

REAL-TIME THERMAL CYCLER



REAL-TIME THERMAL CYCLER

Real-time PCR has revolutionized the way clinical microbiology laboratories diagnose human pathogens. It delivers reliability, sensitivity, and accuracy, which is optimized to enable the broadest range of real time PCR applications. Features like compact size, individually programmed wells, heated lids to prevent condensation, higher throughput and software integration makes it an unique choice.

Used in Quantitative gene expression analysis, SNP analysis, drug target validation, genotyping, RNA Analysis, Rare Mutation Detection, Clinical Microbiology.

Also known as Real-Time PCR Thermal Cyclers, Thermocycler, Quantitative PCR, Laboratory Real Time PCR, Laboratory Thermocycler, Laboratory Quantitative PCR, Laboratory Real-time Thermal Cyclers..

PCR32-48 REAL-TIME THERMAL CYCLER

Petlier technology: Solid-state, thermoelectric heating and cooling unit for improved control and durability

Bottom detection system provides greater accuracy and sensitivity of measurements

High-powered photomultiplier provides sensitive detection

Long life LED excitation light source does not need maintenance or preheating

Hot-lid feature allows oil-free operation

Advanced PID control ensure the accuracy of temperature control

Absolute Quantification, Relative Quantification, SNP Analysis

Data Automatic Analysis; Melting Curve Genotyping

Gradient; HRM; Multi-channel Crosstalks Correction

Background Correction; Automatic Gain; Customized Parameters



SPECIFICATIONS

Model	PCR32-48
Sample Capacity	48x0.2 ml
Temperature Range	4°C~99°C
Dynamics Range	1~1010 Copies
Max Heating Rate	≥4.0°C / sec
Max Cooling Rate	≥4.0°C / sec
Sample Volume Range	10-100µL
Uniformity	≤±0.3°C
Accuracy	≤±0.1°C
Gradient Temp Range	1°C~24°C
Hot Lid Temperature	80°C~110°C
PC Operation system	Windows 2000 / XP
Dimension (W×D×H)	450x520x320 mm
Power	650 W
Weight	25 kg
Power Supply	AC 110~220 V 50 / 60 Hz

OPTIONAL ACCESSORIES

Accessory Code	Name	Description
LS52150	Block A	48x0.2 ml, 4 channels
LS52163	Block B	48x0.2 ml, 2 channels

PCR33-48 REAL-TIME THERMAL CYCLER

Peltier technology: Solid-state, thermoelectric heating and cooling unit for improved control and durability

Bottom detection system provides greater accuracy and sensitivity of measurements

High-powered photomultiplier provides sensitive detection

Long life LED excitation light source does not need maintenance or preheating

Hot-lid feature allows oil-free operation

Advanced PID control ensures the accuracy of temperature control

Absolute Quantification, Relative Quantification, SNP Analysis

Data Automatic Analysis; Melting Curve Genotyping

Gradient; HRM; Multi-channel Crosstalks Correction

Background Correction; Automatic Gain; Customized Parameters



SPECIFICATIONS

Model	PCR33-48
Sample Capacity	48x0.2 ml (Single tube or Strips 8 PCR tubes)
Temperature Range	4~105°C (Minimum setting scale: 0.1°C)
Detected Fluorescence	F1: FAM, SYBR Green I; F2: VIC, HEX, TET, JOE, Cy3, TAMRA; F3: ROX, TEXAS-RAD, F4: CY5, Quasar-670
Operation Mode	Continuous
Heating/Cooling adjustable rate	4.0°C / s(max)
Temperature Fluctuation	≤±0.1°C
Uniformity	≤±0.3°C
Accuracy	≤±0.1°C (55°C typical value)
Hot Lid Temperature	70°C~110°C
Height of hot Lid	Automatic Adjustable (Default 105°C)
PC Operation system	Microsoft: WindowsXP / VISTA / Windows7 / Windows8
Socket	USB Adapter, RS232 Adapter, Bluetooth Adapter
Dimension (W×D×H)	384x353x348 mm
Power	600 W
Weight	13 kg
Power Supply	100-240 V, 50-60 Hz

