Global Headquarters

SUZHOU MOLARRAY CO., LTD.

Service HOTLINE **86-400-806-1255**

Address: 1-2/F, Bldg. C7, No. 218, Xinghu St., SIP, Suzhou, China

www.molarray.com

Molarray reserves all the rights for final explanation.

Version: 202206 V1

雅睿生物 Molarray

REAL-TIME FLUORESCENCE QUANTITATIVE PCR SERIES

Suzhou Molarray Co., Ltd.

Profession, Innovation and People oriented

Profession, Innovation and People oriented

Molarray

ABOUT US

Suzhou Molarray Co., Ltd. was established in 2010. As a hi-tech enterprise with molecular diagnosis technology, Molarray is located in the China-Singapore Suzhou Industrial Park (SIP).

Molarray has accumulated self-developed technologies in automatic control, image processing, optical detection, microscopy, liquid circuits, electronic application and software, and has more than 20 patents and 13 software copyrights.

Molarray independently developed the world's leading gene detection platform, automatic liquid extraction platform and automatic microbial detection platform. With these successful technology platforms, it formed the product portfolio of fluorescence quantitative PCR, Loop-mediated isothermal amplification PCR, portable fluorescence quantitative PCR, nucleic acid extraction and loading system, and nucleic acid rapid diagnosis system.

Adhering to the spirit of Profession, Innovation and People oriented, Molarray products serve the global market wholeheartedly.

Global Headquarters

Development

THE COMPANY ESTABLISHED — 2010

In 2010, Molarray was established in SIP, with 3,000 square meters of production workshop.

R&D/MARKETING CENTER ESTABLISHED — 2016

In 2016, the R&D center was established in Canada to realize the integration of research, production and sales.

2017

In 2017, Molarray obtained the manufacturing license for Class III medical devices.

2018

In 2018, MA-1620Q portable qPCR solved a multitude of detection problems during outbreaks of African swine fever.

RAPID DEVELOPMENT — 2020

In 2020, Molarray made great contributions to the national epidemic prevention, donated hundreds of equipment, and received the commendation from the State Council.

IPO PREPARATION & EXECUTION — 2021

In June 2021, Molarray completed the shareholding system transformation.

2022

Stay true to our original aspiration and forge ahead.

Qualification & Reputation


质量管理体系认证证书

ISO 9001


医疗器械质量管理体系认证证书

ISO 13485

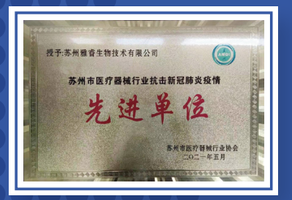

CE

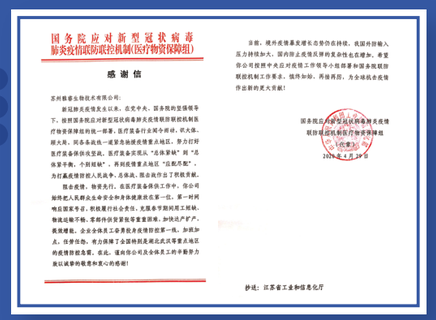

专利登记簿副本


专利登记簿副本


发明专利证书


高新技术企业证书




国务院应对新型冠状病毒肺炎疫情联防联控机制(医疗物资保障组)
感谢信


工业和信息化部司局简函
感谢信

Main Products

MA-6000

MA-3200Q

MA-9600P

MA-1600Q Series

MA-688

P30

Application Field

BASIC RESEARCH

Research on molecular cloning, gene expression and genotyping in scientific research institutes and universities

MEDICAL DIAGNOSIS

Pathogen detection, genetic screening, tumor diagnosis in medical institutions

EPIDEMIC PREVENTION AND CONTROL

Identification and monitoring of epidemics (avian influenza, SARS, dengue fever, etc.) by national systems such as CDC and Customs

