Real Time PCR

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Real Time PCR LRTP-A10

Real time PCR LRTP-A10 is a 96 well capacity PCR machine with, wide temperature range, and fast speed dual colour scanning mod. The adjustable automatic hot lid with auto opening/closing ensures constant pressure for various tube heights. It offers wide range of block temperature. With its unique block dissipation technology, it provides precise temperature control and thermal gradient which easily optimizes PCR assays.

Features:

- Ferrotec Peltier cooler with improved efficiency rate and long life
- Wide range of block temperature (4-105°C) with SOAK low temp. function
- 5 individual filters cover wide range of fluoresence detection wavelength
- Maximum 36°C temperature gradient control function with calculator
- Automatic brake function of internal motor
- Touch screen display with one finger touch operations
- High long life LED
- Dual high sensitivity PMT (photomultiplier tube) synchronous detection
- Wide power supply range with PFC function
- PC connections, USB, wireless Bluetooth data transfer

Applications:

Real time PCR is used for sequencing, genotyping, cloning, mutagenesis and routine applications that require quantification and characterization of nucleic acids in academic institutes, research centres, diagnostics and laboratories.

Specifications:

Model no.	LD-LRTP-A10
Socket	USB Adapter; Bluetooth Adapter
Tablet	Microsoft Surface 2 pro
Program	Max 20 Segments for Each Program, Max 99 Cycles
Scan Mode	Entire Plate or Designated Line
Scan Period	5.5 sec
Power Supply	100 to 240 V, 50/60 Hz, 600 W
Ramping Rate	4.0 ℃/sec
Dynamics Range	10 to 10¹⁰ Copies
Operation Mode	Continuous
Sample Capacity	12 × 8 (96 wells with 0.2 ml each) plate, 96 × 0.2 ml tubes (Bottom Transparent)
Feature Function	Absolute Quantification; Relative

	Quantification; SNP Analysis; Data Automatic Analysis; Melting Curve Genotyping; Gradient; HRM Multi-channel Crosstalk Correction; Background Correction; Automatic Gain; Customized Parameters
PC Configuration	Memory : 512 M; Hard Disk : 10 GB; CPU : Pentium® 4; Virtual Memory : ≥ 1000 MB
Temp. Uniformity	≤ ± 0.3 ℃
Block Temp. Range	4 to 105℃ (Minimum Increment: 0.1℃), SOAK Low Temp. Conservation Function
Temp. Fluctuation	≤ ± 0.1 ℃
Temp. Control Mode	BLOCK/Tube Simulation Mode (Automatic Control based On Sample Volume)
Emission Wavelength	500 to 800 nm
Hot-lid Temp. Range	30 to 110℃ (Adjustable, default 105℃, Automatic Hot-lid)
Sample Volume Range	5 to 100μl
Gradient Temp. Range	1 to 36 ℃
Excitation Wavelength	300 to 800 nm
Temp. Control Accuracy	≤ ± 0.1 ℃
Detected Fluorescence	F1 : FAM, SYBR Green 1; F2 : VIC HEX TET JOE CY3 TAMRA; F3 : ROX TEXAS-RED; F4 : CY5 Quasar-670; F5 : CY5.5 Quasar-705
Dimension (L × W × H)	410 × 386 × 352 mm
Max. channels number of fluorescence detection	5 channels

Real Time PCR LRTP-A20

Real Time PCR LRTP-A20 is a thermo-cycler having 48 wells of sample capacity and require only 0.2 ml volume sample tubes. Features four detection channels, three block (16 tubes each block) configuration, alarm system, automatically controlled hot-lid for uniform pressure and heat preservation, compact design. Advanced temperature control system, powerful and user-friendly software system, novel fluorescence detection technology etc. ensures relative and complete quantification, precise differentiation and highly sensitive results in a single step procedure. It is used in diagnostic labs, molecular biology, genetic engineering, archaeology, forensics, etc.

