethernet and 3 USB	
Footprint (WxDxH)	355mm X 480mm X 485mm	
Weight	30kg	
Power usage	AC 100 to 125 V / 200 to 240 V (50/60 Hz).	
Power consumption	900VA	
Work environment	Temperature:10°C~30°C Humidity:20%~85%	