PCA100/A200
Touch Screen PCR Analyzer

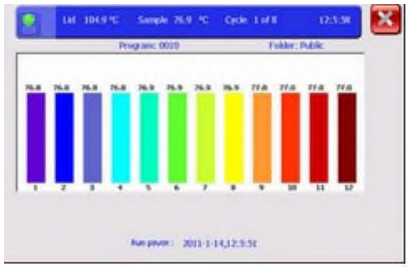
Specification

Newest Generation Peltier-based Technology, more Steady, Reliable and Durable
7” Color Full Touch Screen, Graphical Display of Protocols
Effortlessly Interchangeable Reaction Modules that Swap in Seconds without Tools.
Bilingual Interface (English and Chinese)
Unlimited storage of Protocols with USB Flash Drive

	96 Module：96wells×0.2ml
	9677 Module：96wells×0.2ml+77wells×0.5ml
Optional Module:	48 Module：48wells×0.2ml+48wells×0.5ml
(A100 without gradient)	108 Module：108wells×0.2ml+88wells×0.5ml
(A200 with gradient)	384 Module：384wells
	Multi-purpose Module: 9677 Module + In-situ Adapter

Temperature

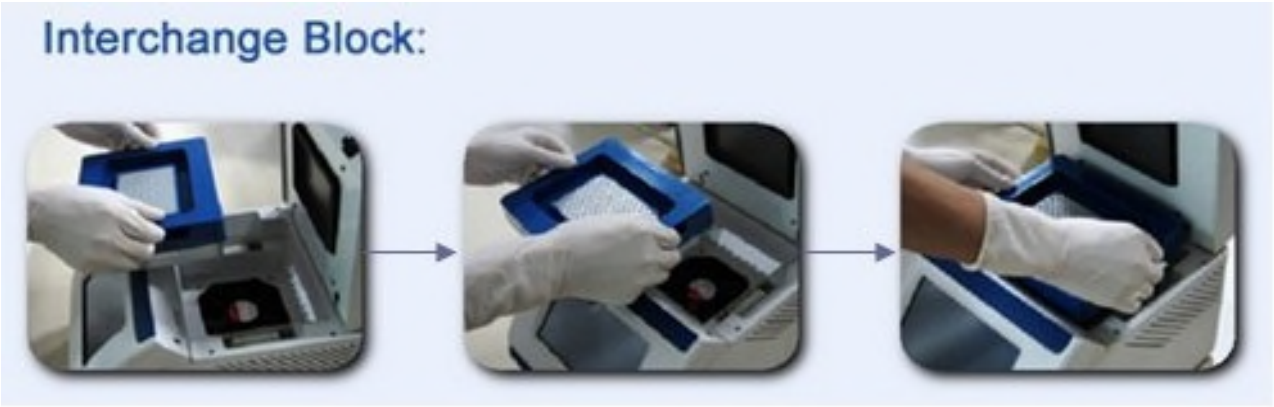
Block Temperature Range:	0℃～100℃
Max. Ramping Rate:	4℃/sec
Temperature Uniformity:	≤±0.2℃（at 95℃）



Heated Lid
Innovative Designed Two-in-One (Open/Lift) Lid
Auto Shut-off Heating Function of Lid at Low Temperature (＜30℃) of block
Steplessly Adjustable Lid, accommodates a wide range of PCR tubes and plates

Software
Max.30 Steps, multiple nested cycle availabl
100 Typical Cycles, multiple nested 60000 cycles
Time/Temp. Increment/Decrement is available for performing Long PCR and Touchdown PCR
Auto Pause; Auto restart after power failure
An Infinite incubation time at low temperature for overnight working
Multi-user log in with password-based authentication, free from worry of copy and alteration of protocols by others, ensure user's privacy and safety
Tm calculator: automatically calculates the melting and annealing temperature with two primer sequences, greatly improve work efficiency
Program wizard provides a quick method for creating PCR protocols in a few steps
Display recent run 10 programs for easy access
Get detailed running report, providing precise data support for analyzing of experimental results
Effortlessly Combine up to 50 units of A100/200 for remote control and management by computers

Other Features
Wide Range Power Supply 175V ~ 275V, 50-60Hz
Communication Ports: USB2.0, LAN and RS232
Power Consumption： Max.600W
Certificate: ISO 9001:2000, CE
Dimension（L×W×H）: 362×256×255mm
Net Weight: 7.3kgs



PCA300 Touch Screen PCR Analyzer (fast)