DETECTED FLUORESCENCE

A20	A40	A60	A80
-----	-----	-----	-----

F1: FAM, SYBR Green I F2: VIC, HEX, TET, JOE	F1: FAM, SYBR Green I F2: VIC, HEX, TET, JOE F3: Cy3, NED, TAMRA F4: ROX, TEXAS-RED	F1: FAM, SYBR Green I F2: VIC, HEX, TET, JOE, Cy3, NED, TAMRA F3: ROX, TEXAS-RED F4: Cy5	F1: FAM, SYBR Green I F2: VIC, HEX, TET, JOE F3: Cy3, NED, TAMRA F4: ROX, TEXAS-RED F5: Cy5 F6: Cy5.5 F7, F8: For Customized
---	--	---	--

OPTIONAL ACCESSORIES

Accessory Code	Name	Description
LS52072	Block A	96x0.2 ml, 8 channels, bluetooth
LS52085	Block B	96x0.2 ml, 6 channels, bluetooth
LS52098	Block C	96x0.2 ml, 4 channels
LS52111	Block D	96x0.2 ml, 2 channels

PCR34-96 REAL-TIME THERMAL CYCLER

Petlier technology: Solid-state, thermoelectric heating and cooling unit for improved control and durability

Bottom detection system provides greater accuracy and sensitivity of measurements

High-powered photomultiplier provides sensitive detection

Long life LED excitation light source does not need maintenance or preheating

Hot-lid feature allows oil-free operation

Advanced PID control ensures the accuracy of temperature control

Absolute Quantification, Relative Quantification, SNP Analysis

Data Automatic Analysis; Melting Curve Genotyping

Gradient; HRM; Multi-channel Crosstalks Correction

Background Correction; Automatic Gain; Customized Parameters



SPECIFICATIONS

Model	PCR34-96
Sample Capacity	96-Well PCR plate, 12x8-strip, 96x0.2 ml (Bottom Transparent)
Temperature Range	4~105°C (Minimum Increment: 0.1°C) SOAK Low Temperature Conservation Function
Dynamics Range	1~10 ¹⁰ Copies
Excitation Wavelength	300-800 nm
Emission Wavelength	500-800 nm
Fluorescence Detection Repeatability	0.05
Scan Mode	Entire plate or Designated Line
Operation Mode	Continuous
Scan Period	5.5 s (F1 / F2 96 Plate Scan)
Sample Volume Range	5-100 µL
Heating/Cooling adjustable rate	4.0°C / s
Temperature Fluctuation	≤ ±0.1°C
Uniformity	≤ ±0.3°C
Accuracy	≤ ±0.1°C
Gradient Temp Range	1~36°C
Hot Lid Temperature	30°C~110°C

Height of hot Lid	Automatic Adjustable (Default 105°C)
Temp Control Mode	Block, tube Simulation Mode (Automatic Control Based on Sample Volume)
Memory Capacity	Memory: 2G Hard Disk: 32GB
PC Operation system	Microsoft: Windows 2000 / XP / vista / Windows 7 / Windows 8(Compatible with 64-bit operating system) Software: Excel2003 / 2007
Socket	USB Adapter, RS232C Adapter(optional), Bluetooth Adapter(optional)
Power	600 W
Weight	28 kg
Power Supply	100-240 V, 50-60 Hz

OPTIONAL ACCESSORIES

Accessory Code	Name	Description
LS52176	Block A	96x0.2 ml, 5 channels
LS52189	Block B	96x0.2 ml, 4 channels
LS52202	Block C	96x0.2 ml, 2 channels

PCR35-96 REAL-TIME THERMAL CYCLER

Two channel fluorescent detection system with LED light source and high resolution CCD

The optical system automatically collects data from all wells during data acquisition at the same time

It can discriminate up to five targets in a single reaction well

The optical filter sets are designed to maximize fluorescence detection for specific dyes in specific channels

Compatible with different reagent and consumables

Block utilizes most advanced Peltier-based technology with high amplification efficiency

Up to 6°C/s maximum ramp rate saves your valuable time dramatically

Two independent temperature control mode- block and tube, maximize control flexibility

Excellent temperature uniformity limits the variation between wells, ensuring the accuracy of low copy sample

Manager Software accommodates individual needs with intuitive navigation and customizable settings

The software can be used for a variety of applications including absolute/relative quantification, melting curve (dissociation curve)

With integrated powerful visualization tools, the data is analyzed on machine directly

Advanced programming function like gradient and touch-down

The machine can be connected with PC through WI-FI or LAN

Software allows you to manage and monitor from your computer

Low noise, low energy consumption, long life-span

Chemistry-All real-time PCR-based chemistries. Flexibility for chemistries with or without passive reference dye