Features:

- Novel Fluorescent Detection Technology
- Amplification and Detection are simultaneously carried out
- Advanced thermoelectric refrigeration technology for steady and fast heating, cooling cycles
- Multi-point control of temperature for uniform heat distribution
- Four Thermo electric modules
- Independent control of temperature of three blocks
- Storage of PCR reagents at low-temperature
- LED light with long life as an excitation source
- Advanced fibre optic transmission technology for highly sensitive detection
- Extremely sensitive PMT and accurate optical path
- Wide linear range
- Multiplexing assay can be performed
- Includes continuous running mode
- Software Details
- Parameters like temperature, cycles, time, cooling/heating rate, detection channel etc. can be pre-set
- Records sample data
- Real-time display of heat-cycle, fluorescence detection
- Analysis of data
- Data saved in various formats like excel, TXT
- Data can be printed
- Storage of data
- Alerts the user during any fault

Applications:

It is used for parallel amplification and quantification of fluorescent tagged DNA or RNA molecules. Widely used to diagnose genetic disease, detect infections in humans and environment, DNA profiling, research etc.

Specifications:

Model no.	LD-LRTP-A20
Socket	RS232, USB, Bluetooth
Weight	12 kg

Programs	Absolute Quantification, Relative Quantification, SNP Analysis, Melting Curve Genotyping, Gradient, HRM, Multi-channel Crosstalk Correction, Background Correction, Automatic Gain, Customized Parameters.
Dimension	384 × 353 × 348 mm
Power Supply	100 to 240V, 50/60 Hz, 600W
Dynamics Range	1-10¹⁰copies
Sample Capacity	3 × 16 × 0.2 ml (Single tube or Strips 8 CPR Tubes)
Operation System	Windows XP / Windows Vista /Windows7 / Windows8
Device Requirements	Surface Pro series, PC, laptop
Emission Wavelength	300 to 800 nm
Heating/Cooling Rate	4.0°C /s (max)
Temperature Accuracy	≤ ± 0.2°C (full-range), (55°C typical value ≤ ± 0.1°C)
Excitation Wavelength	500 to 800 nm
Temperature Uniformity	≤ ± 0.4°C (full-range), (55°C typical value ≤ ± 0.3°C)
Block Temperature Range	4 to 105°C (Minimum division: 0.1°C)
Temperature Fluctuation	≤ ± 0.1°C (full-range), (55°C typical value ≤ ± 0.1°C)
Hot-lid Temperature Range	70 to 110°C (adjustable, default: 105°C)
Ambient Working Conditions	Environmental temperature: 10°C to 30°C Environmental RH: ≤ 70 % Altitude: < 2000 m
Temperature Range of Hot-lid Working	70 to 110°C (adjustable, default 105°C)
Repeatability of Fluorescent Intensity Detection	5%

Real Time PCR LRTP-A30

Real Time PCR LRTP-A30 is a portable unit comes with sample capacity of 16×0.2 ml (2×8 well, double block), offers emission wavelength ranges from F1: 520 to 540 nm and factory calibrated dyes of F1: FAM/SYBR Green I. Adopted with American Marlow customized Peltier module, single channel and double 8-wells blocks design with analysis software that can run two different design at a same time. Built in with high sensitivity photoelectric detector, 7 inch color TFT touch screen display of 1280×800 pixels with win 10 operating system and long life LED excitation. Equipped with powerful software analysis function such as, genotyping, melting curve, absolute and relative quantification.

Features:

- 7 inch color TFT touch screen display with 10 operating system for ease of monitoring various parameters
- It is Single Channel Real Time PCR Machine
- Equipped with environmental protection, energy saving and LED light source
- Adopts the same acquisition optical path to improve the repeatability
- Easy to carry, light weight and compact design
- Provide flash memory of 20 G, saves experimental data of upto 40000 pieces
- Built in with back reaction block, side scan technology and electromagnetic lock cover technology
- Offers long service life and free maintenance
- Integrated with front shutdown button to secure file data

Applications:

Real Time PCR is widely used in scientific research in biological laboratories, rapid diagnosis of disaster and epidemic diseases, inspection and quarantine in the field of food safety. It is suitable to use for real time detection in breeding farm, pasture, water sources and forest farm.