Molarray

Technological Innovation

2000 Precise and intelligent temp. control over six independent zones for PCR optimization

2000 The optical fiber transmission of excitation and emission light, effectively solved the optical edge effect

2003 6 independent channels of fluorescence quantitative multiplex detection

2005 The tech of infrared thermal synchronization temp. improved the ramp rate and temp. uniformity

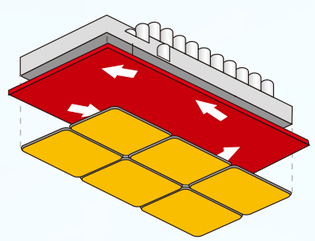
2008 Humanized integration of Windows workstation and system

2012 Multiple detection of eight independent channels and enabled channels mismatch function

2015 Thermal superconducting tech improved the ramp rate and temp. uniformity further

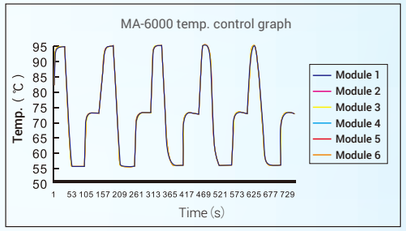
TEMP. CONTROL INNOVATION

Based on six-zone independent temp. control, using the high efficiency of closed liquid conduction, combining with the auxiliary infrared heating adjusted by the environmental scanning monitoring and intelligent frequency conversion of voltage and current system, to ensure a fast ramp rate and effectively prevent temp. overshoot without the edge effect and evaporation, enable to achieve better temp. uniformity and reproducibility in amplification, while saving time and increasing efficiency.

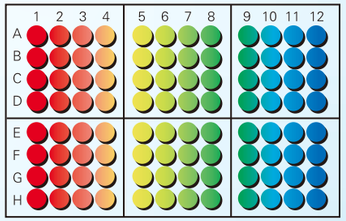


Semiconductor Chilling Plate（Marlow）

Temp. Sensor



6-zone temp. control repeatability graph

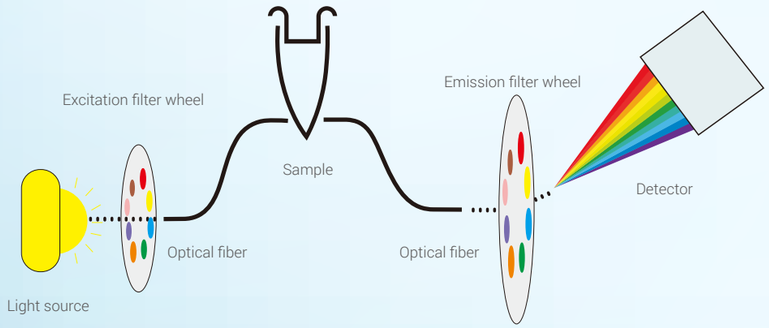


Different temp. distributions of plate

Technological Innovation

OPTICAL DETECTION ADVANTAGES

Representing the world's leading optical transmission and collection technology, the optical fiber is used to transmit the excitation and emission light to each reaction well and cooled CCD without attenuation, while ensuring the consistency and authenticity of excitation and detection, improving the detection sensitivity to enable low-copy samples to be effectively detected. The added channel mismatch function extends the application field of qPCR to the protein level, and provides a new way for the construction of multiplex systems of diagnostic reagents.



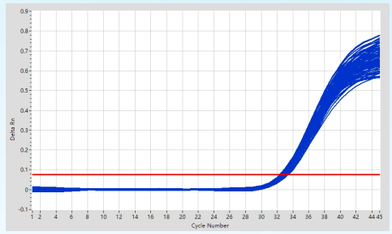
Channel	Excitation wavelength (nm)	Emission wavelength (nm)	Examples of fluorescent dyes
1 Blue	460~480	512~528	FAM/SYBR Green I/EvaGreen···
2 Green	515~535	562~578	VIC/JOE/HEX/TET···
3 Yellow	560~580	612~628	ROX/Texas Red···
4 Red	610~630	662~678	Cy5···
5 Red	660~680	702~718	Cy5.5/Quasar705···
6 Customizable			

- ◆ Channel combination: 6-color excitation and emission filter can detect ≥ 21 different fluorescence spectra, ≥ 6 channels are completely open. Supporting the third-party reagent optimization and FRET application.
- ◆ Multi-channel static fluorescence function: Analysis of starting template and end product.
- ◆ Filters can be customized according to customer needs.

