

## Wise choice of qPCR

### MA-6000 helps you steps forward

With many years of Real-Time PCR system development, we updated a novel Real-Time fluorescence quantitative PCR system MA-6000, which is equipped with innovative hardware, structure and optimized software. These features helps delivering high quality results.

### Performances

6 independent temperature control modules with pioneering superconductive technique for excellent thermal homogeneity.

Temperature compensational technique for thermal controlling.

Optical fiber conducted excitation signal to each vial physically eliminated temperature and optical edge effects.

Monochrome CCD collects fluorescence signal in 0.15s, with CCD cooling system which reduces the array's dark current during signal acquisition, improving the sensitivity of detector.

Easy access software interface for open and flexible applications.

Available for various consumable and reaction reagents.

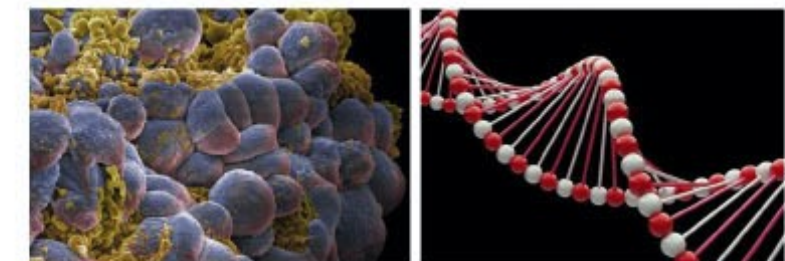
Automatic notification for completion via email, synchronously upload result to CLOUD.

Wide thermal range with 12 gradients.



### Applications

- Scientific research
- Pathogen detection
- Public health disease outbreak surveillance
- Genetically modified organism (GMO) certification
- Precision medication
- Gene expression analysis
- Genetic screening
- Genotyping
- Stem cell research
- Meat adulteration detection
- Food hygiene inspection



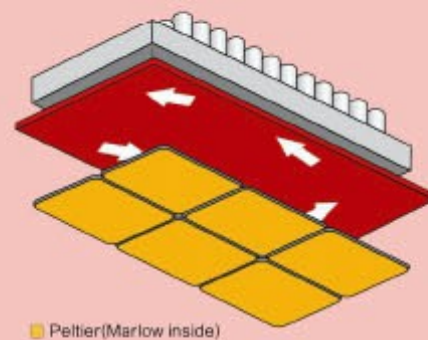
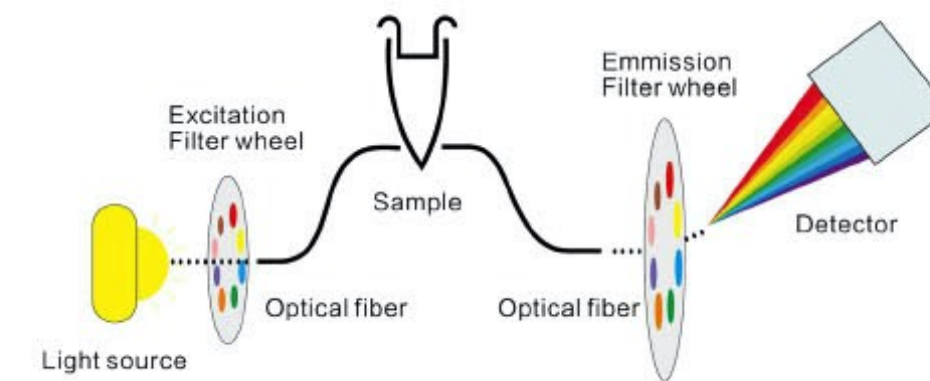