Specifications:

Model no.	LD-LRTP-A30
Power	DC 15 V, 250 W
Display	7 inch color TFT touch screen , 1280×800 pixels
Accuracy	± 0.25°C
Printing	Report can be printed (Optional USB thermal printer)
Detection	High sensitivity photoelectric detector
Consumable	Clear 0.2 ml PCR tube/ 8-tube strips
Excitation	Long life LED

Net Weight	5.5 kg
Uniformity	± 0.25°C
Sensitivity	1 Copy
Dynamic Range	1 to 10¹⁰ copies
Reaction Volume	10 to 100 µl
Sample Capacity	16×0.2 ml (2×8 well, double block)
Feature Function	Absolute /Relative Quantification, melting curve, genotyping
Maximum Ramp Rate	6°C/s
Temperature Range	0 to 100°C (Resolution: 0.1°C)
Communication Parts	WIFI /USB 2.0
Date Export Formats	Excel, CSV, txt
Dimension (L×W×H)	300×267×198 mm
Emission Wavelength	F1: 520 to 540 nm
Hot Lid Temperature	30 to 115°C (Adjustable, default 105°C)
Temperature Control	Block/Tube
Excitation Wavelength	460 to 550 nm
Factory Calibrated Dyes	F1: FAM/SYBR Green I
Temperature fluctuation	± 0.1°C
Temperature Control Technology	Marlow customized Peltier allow 1.000.000 cycles

Real Time PCR LRTP-A31

Real Time PCR LRTP-A31 adopts American Marlow customized Peltier module, double channel and double 8-wells blocks design with analysis software that can run two different design at a same time. It is a portable unit comes with sample capacity of 16×0.2 ml (2×8 well, double block), offers emission wavelength ranges from F1: 520 to 540 nm and F2: 540 to 580 nm and factory calibrated dyes of F1: FAM/SYBR Green I and F2: HEX/VIC/JOE/TFT. Equipped with powerful software analysis function such as, genotyping, melting curve, absolute and relative quantification. Built in with high sensitivity photoelectric detector, 7 inch color TFT touch screen display of 1280×800 pixels with win 10 operating system and long life LED excitation.

Features:

- 7 inch color TFT touch screen display with 10 operating system for ease of monitoring various parameters
- It is Double Channel Real Time PCR Machine
- Equipped with environmental protection, energy saving and LED light source
- Adopts the same acquisition optical path to improve the repeatability
- Easy to carry, light weight and compact design
- Provide flash memory of 20 G, saves experimental data of upto 40000 pieces
- Built in with back reaction block, side scan technology and electromagnetic lock cover technology
- Offers long service life and free maintenance
- Integrated with front shutdown button to secure file data

Applications:

Real Time PCR is widely used in scientific research in biological laboratories, rapid diagnosis of disaster and epidemic diseases, inspection and quarantine in the field of food safety. It is suitable to use for real time detection in breeding farm, pasture, water sources and forest farm.

Specifications:

Model no.	LD-LRTP-A31
Power	DC 15 V, 250 W
Display	7 inch color TFT touch screen , 1280×800 pixels
Accuracy	± 0.25°C
Printing	Report can be printed (Optional USB thermal printer)
Detection	High sensitivity photoelectric detector
Consumable	Clear 0.2 ml PCR tube/ 8-tube strips
Excitation	Long life LED

Net Weight	5.5 kg
Uniformity	± 0.25°C
Sensitivity	1 Copy
Dynamic Range	1 to 10¹⁰ copies
Reaction Volume	10 to 100 µl
Sample Capacity	16×0.2 ml (2×8 well, double block)
Feature Function	Absolute /Relative Quantification, melting curve, genotyping
Maximum Ramp Rate	6°C/s
Temperature Range	0 to 100°C (Resolution: 0.1°C)
Communication Parts	WIFI /USB 2.0
Date Export Formats	Excel, CSV, txt
Dimension (L×W×H)	300×267×198 mm
Hot Lid Temperature	30 to 115°C (Adjustable, default 105°C)
Temperature Control	Block/Tube
Excitation Wavelength	460 to 550 nm
Temperature fluctuation	± 0.1°C
Temperature Control Technology	Marlow customized Peltier allow 1.000.000 cycles