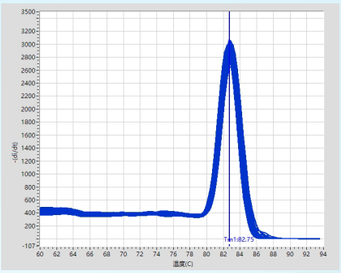
Technological Innovation

HUMANIZED SOFTWARE PLATFORM

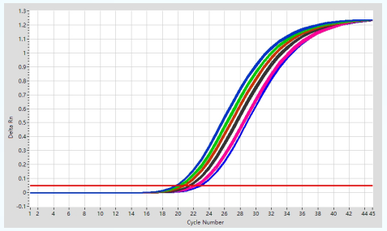
Real-time monitoring, automatic identification and calculation of positive and negative results, automatic establishment of standard curve, absolute/relative quantification, multiple quantification, melting curve, gene mutation, quality control graphic analysis, fluorescence calibration, PCR amplification efficiency, etc.



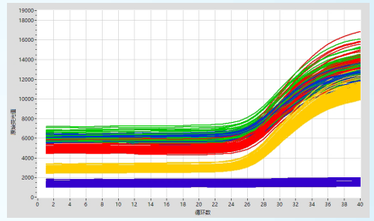
Weak positive repeatability validation



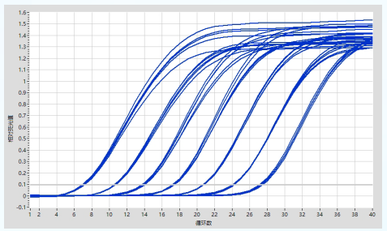
Melting curve validation



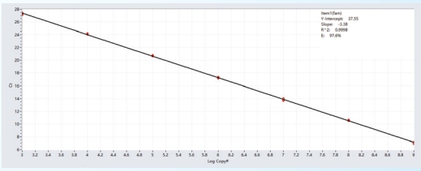
1.5 times effective distinction



Multi-channel experimental curves (FAM、VIC、ROX、Cy5)



10 to 10^{10} copies template validation



10 to 10^{10} gradient standard curve validation

- ◆ Chinese/English system, suitable for Win7, Win8, Win10, etc.

Main Products

Awarded As Excellent Medical Equipment

MA-6000

FEATURES

- 96*0.2ml, compatible with 8-tube strip and single tube
- 6-zone independent temp. control to set different reaction conditions
- 5-color fluorescence channels and support the custom 6th one
  Thermal compensation tech without edge effects, gradient function in wide temp. range
- Maintenance-free long-life continuous-spectrum excitation light source
- Isometric optical fiber conduction tech in excitation and detection
- Simultaneous fast acquisition of 0.15s per color by cooled CCD
- High-resolution melting curve, 1.5 times high sensitivity distinction of relative quantitative
- Support multiple connections to one computer and LIMS/LIS system

