

Real-time PCR system

PCR-Q96-6P



Features

- Strong fluorescence signal with low background noise and high sensitivity.
- Simultaneous 6-channel scanning of 96 samples within 5s.
- Energy-saving, eco-friendly LED light source with long service life and maintenance-free design.
- Automatic hot lid compatible with automated workstations to improve operational efficiency.
- PC-based operation allows a single computer to control multiple instruments.
- Powerful software supports for qualitative/quantitative analysis, HRM, genetic typing, relative quantification, and temperature gradient functions.

Description

Adhering to the principles of high efficiency and quality, this system integrates an advanced temperature control system, a precision optical system, and powerful software analysis functions. It supports a wide range of applications, such as qualitative/quantitative analysis, genotyping, allele identification, HRM, and melting curve analysis. The product utilizes side-scan technology, where signals from all channels are collected simultaneously. It has powerful software and hardware functions to meet different needs.

Specification

Model	PCR-Q96-6P
Sample Capacity	96-well plate, 12*8 strips, 96*0.2ml single tubes
Consumables	0.1/0.2ml tubes, 0.1/0.2ml 8-tube strips, 0.1/0.2ml skirtless and semi-skirted 96-well plates (0.2 ml recommended)
Reaction Volume	10~100μL
Temperature Range	0~100°C (Resolution: 0.1°C)
Max. Ramp Rate	8.0°C/s
Temp. Control Accuracy	±0.1°C
Uniformity	±0.20°C
Accuracy	±0.20°C
Gradient Spread	0.1~42°C
Hot Lid Temperature	30~115°C (Adjustable, default 105°C)
Lid Operation	Automatic hot lid
Temperature Control	Block/Tube
Excitation Wavelength	300nm~810nm
Emission Wavelength	500nm~810nm
Detection Channels	6 channels
Detection Method	Simultaneous scanning of all channels
Scan Period	5 seconds for full 96-well scan
Factory Calibrated Dyes	F1: FAM/SYBR Green/ EvaGreen; F2: HEX/VIC/JOE/TET/YELLOW; F3: ROX/Texas Red; F4: Cy5; F5: Cy5.5; F6: Cy3 (customized)
Excitation	Long-life LED
Detection	High-sensitivity photoelectric detector
Dynamic Range	1~10 ¹⁰ copies
Sensitivity	1 copy
Software Functions	Qualitative/absolute quantification, relative quantification, genotyping, HRM, melting curve, standard curve, allele identification, temperature gradient, etc.
Remote Monitoring	Can be connected to laboratory management system
Automation Platform	Can be used with automated workstations
Data Export Formats	Excel, CSV, TXT, PDF
Printing	Direct report printing supported
Control Method	12.1-inch color touchscreen; PC control supported
Communication	USB 2.0, RS 232
Electricity	100~240 VAC, 50~60 Hz
Power	1500W
Dimensions (L*W*H)	520*350*330mm
Weight	32kg