eQ162C/2CP/4CP

Real-time PCR System

The system is suitable for PCR reaction and quantitative detection in immunology, human genome engineering, forensic science, oncology, tissue and group biology, paleontology, zoology, botany and other fields

The system is optimized for configuration, especially for small sample size, rapid on-site inspection and quarantine disease prevention and control (such as African swine fever, bird flu, etc,), food safety, agriculture, forestry and biochemistry.

Specification

Model	eQ1620	eQ162Cp	eQ164CP
Sample volume	16*0.2ml single tube or 8-strip transparent tube (except for white opaque tube), you can mark the tube with markers on the cover of the tube.		
Applicable reagents	The system is an open platform, suitable for various real-time PCR reagents, including fast extraction reagents, non-extraction reagents or direct amplification reagents and other low-concentration PCR reagents.		
Reaction volume	5-100ul		
Dynamic range	1-10^9 Copies		
Color wavelength	400-700nm		
Optical sensor	PMT	PD	PD
Dyes and probes	CH1:FAM、SYBR Greenl;CH2:HEX、JOE、MC、ROX.		CH1: FAM、SYBR Green I; CH2:HEX、JOE、VIC、TAMRA; CH3:ROX、CALRED: CH4:CY5、QUASAR
Detection technology	Scientific grade, suitable for micro-reaction system.	Double PD detection, practical grade, suitable for conventional reaction system.	Four PD detection, independent excitation fluorescence detection, suitable for multiple PCR.
Unique design of DFD photoelectric module	DFD two-dimensional precision photoelectric module, independent 4-color channel, micro-gap direct photometry, high signal-to-noise ratio, Strong ability to resist environmental light interference, The crosstalk between fluorescent channels is very low to avoid misjudgment of amplification results		
Sensitivity	1 Copy		
Rn	>0.998		
CV	≤0.6%		
Block setting range	10-99.9°C		

Temperature control mode	Tube mode. Real temperature of simulated reagent.
Refrigeration technology	Peltier
ETSC block temperature equalization technology	The know-how of block edge temperature self-compensation design (ETSC) not only reduces the weight of the block, but also achieves excellent temperature uniformity, which effectively shortens the time of PCR experiment.
Precision of temperature control	≤0.1°C
Display resolution	0.1°C
Temperature accuracy	≤0.2°C
Temperature uniformity	≤±0.2°C
Max, ramping rate	≥4°C/s
Avg, ramping rate	≥2.5°C/s(50-90°C)
Hot lid	30-105°C, Default 105°C.
Operating mode	Operate through PC (provided by customer). one PC can be used to control multiple PCR machines to form N * 16 PCR array to run N PCR experiments simultaneously, which is flexible and changeable.
PC operating system	Windows7/10
Com. interface	RS232./USB
Software functions	It has functions of system settings (password permission), experimental parameter settings, sample information input, operation management, data export EXCEL, general view of PCR program, real-time amplification curve display, channel crosstalk correction, criterion setting, automatic report, curve capture, etc.
Analytical functions	Standard curve, Relative Quantitative curve and melting Curve(HRM)
Reports	The human/animal experiment report templates are preset in the system, and the report template is also customized. Results Judgment, fluorescence analysis curve, report printing and other functions.
Specialized biodegradation function	The built-in ultraviolet lamp (UV) can effectively degrade the aerosol contamination on the block and thermal hot lid, and the irradiation intensity is as high as 70uW/cm²
Operating indicator	Power on, in operation, successful communication, ultraviolet degradation (UV),. fault alarm. hot lid open alarm.
operating ambient	Ambient temperature:10-30 °C, relative humidity: 20-85% RH, elevation not higher than 2000 m. storage temperature:-20-60°C
Input power	100-240V~300VA
Dimensions(LxWxH)	324x212x122mm(A4 paper size)
Net weight	5.8Kg