SPECIFICATIONS

Basic	Sample Capacity	96x0.2ml
	Applicable Consumables	0.2ml single tube, 8x0.2ml tube strip, 96-well plate
	PCR volume range	10-120μL
	Working Temperature	15-30°C
	Storage Temperature	-20-55°C
	Ambient Relative Humidity	≤85%
	Dimensions and Weight	600*390*320mm (W*D*H), 23kg
	Power	100-240V, 50Hz, 1500VA
Temp. Control System	Heating/cooling Method	Peltier, independent and intelligent temp. control over 6 zones
	Temperature range	4℃-100°C
	Ramp Rate	Heating: 3.5°C/S, Cooling: 3.5°C/S
	Temperature Accuracy	±0.1°C
	Temperature Uniformity	±0.2°C
	Temperature Control technology	6-zone independent temp. control combined with thermal compensation tech to reduce edge effect
	Gradient Temp. Function	Yes
	Gradient Temp. Columns	12
	Gradient Temp. Range	1°C-32°C
	Gradient Temp. Zones	6
	Gradient Temp. Set Range	30°C-100°C (Room temperature is lower than 28°C)
Detection System	Excitation source	Halogen Tungsten Lamp
	Detection Device	-20°C Cooled CCD
	Light Propagation Medium	Dual-96 high temperature resistant optical fibers for Space
	Detection channels	5（Enable to 6）
	Excitation range	1st Channel: 470nm±10nm 2nd Channel: 525nm±10nm 3rd Channel: 570nm±10nm 4th Channel: 620nm±10nm 5th Channel: 670nm±10nm 6th Channel: Customized
	Detection range	1st Channel: 512nm-528nm 2nd Channel: 562nm-578nm 3rd Channel: 612nm-628nm 4th Channel: 662nm-678nm 5th Channel: 702nm-718nm 6th Channel: Customizable
	Dye compatibility (name)	FAM/SYBR Green/Eva Green/LC Green/Fluorescein;VIC/HEX/TET/Cy3/JOE/Alexa555; ROX/Cy3.5/Texas Red; Cy5/LC Red640; Cy5.5/LC Red705; Tamara
	Detection Sensitivity	≥1 copy
	Confidence Coefficient	99.90%
	Sensitivity	Allowed 1.5-fold in single reaction
	Sample Detection Repeatability	CV≤1%
	Linear Range	1-10^{10}
	Sample Linearity	≥0.99
Software	Software Language	Chinese/English
	Control Method	USB connection to PC, multiple connections, support LIMS/LIS system
	Software Function	Real-time monitoring, automatic identification and calculation of positive and negative results, automatic establishment of standard curve, absolute/relative quantification, multiple quantification, melting curve, gene mutation, key method genotyping (Taqman probe method), Tm value determination, quality control graphic analysis , PCR amplification efficiency, etc.
	Output	EXCEL/WORD/PDF
	Medical Device Registration	CFDA No. 20173401410
	Safety compliances	CE/ISO9001/ISO13485

Main Products

MA-9600P

FEATURES

- 96*0.2ml, compatible with 8-tube strip and single tube
- 6-zone independent temp. control to set different reaction conditions
- 5-color fluorescence channels and support the custom 6th one
- 7 inch high-definition capacitive touch screen, easy to operate
- Support multiple connections to one computer and LIMS/LIS system

SPECIFICATIONS

Basic	Sample Capacity	96x0.2ml
	Applicable Consumables	0.2ml single tube, 8x0.2ml tube strip, 96-well plate
	PCR volume range	15-120μL
	Working Temperature	15-30°C
	Storage Temperature	-20-55°C
	Ambient Relative Humidity	≤85%
	Dimensions and Weight	540*351*310mm (W*D*H), 20kg
	Power	100-240V, 50-60Hz, 1500VA
Temp. Control System	Heating/cooling Method	Peltier, independent and intelligent temp. control over 6 zones
	Temperature range	4°C-100°C
	Ramp Rate	Heating: 4.2°C/S, Cooling: 4.2°C/S
	Temperature Accuracy	±0.1°C
	Temperature Uniformity	±0.2°C
	Temperature Control technology	6-zone independent temp. control combined with thermal compensation tech to reduce edge effect
	Gradient Temp. Function	Yes
	Gradient Temp. Columns	12
	Gradient Temp. Range	1°C-32°C
	Gradient Temp. Zones	6
	Gradient Temp. Set Range	30°C-100°C (Room temperature is lower than 28°C)
Detection System	Excitation source	LED
	Detection Device	PD
	Light Propagation Medium	Dual-96 high temperature resistant optical fibers for Space
	Detection channels	5（Expandable to 6）
	Excitation range	1st Channel: 470nm±10nm 2nd Channel: 525nm±10nm 3rd Channel: 570nm±10nm 4th Channel: 620nm±10nm 5th Channel: 670nm±10nm 6th Channel: Customized
	Detection range	1st Channel: 512nm-528nm 2nd Channel: 562nm-578nm 3rd Channel: 612nm-628nm 4th Channel: 662nm-678nm 5th Channel: 702nm-718nm 6th Channel: Customizable
	Dye compatibility (name)	FAM/SYBR Green/Eva Green/LCGreen/Fluorescein; VIC/HEX/TET/Cy3/JOE/Alexa555; ROX/Cy3.5/Texas Red; Cy5/LC Red640; Cy5.5/LC Red705; Tamara
	Detection Sensitivity	≥1 copy
	Confidence Coefficient	99.90%
	Sensitivity	Allowed 1.5-fold in single reaction
	Sample Detection Repeatability	CV≤1%
	Linear Range	1-10^{10}
	Sample Linearity	≥0.99
Software	Software Language	Chinese/English
	Control Method	Touch screen operation, connect to PC for data analysis, multiple connections, support LIMS/LIS system
	Software Function	Real-time monitoring, automatic identification and calculation of positive and negative results, automatic establishment of standard curve, absolute/relative quantification, multiple quantification, melting curve, gene mutation, key method genotyping (Taqman probe method), Tm value determination, quality control graphic analysis , PCR amplification efficiency, etc.
	Output	EXCEL/WORD/PDF
	Safety compliances	CE/ISO9001/ISO13485