Real Time PCR LRTP-B30

Real time PCR LRTP-B30 comes with 96 well capacity PCR machine with, 1 to 36°C gradient temperature range, and fast speed dual colour scanning mode. Its wide fluorescence wavelength range with innovative 6 channel design, optimizes thermal performance and maximizes convenience during operation. With its unique block dissipation technology, it provides precise temperature control and thermal gradient which easily optimizes PCR assays.

Features:

- Ferrotec Peltier cooler with improved efficiency and long life
- Wide range of block temperature (4-105°C) with SOAK low temperature function
- 6 individual filters cover wide range of fluoresence detection wavelength
- Easy data transfer via USB and Bluetooth
- Real time fast double wavelength X-Y scan system
- High long life LED
- Dual high sensitivity PMT (photomultiplier tube) synchronous detection
- Panoramic view of experimental results

Applications:

Real time PCR, used in quantification and characterization of nucleic acids in academic institutes, research centres, diagnostics and laboratories.

Specifications:

Model no.	**LD-LRTP-B30**
Socket	RS 232C Adapter
Program	Max 20 Segments for Each Program, Max 99 Cycles
Scan Mode	Entire Plate or Designated Line
Scan Period	5.5 sec
Power Supply	100 to 240 V, 50/60 Hz, 600 W
Ramping Rate	4.0 ℃/sec
Dynamics Range	10 to 10¹⁰ Copies
Operation Mode	Continuous
PC Configuration	Memory : 512 M; Hard Disk : 10 GB; CPU : Pentium® 4; Virtual Memory : ≥ 1000 MB
Temp. Uniformity	≤ ± 0.3 ℃
Block Temp. Range	4 to 105℃ (Minimum Increment: 0.1℃), SOAK Low Temp. Conservation Function
Temp. Fluctuation	≤ ± 0.1 ℃

Temp. Control Mode	BLOCK/Tube Simulation Mode (Automatic Control based On Sample Volume)
Emission Wavelength	500 to 800 nm
Hot-lid Temp. Range	30 to 110℃ (Adjustable, default 105℃, Automatic Hot-lid)
Sample Volume Range	5 to 100μl
Gradient Temp. Range	1 to 36 ℃
Excitation Wavelength	300 to 800 nm
Temp. Control Accuracy	≤ ± 0.1 ℃
Dimension (L × W × H)	430 x 395 x 352 mm
Max. channels number of fluorescence detection	6 channels

Real Time PCR LRTP-C10

Real time PCR LRTP-C10 comes with 48 well capacity, durable, energy efficient design and advanced Ferrotec peltier and fibre optic technology. Equipped with advanced multi point temperature control module maintains thermal uniformity. It creates temperature gradient across the sample block. With ability to handle one, two, three, four combinations of excitation and emission wavelengths this PCR finds applications across many fields

Features:

- 4 individual filters cover wide range of fluoresence detection wavelength
- Constant current power supply improves thermal efficiency
- Multi-point temperature control module
- Fibre optics system provides reduced S/N ratio
- Data storage during accidental power cut off
- Automatic amplitude adjustment
- Overheat protection, alarm warning
- Electric heat preservation cover
- Temperature gradient control up to 24°C
- USB, RS232 interface for data transfer

Applications:

Real time PCR used in sequencing, genotyping, cloning, mutagenesis and routine applications that require quantification and characterization of nucleic acids in academic institutes, research centres, diagnostics and laboratories.