Optional Module	Standard Module	Gradient Module
Optional Module	96 Module：96wells×0.2ml 9677 Module： 96wells×0.2ml+77wells×0.5ml 48 Module： 48wells×0.2ml+48wells×0.5ml 108 Module： 108wells×0.2ml+88wells×0.5ml Multi-purpose: 9677 Module + In-situ Adapter	96 Module：96wells×0.2ml 9677 Module： 96wells×0.2ml+77wells×0.5ml 48 Module： 48wells×0.2ml+48wells×0.5ml 108 Module： 108wells×0.2ml+88wells×0.5ml Multi-purpose: 9677 Module + In-situ Adapter
Display	7” Color Touch Screen, graphical display of protocols and running status	
Communications	USB2.0, LAN and RS232	
Temperature		
Block Temperature Range	0℃～100℃	
Max. Heating/Cooling Rate	6℃/s	
Temperature Uniformity	≤±0.2℃（at 95℃）	

Temperature Accuracy	≤±0.2℃（35℃-100℃）
Display Resolution	0.1℃
Mode of Temperature Control	Sim-tube & Block mode

Gradient		
Gradient Accuracy	/	≤±0.3℃（35℃-100℃）
Column Uniformity	/	≤±0.3℃（at 95℃）
Gradient Range	/	30℃～99.9℃
Temp. Differential Range	/	Max. 30℃
Gradient Capability	/	12 Column（Vertical）
Heated Lid		
Height of Heated Lid	Steplessly Adjustable Lid, accommodates a wide range of PCR tubes and plates	
Open Method	Innovative "TOP-OPEN" technology realizes Two-in-One(Open/Lift) Lid	
Heated Lid Temperature Range	30℃～112℃	
Auto Shut-Off	Yes	
Software		
Max. Number of programs	Max. 15,000 programs onboard, unlimited storage of protocols with USB flash drive	
Max. Step	30 Steps, multiple nesting cycle available	
Max. Cycle	100 typical cycles (duplex nesting 60,000 cycles)	
Time & Temp. Increment/Decrement	Yes , available for Long PCR & Touchdown PCR	
Auto Pause / Auto Restart	Yes	
Multi-user log in	With password-based authentication, prevent from view, copy and alteration of protocols	
Tm calculator	Automatically calculates the melting and annealing temperature with two primer sequences	
Hold at 4℃	Yes, an Infinite incubation time at low temperature for overnight working	
Program wizard	Yes, create PCR protocols with only a few clicks	
Running Report	Yes, provide precise data support for analyzing of experimental results	
PC Connection	PC remote control to manage more than 120 units of A300 across the network	
Other Features		
Power	Universal AC input Switching Power Supply: 85V ~ 265V, 50-60Hz Max. 600W	
Dimension（L×W×H）	362×256×255mm	
Net Weight	7.3kgs	

PCA600 Super Gradient Thermal Cycler

Gradient Module	
Block	6*16wells*0.2 individual module, six different annealing temperatures could be set for each zone
Tube Type	0.2ml PCR tubes, 8/12 Strips, 96 wells PCR plate
Peltier Technology	New Generation Peltier Technology
Display	7” Color Touch Screen, graphically display the realtime protocols and running status
Language	Full English
Communications Ports	2 USB and 1 LAN
Venting System	Front air in and back air out,two cyclers can be placed side by side

Temperature	
Block Temperature Range	0℃～105℃
Max. Heating Rate	5.5℃/s
Max. Cooling Rate	4.5℃/s
Temperature Uniformity	≤±0.15℃

Temperature Accuracy	≤±0.10℃
Display Resolution	0.10℃
Ramping Rate Adjustable	Yes
Mode of Temperature Control	Sim-tube & Block mode
Gradient	
Gradient Accuracy	≤±0.15℃
Zone Uniformity	≤±0.20℃
Gradient Range	0℃～105℃
Temperature Differential Range	less than 25℃ between two adjacent zones
Gradient Capability	6-zone temperature can be set independently. better than traditional gradient function
Heat Lid	
Height of Heat Lid	Steplessly Adjustable Lid, accommodates all kinds of PCR tubes, strips and plates
Lid Feature	Innovative "TOP-OPEN" technology, protection from over- pressure
Heat Lid Temperature Range	30℃～112℃
Auto Shut-Off	Yes
Software	
Max. No. of programs	Max. 15,000 programs onboard, unlimited storage of protocols with USB flash drive
Max. Step	30 Steps, multiple nesting cycle available
Max. Cycle	100 Typical cycles, max. 60,000 nesting cycles
Time Increment/Decrement	1-120 sec, available for Long PCR & Touchdown PCR
Temperature Increment/Decrement	0.1-10.0℃, available for touchdown PCR
Auto Pause / Auto Restart	Yes
Multi-user log in	With password-based authentication prevents from view, copy and alteration of protocols
Tm calculator	Automatically calculate the melting and annealing temperature with two primer sequences
Hold at 4℃	Yes, an Infinite incubation time at low temperature for overnight working

