



LifeECO

Thermal Cycler



Quite running
Energy saving
Skillful manufacture
Environment-friendly
Authorized certification



◆ Well-designed



◆ Hotlid

Adjustable hot lid pressure - Fit for various lab consumables, fulfill variety of application requirements.



◆ Block

High precision and uniformity



◆ LCD Touch Screen

5.7 inch large color touch screen (640×480, 262k-color images)



◆ USB interface

Unlimited USB expansion

Care about you! The special 8



Power

- Wide input Voltage: 100-240V 50-60Hz
- Use the closed magnetic protection power, filtrate clutter power, it ensures the repeatability of experiments
- UL/CSA/CE/RoHS certificated

Peltier



- FerroTec full tailor-made long-life Peltier devices to ensure the instrument's life and safety
- More precise-temperature Control limit of 0.001
- More environment friendly-no pollution, no noise
- More reliable-the longest life up to 100,000 cycles

CPU ARM9

Using ARM9 CPU to improve the speed greatly



Memory

- FLASH memory for program storage, ensure running programs are being saved when power failure happened
- RAM memory as an instrument of memory to ensure the running speed



70,000 h

Imported of industrial cooling fans, dual ball bearing up to 70,000 hours



Internal frame

Integrated structure, high reliability, good stability, shock proof and crash resistant

Safe

The self-test makes sure the LifeECO in normal status and protect the experiment

SMT AUTO

Fully automatic SMT production line to ensure the reliability of the circuit board

◆ Easy experiment

◆ Intuitive interfaces

- 5.7 inch large touch screen colorful display, the bilingual language choices, direct communication.
- Settings at a glance, powerful program editing function, flexible and efficient to define your application.
- Pause Function, the program can be run manually or pre-program suspended.
- POST normal state to ensure than equipment to protect the safety test, improved user management, password protection, experimental procedures to copy, delete, operating etc.
- Three kinds of file storage for your choose: Equipment storage, USB FLASH-Take your experiment data everywhere with you, USB port to a computer.
- Upgrade, software scalability, and free upgrade to meet future experimental technique development.

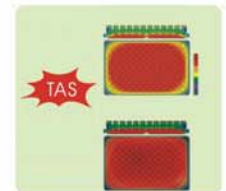
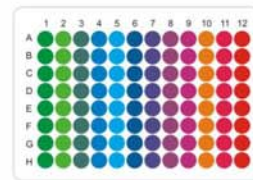


◆ Superior performance

Using the unique TAS technology, LifeECO avoids the edge effect of thermal conduction of block, provides PCR experiments with first-class temperature uniformity. It ensures the repeatability of results.

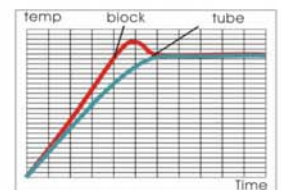
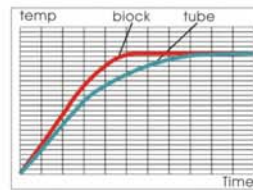
◆ Multiple Temperature control modes

The users can choose TUBE mode or BLOCK mode. The BLOCK mode directly reflects the changes of metal block. While the simulating TUBE mode is able to demonstrate the actual temperature changes of reagents. According to the reagents, choose a suitable temperature control mode can achieve the best conditions of amplification.



◆ Gradient function thermal cycler

Excellent gradient function, with the temperature range up to 30°C, to meet the needs, even the most demanding tests.



◆ Smart block

When the hot lid is heating, the block can keep lower temperature to improve amplification specificity.

◆ Three modes of operation for your choice

Network function - One computer can control many LifeECO, best for massive experiment or industry.

Single operation mode



Online operation mode



Network operation mode



◆ Extensive experiment application

- Swift temperature variation(up to 4°C/s). The temperature heating/cooling rate is adjustable based on the necessary of the experiment.
- Time progressive increase/decrease function. Suitable for Long PCR, which can apply to amplify the PCR template longer than 5kb.
- The function of the temperature progressive increase/decrease. Suitable for Touchdown PCR.
- Suitable for nested PCR.



◆ Specifications

Name	LifeECO
Product code	BYQ6078
Model	TC-96/G/H(b)C
Sample capacity	96-PCR plate (full-skirted) 96×0.2ml tubes 12×8-strip
Cooling technology	Peltier-based
Display	LCD display and touch screen(5.7 inch)
Temp. range	4℃~105℃
Heating speed of ramping	Up to 4℃/sec
Cooling speed of ramping	Up to 4℃/sec
Temp. uniformity	≤ ±0.3℃
Temp. accuracy	≤ ±0.1℃ (55℃) ≤ ±0.2℃ (≥90℃)
Temp. display resolution	0.1
Temp. control modes	BLOCK or TUBE
Ramping range adjustable	0.1℃~4℃
Memory	≥250 typical programs onboard, unlimited with USB flash drive expansion
Max. No. of cycle	99. Suitable for Nested PCR
Time up/down	0~9min59s, suitable for Long PCR
Temperature up/down	0.1~9.9℃, suitable for Touchdown PCR
Auto pause/power protection	YES
Soak function	YES
Real-time running status display	Graph and text display
Gradient range	30~105℃
Gradient temperature range	1~30℃
Hot lid temperature range	30~110℃
Height of hot lid	Adjusted
Auto shut-off function of hot lid	While block temperature is lower than set temperature or program ends, the hot-lid will be automatically closed
Port	Use USB disk download programs unlimitedly
Communication interface	USB B
Input power	100~240V, 50~60Hz
Output power	600W
Dimensions (W×D×H)	335×260×270mm
Net weight	10kg
Certificate	RoHS/CE/MET

*The ideal value under the standard laboratory environment