## The world's leading optical detection technology and advantages

### Temperature Control Technology and Innovation

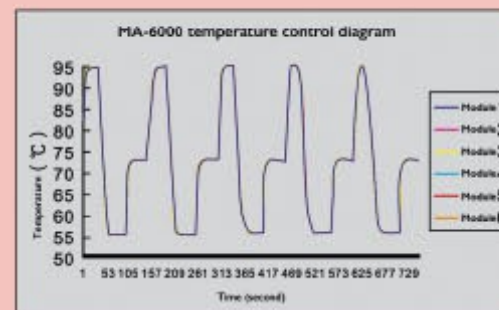
MA-6000 employs a 6 independent temperature control module, associated with an infrared environmental scanning and monitoring system for temperature control, secured the precision for the thermal block. A novel designed thermal gradient customizes 12 various thermal conditions for multiple reaction requests in scientific research, maximize convenience for your experiments. Meanwhile, the platinum sensor prevents temperature overshoot and undershoot, homogenized temperature variance, presents excellent repeatable data output, facilitates your prosperity.

A world leading technology of optical conduction and detection is applied to MA-6000. A highly functional heat-resistance optical fiber conducts full-spectrum halogen light source to samples without attenuation. The emission fluorescence signals are synchronously collect by monochrome CCD which associate with a cooling system, physically eliminates dark current on detection array. MA-6000 ensures extraordinary detection sensitivity, extends the application of thermal cycler from nucleic acid to biotinylated protein, expands a brand new path for multiplex diagnosis in clinic field.

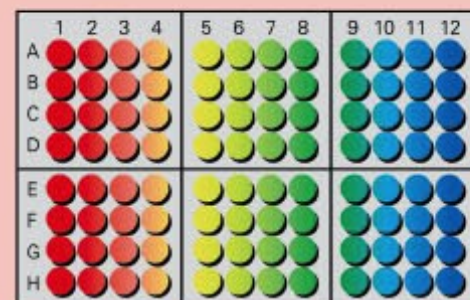


■ Peltier(Marlow inside)

Temperature control repeatability of 6 temperature zones



Different temperature distribution on reaction plate



Channel	Excitation wavelength(nm)	Emission wavelength(nm)	Examples of fluorescent dyes
1	460~480	512~528	FAM/SYBR <sup>®</sup> Green I/Eva Green
2	515~535	562~578	VIC/JOE/HEX/TET
3	560~580	612~628	ROX/Texas Red
4	610~630	662~678	Cy5
5	660~680	702~718	Cy5.5/Quasar-705
6	Available for customized		

Flexible combination of 6 optical excitation and emission filters detect over 21 fluorescence dyes and probes. Moreover, it supports FRET for overlap between excitation and emission fluorescence spectrum analysis.