Main Products

FEATURES

- 48*0.2ml, compatible with 8-tube strip and single tube
- Independent and intelligent temp. control over 4 zones
- 4-color fluorescence channels, applicable for most tests
- Support multiple connections to one computer and LIMS/LIS system
- Run experiments in 30s without preheating time

MA-688

SPECIFICATIONS

Basic	Sample Capacity	48x0.2ml
	Applicable Consumables	0.2ml single tube, 8x0.2ml tube strip
	PCR volume range	15-120μL
	Working Temperature	15-30°C
	Storage Temperature	-20-55°C
	Ambient Relative Humidity	≤85%
	Dimensions and Weight	466*310*273mm (W*D*H), 17.5kg
	Power	220 V, 50 Hz, 865VA
Temp. Control System	Heating/cooling Method	Peltier, independent and intelligent temp. control over 4 zones
	Temperature range	4°C-100°C
	Ramp Rate	Heating: 4°C/S, Cooling: 4°C/S
	Temperature Accuracy	±0.1°C
	Temperature Uniformity	±0.15°C
	Temperature Control technology	4-zone independent temp. control combined with thermal compensation tech
	Gradient Temp. Function	Yes
	Gradient Temp. Columns	8
	Gradient Temp. Range	1°C-32°C
	Gradient Temp. Zones	4
	Gradient Temp. Set Range	30°C-100°C (Room temperature is lower than 28°C)
Detection System	Excitation source	LED
	Detection Device	PD
	Light Propagation Medium	Dual-48 high temperature resistant optical fibers for Space
	Detection channels	4
	Excitation range	1st Channel: 470nm±10nm 2nd Channel: 525nm±10nm 3rd Channel: 570nm±10nm 4th Channel: 628nm±10nm
	Detection range	1st Channel: 520nm±10nm 2nd Channel: 570nm±10nm 3rd Channel: 628nm±10nm 4th Channel: 670nm±10nm
	Dye compatibility (name)	FAM/SYBR Green/Eva Green/LC Green/Fluorescein; VIC/HEX/TET/Cy3/JOE; ROX/Cy3.5/Texas Red; Cy5 etc
	Detection Sensitivity	≥1 copy
	Confidence Coefficient	99.90%
	Sensitivity	Allowed 1.5-fold in single reaction
	Sample Detection Repeatability	CV≤1%
	Linear Range	1-10^{10}
	Sample Linearity	≥0.99
Software	Software Language	Chinese/English
	Control Method	Connect to PC for data analysis, USB, support LIMS/LIS system
	Software Function	Real-time monitoring, automatic identification and calculation of positive and negative results, automatic establishment of standard curve, absolute/relative quantification, multiple quantification, melting curve, gene mutation, key method genotyping (Taqman probe method), Tm value determination, quality control graphic analysis , PCR amplification efficiency, etc.
	Output	EXCEL/WORD/PDF
	Medical Device Registration	CFDA No. 20173401410
	Safety compliances	CE/ISO9001/ISO13485

Main Products

FEATURES

- 32*0.2ml, compatible with 8-tube strip and single tube
- Independent and intelligent temp. control over 2 zones
- 4-color fluorescence channels, applicable for most tests
- 8 inch high-definition capacitive touch screen, easy to operate
- Support multiple connections to one computer and LIMS/LIS system