Specifications:

Model no.	LD-LRTP-C10
Weight	25 kg (Without computer)
Power Supply	100 to 240 V, 50/60 Hz, 650 W
Ramping Rate	4.0 ℃/sec
Dynamics Range	10 to 10¹⁰ Copies
Sample Capacity	48 × 0.2 ml
Operation System	Windows 2000/XP
Temp. Uniformity	≤ ± 0.3 ℃
Block Temp. Range	4 to 99.9℃
Hot-lid Temp. Range	80℃ to 110℃
Sample Volume Range	10 to 100µL
Gradient Temp. Range	1 to 24 ℃
Temp. Control Accuracy	≥ 4.0 ℃/sec

Dimension (L × W × H)	520 x 450 x 320 mm
Max. channels number of fluorescence detection	4 channels

Real Time PCR LRTP-C20

Real time PCR LRTP-C20 comes with 48 well capacity, durable, energy efficient design and advanced Ferrotec peltier and fibre optic technology. Equipped with advanced multi point temperature control module maintains thermal uniformity. It creates temperature gradient across the sample block. With ability to handle one, two, three, four combinations of excitation and emission wavelengths this PCR finds applications across many fields

Features:

- 2 individual filters cover wide range of fluoresence detection wavelength
- Constant current power supply improves thermal efficiency
- Multi-point temperature control module
- Fibre optics system provides reduced S/N ratio
- Data storage during accidental power cut off
- Automatic amplitude adjustment
- Overheat protection, alarm warning
- Electric heat preservation cover
- Temperature gradient control up to 24°C
- USB, RS232 interface for data transfer

Applications:

Real time PCR used in sequencing, genotyping, cloning, mutagenesis and routine applications that require quantification and characterization of nucleic acids in academic institutes, research centres, diagnostics and laboratories.

Specifications:

Model no.	LD-LRTP-C20
Weight	25 kg (Without computer)
Power Supply	100 to 240 V, 50/60 Hz, 650 W
Ramping Rate	4.0 ℃/sec
Dynamics Range	10 to 10¹⁰ Copies
Sample Capacity	48 × 0.2 ml
Operation System	Windows 2000/XP
Temp. Uniformity	≤ ± 0.3 ℃
Block Temp. Range	4 to 99.9℃
Emission Wavelength	F1 : 525 nm F2 : 564 nm
Hot-lid Temp. Range	80℃ to 110℃
Sample Volume Range	10 to 100µL
Gradient Temp. Range	1 to 24 ℃

Excitation Wavelength	F1 : 470 nm F2 : 523 nm
Temp. Control Accuracy	≥ 4.0 ℃/sec
Dimension (L × W × H)	520 x 450 x 320 mm
Max. channels number of fluorescence detection	2 channels

Real Time PCR LRTP-A21

Real-Time PCR LD-LRTP-A21 is a high-performance model. The instrument does not require a computer and realizes independent operation, program editing, data viewing, and data analysis. Advanced temperature control system, powerful and user-friendly software system. Features four fluorescent detection channels with dyes. With a strong fluorescence signal, low background noise, and high sensitivity. The system has indicators for power on, in operation, successful communication, ultraviolet degradation (UV), a fault alarm, and hot lid open alarm. Temperature is controlled by Peltier technology. High-brightness single color LED module with a long lifespan serves as the excitation light source.

Features:

- Touch screen control, with software, efficient and convenient
- For sample evaluation, both 16 x 0.2 ml transparent tube and strip modes are acceptable, you can mark the tube with markers on the cover of the tube
- The system is an open platform, suitable for various real-time PCR reagents, including fast extraction reagents, non-extraction reagents or direct amplification reagents and other low-concentration PCR reagents
- Communication interface is RS232/ USB
- Software functions are It has system parameter setting (with password authority), experimental parameter setting, sample information input, operation management, data export EXCEL, PCR program overview, real-time amplification curve display, channel crosstalk correction, criterion setting, automatic report, curve capture and other functions
- Analytical functions provided are standard curve, relative quantitative curve and melting curve (HRM)

Applications:

It is used for parallel amplification and quantification of fluorescent tagged DNA or RNA molecules. Widely used to diagnose genetic disease, detect infections in humans and environment, DNA profiling, research etc.