Program wizard	Yes, create PCR protocols with only a few clicks
Running Report	Yes, Provide precise information for the whole experiment
PC Connection	Yes,PC remote control to manage multl units across the Newwork
Other Features	
Power	Universal AC input Switching Power Supply: 85V ~ 265V, 50-60Hz Max. 600W
Dimension（L×W×H）	362×256×255mm
Net Weight	7.3kgs

PCT20 Touch Screen Multi-block Thermal Cycler

Model	T20
Sample Block	2*48wells*0.2ml Easily Interchange the TalentGene series without tools
Tube Optional	0.2ml PCR tubes, 8 stripes
Peltier Technology	New generation peltier technology, allow 1,000,000 cycles
Display	10” Full Color Touch Screen with adjustable angle, graphically protocols run edit and running status
Language	English
Communications	2 USB and LAN
Temperature	
Block Temperature Range	0℃～105℃
Max. Heating Rate	7.5℃/s
Max. Cooling Rate	6℃/s
Temperature Uniformity	≤±0.2℃ (at 90℃)
Temperature Accuracy	≤±0.2℃ (at 90℃)
Display Resolution	0.1℃
Ramping Rate Adjustable	Yes

Mode of Temperature Control	Sim-tube & Block
Gradient	
Gradient Accuracy	≤±0.1℃ (at 90℃)
Column Uniformity	≤±0.2℃ (at 90℃)
Gradient Range	30℃～105℃
Temp. Differential Range	1～25℃
Gradient Capability	Each individual block has 8 gradient temperatures
Heat Lid	
Lid Temperature Range	30℃～112℃
Open Method	Innovative TOP-OPEN technology, with excess even pressure of heat lid
Auto Shut-Off	Yes,lid will shut off automatically when the block temperature below set temperature
Software	
Max. number of programs	Max. 15,000 programs onboard, unlimited storage of protocols with USB flash drive
Max. Step	30 Steps, multiple nesting cycle available
Max. Cycle	100 Typical Cycles (multiple nesting allows 10,000 cycles)
Time Increment/Decrement	1-120 sec, available for Long PCR
Temperature Increment/Decrement	0.1-10.0℃, available for Touchdown PCR
Auto Pause / Auto Restart	Yes
Multi-user log in	Password-based authentication protect personal PCR protocols
Hold at 4℃	Yes,a below ambient temerature incubation allow PCR results storage overnight
Program wizard	Yes, template PCR protocol allow to create a new one with only a few clicks
Running Report	Yes, provide full review after protocol running
PC Connection	Yes
Other Features	
Power	Global switching power supply: 100V ~ 240V, 50--60Hz Max. 900W
Dimension（L×W×H）	375×270×277mm 13KG

PCT30 Touch Screen Multi-block Thermal Cycler

Model	T30
Sample Block	3*32wells*0.2ml Easily Interchange the TalentGene series without tools
Tube Optional	0.2ml PCR tubes, 8 stripes
Peltier Technology	New generation peltier technology, allow 1,000,000 cycles
Display	10” Full Color Touch Screen with adjustable angle, graphically protocols run edit and running status
Language	English
Communications	2 USB and LAN
Temperature	
Block Temperature Range	0℃～105℃
Max. Heating Rate	7.5℃/s
Max. Cooling Rate	6℃/s
Temperature Uniformity	≤±0.2℃ (at 90℃)
Temperature Accuracy	≤±0.2℃ (at 90℃)
Display Resolution	0.1℃
Ramping Rate Adjustable	Yes
Mode of Temperature Control	Sim-tube & Block
Gradient	

Gradient Accuracy	≤±0.1℃ (at 90℃)
Column Uniformity	≤±0.2℃ (at 90℃)
Gradient Range	30℃～105℃
Temp. Differential Range	1～25℃
Gradient Capability	Each individual block has 8 gradient temperatures
Heat Lid	
Lid Temperature Range	30℃～112℃
Open Method	Innovative TOP-OPEN technology, with excess even pressure of heat lid
Auto Shut-Off	Yes,lid will shut off automatically when the block temperature below set temperature
Software	
Max. number of programs	Max. 15,000 programs onboard, unlimited storage of protocols with USB flash drive
Max. Step	30 Steps, multiple nesting cycle available
Max. Cycle	100 Typical Cycles (multiple nesting allows 10,000 cycles)
Time Increment/Decrement	1-120 sec, available for Long PCR
Temperature Increment/Decrement	0.1-10.0℃, available for Touchdown PCR
Auto Pause / Auto Restart	Yes
Multi-user log in	Password-based authentication protect personal PCR protocols
Hold at 4℃	Yes,a below ambient temerature incubation allow PCR results storage overnight
Program wizard	Yes, template PCR protocol allow to create a new one with only a few clicks
Running Report	Yes, provide full review after protocol running
PC Connection	Yes
Other Features	
Power	Global switching power supply: 100V ~ 240V, 50--60Hz Max. 900W
Dimension（L×W×H）	375×270×277mm
Net Weight	13kgs