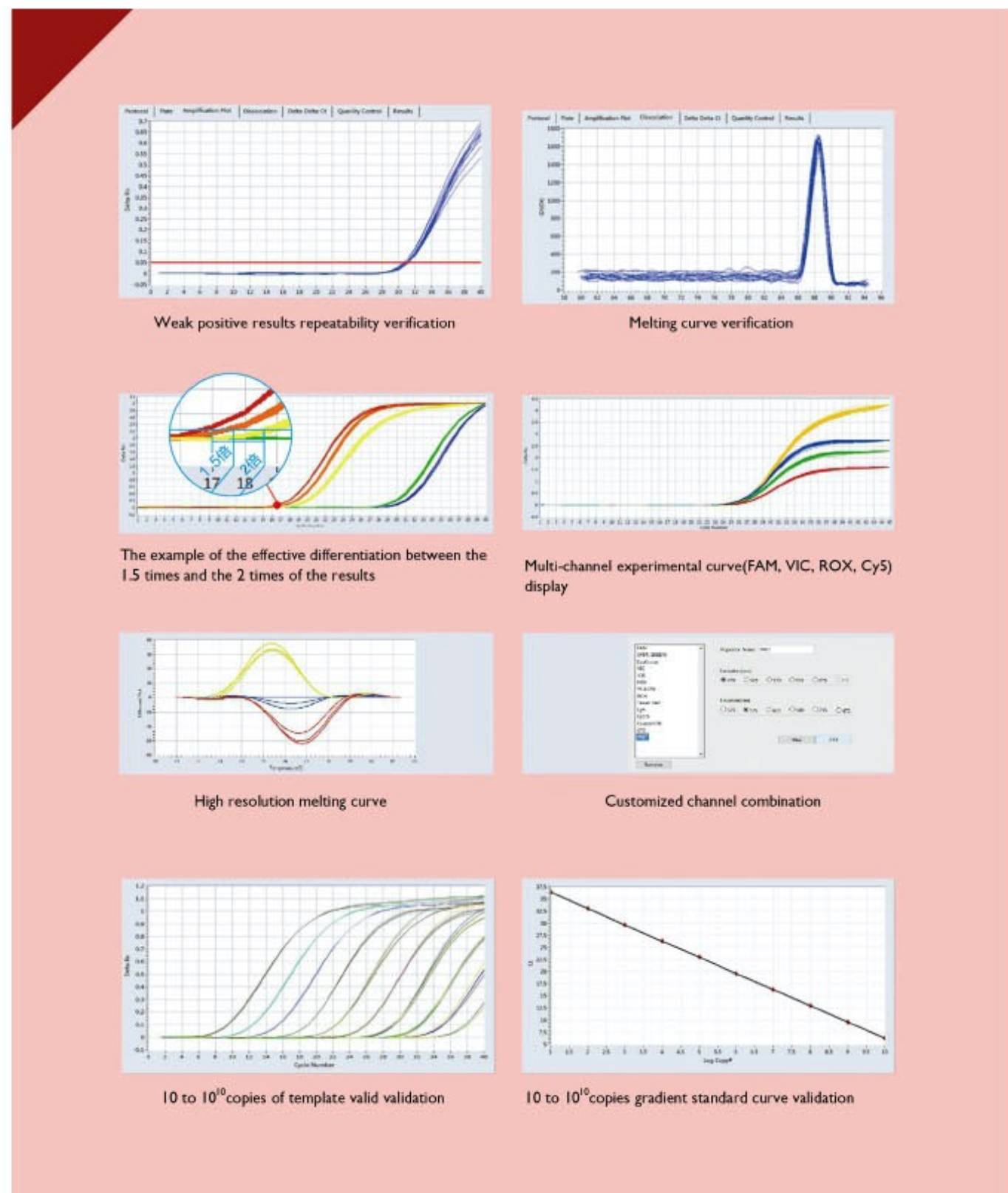
Multi-channel static quenching detection analyze the template concentration and application product.

Optical filter offers define by customer's request.



## Abundant software platform

Real-time monitoring, automatic identification and calculation of positive and negative results, automatic establishment of standard curve, absolute/relative quantitative, multiple quantitative, melting curve, gene mutation, quality control graphics analysis, fluorescence calculation, PCR amplification efficiency and high resolution melting curve (optional), etc.



## Specifications

### PCR Module

Sample capacity	96 x 200 µl tubes or 12 x 8-well PCR strips or 1 x 96-well plate
Temperature range	4-100 °C
Maximum ramp rate	3.5 °C/s for heating; 3.2 °C/s for cooling
Temperature accuracy	±0.1 °C
Temperature uniformity	±0.25 °C
Temperature monitoring method	6 independent zones for temperature surveillance
Gradient capability	Yes
Excitation light source	Full spectrum halogen lamp (5 years warranty)
Excitation spectrum	380-780 nm
Excitation channels	Built-in 6 (including 1 extension channels)
Fluorescence dyes/probes	FAM/SYBR® Green I/VIC/HEX/TET/Cy3/Cy3.5/JOE/ Yellow 555/ROX/Texas Red/Cy5/Cy5.5/LC Red/Tamara
Detection channels	96 two-way heat-resistance optical fibers
Data resolution	5,000-10,000 copies with 99.8% confidence; 1.5 times differentiation for single reaction

### Thermo Cycler

Power supply	100-240 V
Frequency	50-60 Hz
Dimensions (W x H x D) (cm)	54.8 x 38.8 x 28.8
Weight	23kg
Software	Win7, Win8, Win10, etc..