SPECIFICATIONS

Model	PCR35-96
Sample Capacity	96-Well PCR plate, 12x8-strip, 96x0.2 ml(Bottom Transparent)
Temperature Range	4~105°C(Minimum Increment: 0.1°C) SOAK Low Temperature Conservation Function
Dynamics Range	1~10 ¹⁰ Copies
Excitation Wavelength	300-800 nm
Emission Wavelength	500-800 nm
Fluorescence Detection Repeatability	0.05
Detected Fluorescence	F1: FAM, SYBR Green I; F2: VIC, HEX, TET, JOE, Cy3, TAMRA; F3:ROX, TEXAS-RAD, F4: CY5, Quasar-670; F5: CY5.5, Quasar-705
Scan Mode	Entire plate or Designated Line
Scan Period	5.5 s
Sample Volume Range	5-100 μ L
Heating/Cooling adjustable rate	4.0°C / s(max)
Temperature Fluctuation	$\leq \pm 0.1^\circ\text{C}$
Uniformity	$\leq \pm 0.3^\circ\text{C}$
Accuracy	$\leq \pm 0.1^\circ\text{C}$
Gradient Temp Range	1~36°C
Hot Lid Temperature	30°C~110°C
Height of hot Lid	Automatic Adjustable (Default 105°C)
Max.No.of Cycle	99
Max Segments	20
Temp Control Mode	Block, tube Simulation Mode (Automatic Control Based on Sample Volume)
Memory Capacity	Memory: 2G Hard Disk: 32GB
PC Operation system	Microsoft: Windows 7 / Windows 8.1 Software: Excel2000 /2002 / 2003 / 2007 / 2012
Socket	USB Adapter, RS232 Adapter, Bluetooth Adapter
Dimension (WxDxH)	386x410x352 mm
Power	600 W

PCR37-96C5 REAL-TIME THERMAL CYCLER

Five channel fluorescent detection system with LED light source and high resolution CCD

The optical system automatically collects data from all wells during data acquisition at the same time

It can discriminate up to five targets in a single reaction well

The optical filter sets are designed to maximize fluorescence detection for specific dyes in specific channels

Compatible with different reagent and consumables

Block utilizes most advanced Peltier-based technology with high amplification efficiency

Up to 6°C/s maximum ramp rate saves your valuable time dramatically

Two independent temperature control mode- block and tube, maximize control flexibility

Excellent temperature uniformity limits the variation between wells, ensuring the accuracy of low copy sample

Manager Software accommodates individual needs with intuitive navigation and customizable settings

The software can be used for a variety of applications including absolute/relative quantification, melting curve (dissociation curve)

With integrated powerful visualization tools, the data is analyzed on machine directly

Advanced programming function like gradient and touch-down

The machine can be connected with PC through WI-FI or LAN

Software allows you to manage and monitor from your computer

Low noise, low energy consumption, long life-span

Chemistry-All real-time PCR-based chemistries. Flexibility for chemistries with or without passive reference dye



SPECIFICATIONS

Model	PCR37-96C5
Temperature Range	0°C-100°C
Max. ramp rate	6°C
Channel	5
Reactions per run	96
Reaction volume	15µl-100µl
Block Formats	96-well 0.2 ml
Block Material	Peltier
Display Interface	LED
Excitation filters/colors	Channel 1: 470 nm Channel 2: 525 nm Channel 3: 585 nm Channel 4: 625 nm
Uniformity	±0.4°C (10 sec after reaching 95°C) ±0.2°C (10 sec after reaching 55°C)
Accuracy	±0.1°C
Gradient Temp Range	30°C~100°C
Sensitivity	Down to 1 copy
Color Combinations	Up to 5
Light Source	High brightness monochrome LED
Detector	Highly sensitive cold light CCD
Detection dynamic range	10 ² -10 ¹⁰

Kits & Reagent	Channel 1: FAM / SYBR Channel 2: VIC / HEX / JOE / TET / TAMRA Channel 3: ROX / TEXRAD Channel 4: CY5
Network	LAN / WIFI
Multiple control	Support
PC Operation system	WindowsXP / VISTA / Windows7 / Window8
CPU	A8
X960 Operation system	linus
Dimension (W×D×H)	592x440x280 mm

Centrifugen

Centrifugen

82 Wendell Avenue, STE 100, Pittsfield, MA, 01201, USA
 Email: info@centrifugen.com | Website: centrifugen.com