PCQ1000 /Q1000+ Real-Time PCR System

Model	Q1000
Block Sample Capacity	48-well * 0.1ml
Reaction Volume	10-50ul
Tubes Option	Low-profile white or clear 0.1ml PCR tube/eight strip tubes with optical flat cap
Heating and Cooling Technology	The newest generation of Peltier technology for more than one million thermal cycles
Control Methods	Operate via PC remote contro; or the touch screen on instrument with limited function
Language	English
Communications	USB 2.0 and LAN, export data via USB flash drive
Display	7" Color TFT Touch Screen
Temperature	
Block Temperature Range	0℃～105℃
Max. Heating Rate	7℃/s
Max. Cooling Rate	6℃/s
Temperature Uniformity	≤±0.2℃ (at 90℃)
Temperature Accuracy	≤±0.2℃ (at 90℃)
Display Resolution	0.1℃

Ramping Rate Adjustable	Yes
Mode of Temperature Control	Sim-tube & Block
Optical Module	
Excitation	Long life LED
Detection	High sensitivity photoelectric detector
Calibrated Dyes at Installation	(Q1000) Channel 1：FAM、SYBR, Channel 2：VIC、HEX、JOE、CY3、NED (Q1000+) Channel1: FAM、SYBR, Channel 2：VIC、HEX、JOE、CY3、NED Channel 3：ROX、TEXAS-RED Channel 4：CY5
Fluorescence Excitation Range	470 — 500nm
Fluorescence Detection Range	Channel 1：520 — 540nm, Channel 2：540 — 700nm
Data Export Formats	Excel, TXT
Computer	
Operating Systems	Windows7、Windows8、Windows10
CPU Speed	2.0 GHz
Display Resolution	1366×768
Memory	2.00 GB RAM
Available Hard Disk	＞ 20 GB
Other Features	
Power	Global switch power supply: 85V-265V, 50-60Hz
Consumption	400W
Net Weight	8.2KG
Dimensions (w x d x h)	205×250×320mm

PCQ2000 Real-Time PCR System

Features

1. Top brand Peltier elements from MARLOW(U.S.A)adopted, ensure long life of 1,000,000 cycles and fast ramping rate up to 6℃/s.
2. T-Optical™ technology, reduce background noise, improve fluorescence signal sensitivity and signal to noise ratio.
3. The angle of display could be adjusted to the best view.
4. 96 wells* 6 channels, simultaneous detection of wells, not in sequence.
5. User could view PCR process and run PCR protocol through self-contained 10'' TFT LCD and touch screen.
6. Special designed optical system for qPCR, avoiding more moving parts problems like overheat, wear and off center. Not optical fiber based, avoiding break and block.
7. Long life LED lamps to excite fluorescence and detect with SSLP™ CCD imaging technology.
8. Sample wells with temperature gradient function, convenient to optimize PCR conditions.
9. The drawer design of sample block, makes it easier to pick and place PCR tubes & plates.
10. The qPCR analysis software could be upgrade for free.

Technical Specifications

Instrument Performance	
Sample Block Capacity	96 wells * 0.1ml
Reaction Volume	10-50ul(recommend 20ul)
Tubes Option	Low profile, white or clear PCR tubes or strips or 96 well PCR plate, with optical flat cap

Heating and Cooling Technology	New powerful Peltier Technology
Control Methods	Operated via PC or self-contained touch screen on instrument
Temperature	
Block Temperature Range	0℃ ~ 105℃
Max. Heating Rate	6℃/s
Max. Cooling Rate	5℃/s
Temperature Uniformity	≤±0.2℃(at 90℃)
Temperature Accuracy	≤±0.1℃(10 seconds after reach 90℃)
Display Resolution	0.1℃
Heat Lid Temperature Range	30℃~112℃
Temperature control Mode	Block & Calculated sample
Gradient Range	30℃~100℃
Temp. Differential Range	1℃~30℃
Fluorescence Detection	
Calibrated Dyes at Factory	
Excitation	Long life LED lamps
Detection	CCDs
Channel 1	FAM、SYBR GREEN
Channel 2	VIC、HEX、JOE、CY3、NED
Channel 3	ROX、TEXAS-RED
Channel 4	CY5
Channel 5	CY5.5
Channel 6	Reserved
Fluorescence Excitation Range	300 — 800nm
Fluorescence Detection Range	500 — 800nm
Data Export Formats	Excel, TXT
Dynamic Range	$1\sim10^{10}$
Sensitivity	≥1 copy
Fluorescence Detection	
AC power supply	100V ~ 240V, 50-60Hz

Consumption	600W
Dimension (L×W×H)	334×280×365mm
Net Weight	13KG
Computer Operating Systems	Windows10、Windows7、Windows XP