Fluorescent Quantitative PCR Detection System

Introduction:

Real- time PCR is used for sensitive, specific detection and quantification of nucleic acid targets. We have developed powerful assay design algorithms, optimized qPCR regent, intuitive data analysis software, and flexible instrumentation to help harness the power of qPCR across a rich and diverse set of applications. Explore our robust solutions for your qPCR-based research.

Application:

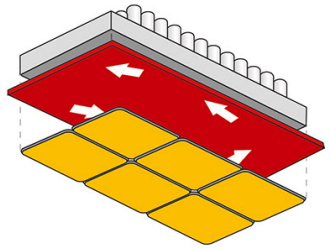
* Basic materials research
* Pathogen detection
* Public health safety surveillance
* Meat products adulterated
* Transgenic testing
* Food safety inspection
* Drug development and rational drug use
* Precise tumor treatment
* Gene expression
* Genetic screening
* Genotyping
* Stem cell research

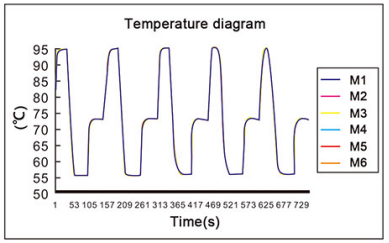
Feature:

* Six independent temperature control.
* Thermal compensation technology of temperature module.
* No edge effect of temperature and optics have.
* Maintenance-free long - life continuous spectral excitation source.
* Synchronous and fast acquisition of low temperature CCD 0.15s in cold state.
* Relative quantitative high sensitivity 1.5 times effective discrimination.
* Flexible, open and user-friendly software platform.
* Open reagent consumable platform.

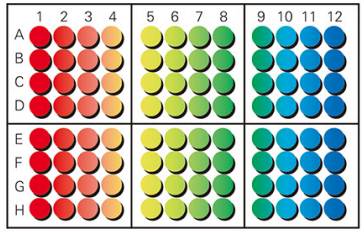
Temperature Control Module:

On the basis of the six independent temperature control technology, using the enclosed liquid heat transfer efficiency, combined with environmental scanning monitoring regulation auxiliary infrared with heating and intelligent variable frequency system voltage, current, ensures the module heating speed, effectively prevents temperature overshoot no edge effect and the evaporation temperature, not only saves your precious time to amplify the required temperature uniformity and the repeatability of the results achieved perfection, no matter what kind of test mode, application, it can get good data uniformity and repeatability.





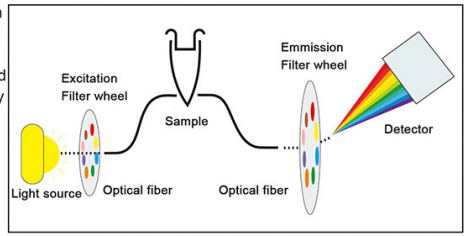
Temperature control repeatability diagram of 6 temperature zones



Renderings of different temperature distributions of reaction plate

Optical Module:

On behalf of the world's leading optical transmission and collection technology, use optical fiber after the excitation light source for reaction system and the emission of light from the reaction system after excitation, the energy attenuation without conduction to each reaction holes and cold CCD, from physical properties to ensure consistency and authenticity of the excitation and detection, and greatly improve the detection sensitivity, can make your low effective detection and distinguish easily copy sample. The channel mismatch function is added to extend the application field of qPCR to the protein level and provide a new way for the construction of multiple systems of diagnostic reagents



Channel	Excitation Wavelength (nm)	Emission Wavelength (nm)	Examples of Fluorescent Dyes
1 Blue	460~480	512~528	FAM/SYBR Green I/Eva Green…
2 Green	515~535	562~578	VIC/JOE/HEX/TET…
3 Yellow	560~580	612~628	ROX/Texas Red …
4 Red	610~630	662~678	Cy5…
5 Red	660~680	702~718	Cy5.5/Quasar705…

- Channel combination: 6-color excitation light filter and 6-color detection light filter can detect≥21 different fluorescence spectra, channels are completely open, supporting third-party reagent optimization Support FRET application.
- Multichannel static fluorescence function: analysis of starting template and end product.
- Filter can be customized according to customer need.