MA-3200Q

SPECIFICATIONS

Basic	Sample Capacity	32x0.2ml
	Applicable Consumables	0.2ml single tube, 8x0.2ml tube strip
	PCR volume range	15-120μL
	Working Temperature	15-30°C
	Storage Temperature	-20-55°C
	Ambient Relative Humidity	≤85%
	Dimensions and Weight	370*280*250mm (W*D*H), 9.7kg
	Power	220 V, 50 Hz, 450VA
Temp. Control System	Heating/cooling Method	Peltier, independent and intelligent temp. control over 2 zones
	Temperature range	4°C-100°C
	Ramp Rate	Heating: 5.2°C/S, Cooling: 5.2°C/S
	Temperature Accuracy	±0.1°C
	Temperature Uniformity	±0.2°C
Detection System	Excitation source	LED
	Detection Device	PD
	Light Propagation Medium	Optical fibers for Space
	Detection channels	4
	Excitation range	1st Channel: 470nm±10nm 2nd Channel: 525nm±10nm 3rd Channel: 570nm±10nm 4th Channel: 628nm±10nm
	Detection range	1st Channel: 520nm±10nm 2nd Channel: 570nm±10nm 3rd Channel: 628nm±10nm 4th Channel: 670nm±10nm
	Dye compatibility (name)	FAM/SYBR Green/Eva Green/LC Green/Fluorescein; VIC/HEX/TET/Cy3/JOE; ROX/Cy3.5/Texas Red; Cy5 etc
	Detection Sensitivity	≥1 copy
	Confidence Coefficient	99.90%
	Sensitivity	Allowed 1.5-fold in single reaction
	Sample Detection Repeatability	CV≤1%
	Linear Range	1-10^{10}
	Sample Linearity	≥0.99
Software	Software Language	Chinese/English
	Control Method	8 inch touch screen operation and data analysis, multiple connections, support LIMS/LIS system
	Software Function	Real-time monitoring, automatic identification and calculation of positive and negative results, automatic establishment of standard curve, absolute/relative quantification, multiple quantification, melting curve, gene mutation, Tm value determination, quality control graphic analysis , PCR amplification efficiency, etc.
	Output	EXCEL/WORD/PDF
	Medical Device Registration	CFDA No. 20223220527
	Safety compliances	CE/ISO9001/ISO13485

Main Products

FEATURES

- Small size and light weight for outdoor experiments
- 16*0.2ml, compatible with 8-tube strip and single tube
- 3-color fluorescence channels, applicable for various tests
- 7 inch high-definition capacitive touch screen, easy to operate
- Convenient and efficient multiple connections