Specifications:

Model no.	LD-LRTP-A21
CV	CV ≤0.6%
Rn	≥ 0.998
Hot lid	30-105°C, Default 105°C
Net weight	6.8 kg
Sensitivity	1 copy
Power supply	100 to 240V, 50/60 Hz, 300VA
Dynamic range	1-1010 Copies

Sample volume	16 x 0.2 ml single tube or 8-strip transparent tube
Optical sensor	PD
Dyes and probes	CH1: FAM, SYBR Green I; CH2: HEX, JOE, VIC. TAMRA; CH3: ROX, CALRED; CH4: CY5, QUASAR.
Reaction volume	5 - 100 ul
Color wavelength	400 to 700nm
Avg. ramping rate	≥2.5°C /s (50~90°C)
Max. ramping rate	≥ 4°C /s
Display resolution	0.1°C
Detection technology	Four PD detection, independent excitation fluorescence detection, suitable for suitable for multiple PCR.
Temperature accuracy	≤ 0.2°C
Operating environment	Ambient temperature: 10-30°C, relative humidity: 20-85%RH, elevation not higher than 2000 m, storage temperature: -20 – 60 °C
Dimensions (L x W x H)	265 x 334 x 172mm
Temperature uniformity	≤ ±0.2°C
Block temperature setting range	10 to 99.9°C
Precision of temperature control	≤0.1°C

Real Time PCR LRTP-A32

Real Time PCR LD-LRTP-A32 is a compact molecular biology instrument designed for real-time amplification and fluorescence-based detection of nucleic acids. Its dual-block configuration allows two programs to be operated simultaneously, while integrated analysis functions support quantitative and qualitative PCR workflows, melting curve analysis, and genotyping.

Features:

- Four-channel dual-block design enables two programs to run simultaneously
- Customized Peltier temperature control provides precise thermal cycling
- Compact construction provides convenient handling and space-efficient installation
- 7-inch color touchscreen and integrated software provide convenient operation and data analysis
- Side-scanning optical design enhances fluorescence collection
- LED illumination provides long-life, maintenance-free operation
- Black reaction blocks help minimize background interference
- Constant-current control improves temperature control stability
- Electromagnetic lid locking enhances operational safety
- Built-in data storage supports extensive experimental record management
- Optional USB thermal printer enables convenient on-site result printing

Applications:

Suitable for molecular diagnostics, genetic testing, life science research, microbiology, biotechnology, pharmaceutical research, and academic laboratories.

Specifications:

Model no.	**LD-LRTP-A32**
Detection	High-sensitivity photoelectric detector
Net Weight	8 kg
Sensitivity	1 copy
Peltier Life	Up to 1,000,000 cycles
Power Supply	220 VAC, 50 Hz; DC 15 V, 255 W
Communication	Wi-Fi / USB 2.0
Dynamic Range	1–10^{10} copies
Reaction Volume	15–100 µL
Sample Capacity	32 × 0.2 mL (4 × 8-well, dual block)
Excitation Source	Long-life LED
Maximum Ramp Rate	5°C/s
Temperature Range	0–100°C

Analysis Functions	Quantitative/qualitative analysis, melting curve, genotyping
Package Dimensions	480 × 400 × 340 mm
Data Export Formats	Excel, CSV, TXT
Hot Lid Temperature	30–115°C, adjustable; default 105°C
Temperature Control	Block / Tube
Detection Wavelength	500–800 nm
Temperature Accuracy	±0.25°C
Excitation Wavelength	300–800 nm
Temperature Resolution	0.1°C
Temperature Uniformity	±0.25°C
Factory-Calibrated Dyes	F1: FAM/SYBR Green I; F2: HEX/VIC/JOE/TET; F3: ROX; F4: CY5
Temperature Fluctuation	±0.1°C
Dimensions (L × W × H)	300 × 267 × 198 mm