

## RapiCycler 96

Real-Time PCR System

Tailored for High-End Laboratory Needs



CAT#	DESCRIPTION	
G2MRAPI4001	RapiCycler 96 Real Time PCR System	
G2MRAPI4002	RapiCycler 96 PRO Real Time PCR System	

# RapiCycler 96

Real-Time PCR System

RapiCycler 96 Real-Time PCR System is designed to meet the experimental needs of high-end laboratories.

With the 4 or 6 fluorescence channels, RapiCycler 96 can process 96 samples in one run. Various downstream applications including multiplex gene qualitative detection, quantitative analysis, SNP analysis, HRM analysis and melting curve analysis, can be carried out easily with the powerful and efficient temperature control system and fluorescence system, easy-to-use software, user friendly operational designs.

### Areas of **Applications**

RapiCycler 96 Real-Time PCR System is designed for experimental analyses characterized by Polymerase Chain Reaction (PCR) for the purpose of DNA/RNA detection, and can be widely used in a variety of areas including

Clinical Diagnosis,

Epidemiological Monitoring,

Food Safety,

Forensics & Scientific Research, etc.





#### Salient Features

RapiCycler 96

Sample reaction volume Sample dynamic range Fold change Wide Temperature range Fluoresence dynamic range Gradient range

1-10 copies 2-10 0-100°C Adjustable 1°C-40°C

0- 100ul



The 4 or 6 fluorescence channels compatible with most of the common fluorescent dyes and probes of regular detection reagents. Specifically, the FRET (Fluorescence Resonance Energy Transfer) channel enables lower background fluorescence value and higher sensitivity for your detection needs. Also, the high-brightness, long-life LED light source can be maintenance-free for life. It takes only 7 seconds to complete a one by one scan of 96 channels of 6 fluorescence channels with high efficiency and no fluorescence edge effect.



The maximum heating ramp rate is ≥6.1°C/s, and the maximum cooling ramp rate is ≥5.0°C/s, for quicker completion of your assays; the temperature accuracy is  $\leq 0.1$ °C to ensure accurate results.



Automated sample chamber; cloud-enabled control from PC via network connection; or stand-alone operation with the built-in 10.4-inch touch screen; data storage of at least 1,000 experiments within the instrument



Capable of various data analyses to meet the needs of most experiments, including qualitative analysis, absolute quantitative analysis, relative quantitative analysis, end-point fluorescence analysis, melting curve analysis, etc. Featured Power Failure Protection design, no more concern about

instantaneous power failure.

#### **SPECIFICATIONS**

Model	RapiCycler 96	RapiCycler 96 PRO
Throughput	96	
Fluorescence Channels	6	4
Compatible Fluorophores	Channel 1: FAM, SYBR Green I, SYTO 9, Eva Green, LC Green Channel 2: HEX, VIC, TET, JOE Channel 3: ROX, Texas Red Channel 4: Cy5 Channel 5: Alexa Fluor 680 Channel 6: FRET	Channel 1: FAM, SYBR Green I, SYTO 9, Eva Green, LC Green Channel 2: HEX, VIC, TET, JOE Channel 3: ROX, Texas Red Channel 4: Cy5
Light Source	High-brightness, long-life and maintenance-free LED light source, excitation from the top	
Detector	Photodiode (PD), top scanning	
Heating Rate	Maximum heating ramp rate ≥6.1°C/s; Average heating ramp rate ≥4.5°C/s	
Cooling Rate	Maximum cooling ramp rate ≥5.0°C/s; Average cooling ramp rate ≥2.8°C/s	
Temperature Uniformity	± 0.1°C	
Temperature Accuracy	≤ 0.1°C	
Special Temperature Setting Function	Support thermal gradients PCR, Long PCR, Touch Down PCR	
Suitable Consumables	0.2 mL 96-well plates, 8-tube strips, single tubes (clear, frosted and white)	
Sample Testing Linearity and Repeatability	Linear Correlation: /r/ ≥0.999 Repeatability: cycle threshold (Ct) value CV ≤0.5%	
Software Analysis	Qualitative analysis, absolute quantitative analysis, relative quantitative analysis, end point fluorescence analysis, melting curve analysis, and genotyping analysis, etc.	
Control Method	Stand-alone operation: 10.4-inch touchscreen control; Cloud-enabled: PC software control via direct connection or LAN (local area network)	
Power Failure Protection	Automatic recovery of the experiment and other functions when the power is on again after cutting off, without waiting for the power-on of the computer or software control	
Data Storage and Transmission	A single machine can store more than 1000 experimental data files, which can be imported and exported via USB disks	
Reporting Function	Built-in experiment report templates for a variety of industries; Fully open universal reporting of which the contents and formats can be customized	
Operating System for PC	Win 7, Win 10	
Instrument Dimensions	355mm×475mm×484mm (W×L×H)	
Weight	30kg (net)	
Power Supply and Power Consumption	AC 100-240V, 50-60Hz; 900VA	

