Model	Q1000	Q1000+	
	Instrument performance		
Sample Block Capacity	48-well*0.1ml		
Reaction Volume	10 ~ 50ul (recommend 20ul)		
Tubes Option	white or clear Low-profile 0.1ml PCR tube/eight strip tubes with optical flat cap		
Heating and Cooling Technology	The newest generation of Peltier technology for more than one million thermal cycles		
Control Methods	Operated via PC remote control;or the touch screen on instrument with limited function		
Language	Chinesse and English		
Communications	USB2.0 or LAN,export date via USB flash drive		
Display	7"color TFT Touch Screen		
	Temperature		
Block Temperature Range	0°C~100°C		
Max. Heating Rate	7°C/S		
Max. Cooling Rate	5°C/S		
Temperature Uniformity	≤ ± 0.2℃ (at 90°C)		
Temperature Accuracy	≤ ± 0.1°C (10 seconds after reach 90°C)		
Display Resolution	0.1℃		
Heat Lid Temperature Range	30°C ∼ 112°C Adjustable		
Temperature Control Mode	Block&Sim-tube mode		
Gradient Range	30°C~100°C		
Temp.Differential Range	1°C~24°C		
	Fluorescence detection range		
Excitation	Long life LED		
Detection	High sensitivity CCD		
Kinetic detection range	1~10 ¹⁰		
Sensitivity	≥1copy		
Calibrated Dyes at Installation	F1: FAM、SYBR Green F2: VIC、HEX、TET、JOE、CY3、TAMARA、NED	F1: FAM、SYBR Green F2: VIC、HEX、TET、JOE、CY3、TAMARA、NED F3: ROX、TEXAS-RED F4: CY5	
Fluorescence Excitation Range	300 ~	800nm	
Fluorescence Detection Range	500 ~ 800nm		
Date Export Formats	EXCEL, TXT		
	Other Features		
power	Global switch power supply:100 ~ 240V , 50 ~ 60Hz		
Consumption	400W		
Net Weight	8.2 kg		
Dimension (L×W×H)	320 × 205 × 380 mm		
Operating Systems	Windows 7, Windows 10, Windows XP		

HANGZHOU LONGGENE SCIENTIFIC INSTRUMENT CO., LTD.

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[Q1000] [Q1000+]



www.longgene.com

INNOVATIVE PELTIER TECHNOLOGY



COMPANY PROFILE

Hangzhou LongGene Scientific Instruments Co., Ltd. established in 2001, is a leading company which specializes in instruments and reagents for life science with advanced and innovative solutions. Our products and services are globally renown, including universities and research centers in North America and Europe. We are the leader of high-end thermal cycler manufacturerin China.

Our senior management team has more than 20 yearsexperience in the life science industry. "Commitment, dedication efficiency, innovation and collaboration" is our company motto. As a pioneer of the life science technologyindustry in China, we aim to contribute to the global gene technology industry by delivering the most advanced products and cutting-edge solutions.





MAIN ADVANTAGES

- **01** / The new generation of Peltier-based technology, fast ramping rate of up to 7° C/sec
- **02** / Sample Block Capacity: 48-well*0.1ml, Both white and through tubes are suitable.In quantitative PCR experiments, white tubes can be used to shield background interference for better results.
- 03 / T-OpticalTM technology, reduce backgroud noise, improve fluorescence signal sensitivity and signal to noise ratio.
- $m{04}$ / Fluorescence same channel synchronous ,detection, delay error reduction.
- 05 / Users can view fluorescence quantitative PCR reaction in real-time on the 7"full color TFT LCD touch screen. Both quantitative PCR procedures and regular PCR procedures can be runned in stand alone mode.
- Solid-state optical system, no moving parts, more reliable and durable (Non-fiber technology),

 Avoiding the optical components of traditional quantitative products due to the heating of sports products,

 Wear and deviation.
- 07 / Long-life LED and high-sensitivity CCD detector technology.
- **08** / With a temperature gradient function, it is more convenient to optimize the reaction conditions.

 Equipped with computer remote control software for remote control of instruments and analysis results.
- 09 / The drawer sample stage design makes it easier to pick and place samples.
- 10 / The software could be upgraded free for life.

SOFTWARE

- 1. Connection via an ethernet cable or via router cable.
- 2. Pre-calibrated optics allow you to start using the instrument in seconds, as no additional calibration is required.
- 3. Quality control (QC) on data automatically, ensuring reliability of analysis results.
- 4. Graphical display of protocols, default templates, and real-time run status.



- 5. Simple and intuitive program, easy to use, without prior reading the user guide thoroughly.
- 6. PCR protocals can be run via a computer network or in the stand –alone mode (using a USB flash drive)
- 7. Real-time monitoring of amplification curve or melt curve via the 7" color touch screen.
- 8. Intuitive plate setup feature.



- 9. Thermal gradient capability for optimizing PCR reaction temperatures
- 10. Protocols & plate setups can be saved as templates for future use.
- 11. Multitasking software, able to analyze multiple experiments at the same time.



- 12. A Variety of Data Analysis Methods
 - (1) Standard curves for absolute quantification
 - (2) Melt-curve to verify product identity
 - (3) Relative quantification for gene expression analysis, with multiple reference genes and amplification efficiency correction
 - (4) Allelic discrimination (SNP Genotyping) using two allele-specific probes, with automated calling and quality-value assignment
 - (5) Presence/Absence (Plus/Minus) assays with/without internal positive control (IPC) for pathogen detection
- 13. A variety of algorithms, such as auto-baseline, manual-baseline, auto-threshold, manual-threshold, amplification efficiency (E), able to streamline data analysis.
- 14. Export results to .xls, .txt.



