BioLAB

PRODUCT CATALOG

REAL-TIME THERMAL CYCLER BTHC-307

CE ISO9001 CERTIFIED

www.biolabscientific.com

REAL-TIME THERMAL CYCLER BTHC-307

REAL-TIME PCR DETECTION SYSTEM

The X960 Real-Time PCR system is a high-performance benchtop instrument giving you greater control of your experiment data. It delivers reliability, sensitivity,and accuracy, which is optimized to enable a broad range of quantitative PCR applications. In real-time quantitative PCR (qPCR), a PCR product is measured at each cycle. By monitoring reactions during the exponential amplification phase of the reaction, users can determine the initial quantity of the target with great precision without involving post-PCR analysis such as gel electrophoresis and image analysis.

Advanced Optical Design:
Two channel (A model) and five channel (B model) 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.
X960 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.

Strict Temperature Control:
Block utilizes 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.

Powerful Software:
X960 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), etc
With integrated powerful visualization tools, the data is analyzed on machine directly

Humanization Design:
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 several X960s from your computer.
Low noise, low energy consumption, long life-span

Ready to Run:
Factory calibrated for optical and thermal accuracy, the instrument is delivered ready for quick installation and use.

Sliding track design of heat lid, easy to place and take samples
LED light source, deep cooling and high-resolution CCD camera
Equipped with gold-plated module, better heat conduction efficiencyIntuitive and clear operation interface, switch language versions conveniently and quickly
With gradient, Touch down, longPCR and other advanced programming functions.
WIFI or LAN connection with PC end
Multiple PCR machines' control on one PC
Customized channels for different customer requirements
Blocks:
Compatible with 96-well plate, 12-well strip tubes, 8-well strip tubes
High quality peltier plates ensure amplification efficiency
Standard gold-plating promotes heat conduction performance

SPECIFICATIONS

Model	BTHC-307
Channel	4
Reactions per run	96
Block Format	96-well 0.2-ml
Color Combinations	4
Light source	High brightness monochrome LED
Detector	Highly sensitive cold light CCD

Detection dynamic range	10^0-10^{10}
Sensitivity	Down to 1 copy
Reaction volume	15ul-100ul
Chemistry	All real-time PCR-based chemistries. Flexibility for chemistries with or without passive reference dye.
Excitation source	White LED
Excitation filters/colors	Channel1: 470nm Channel2: 525nmChannel3: 585nm Channel4: 625nm
Detection filters/colors	Channel1: 520 nm Channel2: 570 nmChannel3: 620 nm Channel4: 675 nm
Kits & Reagent	Channel1: FAM/SYBRChannel2: VIC/HEX/JOE/TET/TAMRA/CY3Channel3: ROX/TEXRADChannel4: CY5Channel5: CY5.5 (Reserved/Customized)
Block Material	Peltier
Accuracy	±0.1C
Temp Uniformity	±0.4C (10 sec after reaching 95 C)±0.2C (10 sec after reaching 55 C)
Temp Range	0C - 99C (Rt<30 C)
Max. ramp rate	5 C/s
Gradient range	300-990
PC Operation system	WindowsXP/VISTA/Windows7/Windows8/Windows10,etc
X960 Operation system	Linux
CPU	A8 processor
Network	LAN/WIFI
Multiple control	Support
Applications Available	Gene Expression, Genotyping, Copy Number Variation, Protein Detection, MicroRNA, Pathogen Detection
Size	W 592 x D 440 x H 280 mm
Alt Name	Real-Time PCR Detection System

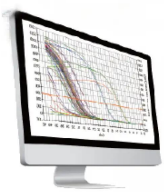
FEATURES

Sliding track design of heat lid, easy to place and take samples
LED light source, deep cooling and high-resolution CCD camera
Equipped with gold-plated module, better heat conduction efficiencyIntuitive and clear operation interface, switch language versions conveniently and quickly
With gradient, Touch down, longPCR and other advanced programming functions.
WIFI or LAN connection with PC end
Multiple PCR machines' control on one PC
Customized channels for different customer requirements

Blocks:
Compatible with 96-well plate, 12-well strip tubes, 8-well strip tubes
High quality peltier plates ensure amplification efficiency
Standard gold-plating promotes heat conduction performance

Lid:
3D style design with well pressure distribution and heat preservation sliding track is convenient for sample operation.

Operation system:
Developed upon Linux operation system, and equipped with A8 CPU for better control experience.



Software:
Independent software analysis module
Intuitive software design enables easy experiment setup and an interactive system allows you to get results faster.

Robust construction:
6mm aluminium alloy main body with solid construction, nice looking curves
and fresh color
Adjustable footing designed for achieving balance easily

Biolab Scientific Ltd.
Trillium Executive Center, East Tower, 675 Cochrane Dr, Markham, Ontario L3R 0B8, Canada
Email: info@biolabscientific.com | Website: www.biolabscientific.com