MA-1600Q Series

SPECIFICATIONS

Basic	Sample Capacity	16x0.2ml		
	Applicable Consumables	0.2ml single tube, 8x0.2ml tube strip		
	PCR volume range	15-120μL		
	Working Temperature	4-35°C		
	Storage Temperature	-20-55°C		
	Ambient Relative Humidity	≤85%		
	Dimensions and Weight	320*250*155mm (W*D*H), 4.5kg		
	Power	220 V, 50 Hz, 180VA, optional external battery		
Temp. Control System	Heating/cooling Method	Peltier, intelligent temp. control		
	Temperature range	4°C-100°C		
	Ramp Rate	Heating: 4°C/S, Cooling: 4°C/S		
	Temperature Accuracy	±0.1°C		
	Temperature Uniformity	±0.2°C		
Detection System	Excitation source	LED		
	Detection Device	PD		
	Light Propagation Medium	Optical fibers for Space		
	Detection channels	2	3	4
	Excitation range	1st Channel: 470nm±10nm 2nd Channel: 525nm±10nm	1st Channel: 470nm±10nm 2nd Channel: 525nm±10nm 3rd Channel: 570nm±10nm	1st Channel: 470nm±10nm 2nd Channel: 525nm±10nm 3rd Channel: 570nm±10nm 4th Channel: 628nm±10nm
	Detection range	1st Channel: 520nm±10nm 2nd Channel: 570nm±10nm	1st Channel: 520nm±10nm 2nd Channel: 570nm±10nm 3rd Channel: 620nm±10nm	1st Channel: 520nm±10nm 2nd Channel: 570nm±10nm 3rd Channel: 628nm±10nm 4th Channel: 670nm±10nm
	Dye compatibility (name)	FAM/SYBR Green/Eva Green/ LC Green/Fluorescein; VIC/HEX/TET/Cy3/ JOE/Alexa555, etc.	FAM/SYBR Green/Eva Green/ LC Green/Fluorescein; VIC/HEX/TET/Cy3/ JOE/Alexa555; ROX/Cy3.5/Texas Red, etc.	FAM/SYBR Green/Eva Green/ LCGreen/Fluorescein; VIC/HEX/TET/Cy3/JOE/Alexa555; ROX/Cy3.5/Texas Red; Cy5/LC Red640, etc.
	Detection Sensitivity	≥1 copy		
	Confidence Coefficient	99.90%		
	Sensitivity	Allowed 1.5-fold in single reaction		
	Sample Detection Repeatability	CV≤1%		
	Linear Range	$1\text{-}10^{10}$		
	Sample Linearity	≥0.99		
Software	Software Language	Chinese/English		
	Control Method	7 inch touch screen operation and data analysis		7 inch touch screen operation and data analysis, multiple connections, support LIMS/LIS system
	Software Function	Real-time monitoring, automatic identification and calculation of positive and negative results, automatic establishment of standard curve, absolute/relative quantification, multiple quantification, melting curve, gene mutation, Tm value determination, quality control graphic analysis , PCR amplification efficiency, etc.		
	Output	EXCEL/WORD/PDF		
	Medical Device Registration	CFDA No.20203220944		
	Safety compliances	CE/ISO9001/ISO13485		

Main Products

FEATURES

- Handheld, small and light for outdoor experiments
- 3*0.2ml reaction module
- 4-color fluorescence channels, applicable for most tests
- Bluetooth tablet connection, easy to operate

P30

SPECIFICATIONS

Basic	Sample Capacity	3x0.2ml
	Applicable Consumables	0.2ml single tube
	PCR volume range	20-120μL
	Working Temperature	15-35°C
	Storage Temperature	-20-55°C
	Ambient Relative Humidity	≤85%
	Dimensions and Weight	130*130*220mm (W*D*H) , 2kg
	Power	100-240V, 50-60Hz, 180VA, optional external battery
Temp. Control System	Heating/cooling Method	Peltier, independent and intelligent temp. control
	Temperature range	4°C-100°C
	Ramp Rate	Heating: 7.5°C/S, Cooling: 7.5°C/S
	Temperature Accuracy	±0.1°C
	Temperature Uniformity	±0.15°C
Detection System	Excitation source	LED
	Detection Device	PD
	Light Propagation Medium	Optical fibers for Space
	Detection channels	4
	Excitation range	1st Channel: 470nm±10nm 2nd Channel: 525nm±10nm 3rd Channel: 570nm±10nm 4th Channel: 628nm±10nm
	Detection range	1st Channel: 520nm±10nm 2nd Channel: 570nm±10nm 3rd Channel: 628nm±10nm 4th Channel: 670nm±10nm
	Dye compatibility (name)	FAM/SYBR Green/Eva Green/LC Green/Fluorescein; VIC/HEX/TET/Cy3/JOE/Alexa555; ROX/Cy3.5/Texas Red; Cy5/LC Red640 etc.
	Detection Sensitivity	≥1 copy
	Confidence Coefficient	99.90%
	Sensitivity	Allowed 1.5-fold in single reaction
	Sample Detection Repeatability	CV≤1%
	Linear Range	$1\text{-}10^{10}$
	Sample Linearity	≥0.99
Software	Software Language	Chinese/English
	Control Method	Bluetooth tablet connection, breakpoint signal acquisition
	Software Function	Real-time monitoring, automatic identification and calculation of positive and negative results, report export
	Output	EXCEL/WORD/PDF
	Safety compliances	CE/ISO9001/ISO13485