



# ETC821D Thermal Cycler Plus (Double Blocks)



Basic Parameters of ETC821D			Block thermal performance of ETC821D		
1	Model	ETC821D	7	Temperature control accuracy	$\leq \pm 0.1^{\circ}\text{C}$
2	Blocks	2*0.2ml*48 wells, Aluminum	8	Block temperature precision	$\leq \pm 0.1^{\circ}\text{C}$
3	Matching Consumables	2*48 wells, single tube, 8-strip tubes, non-skirt, semi-skirt.	9	Block temperature uniformity	$\leq \pm 0.3^{\circ}\text{C}@55^{\circ}\text{C}$
4	Input power	100-240V~50/60Hz, 600VA	10	Max. ramp rate	$\geq 5^{\circ}\text{C/s}$
5	Dimension L*W*H	427*288*227 mm	11	Avg. ramp rate	$\geq 2^{\circ}\text{C/s}$
6	Net Weight	9.5kg	12	Temperature Control Technology	Peltier

Features of ETC821D			
13	Block control mode	Tube (Reagent volume setting) / Block	
14	Block temperature range	0-105°C	
15	Hot lid temperature range	30-105°C, ON/OFF	
16	Time setting range	1s-9h0m0s, ∞ means forever	
*	17	Auto hot lid	Yes. Auto setting temperature of the hot lid according to the PCR parameter.
18	Real-time curve	Yes. Displays dynamic temperature curve of block and hot lid.	
19	Temperature touch down	Yes. $\pm 0.1 \pm 10^{\circ}\text{C}/\text{Cycle}$	
20	Time touch down	Yes. $\pm 1 \pm 120\text{s}/\text{Cycle}$	
21	Waiting for operating	Yes. Auto pause and hold temperature waiting for user operation according to program.	
22	Cycles setting range	1-150X, Non cross dual nest loops available.	
23	Adjustable ramp rate	Yes. 0.1-3.5°C/s, Constant temperature change.	
24	Step setting range	1-100	
25	Memory capacity	Max 1000 folders, each folder includes max 1000 files.	
26	Wizard template	Yes. The wizard template guides editing and prompt errors.	
27	Double-block independent operation	Yes, Double-block display, independent operation.	

File management of ETC821D			
*	28	Administrator	Create user account, set password, software upgrade, system reset.
	29	Guest	No password
	30	User	Create accounts as needed. Data will be protected independently.
*	31	Read-only protection	Yes. File name suffix # makes files read-only.
	32	Run log	Yes. Including programs, running times and operations.
*	33	Run history	Yes.
	34	Editing during runtime	Yes.
	35	File template	Provide programmable templates.
	36	USB interface	Yes. Files can be imported / exported with one click. Easy exchange files between PCR machines. Software upgrade.

More features of ETC821D			
37	Display	7 "WVGA 64000, LED backlight, high sensitive touch screen.	
*	38	User friendly interface	Yes. Dynamic temperature and color background, animation running status, breathing light indication, buzzing prompt.
39	Screen lock	For large users, in order to prevent the machine from being mis operated by others in the experiment, the operator can lock the screen so that the click on the screen will not respond until it is unlocked with a password.	
*	40	Easy interfaces switch	Simple main interface, operating interface, dynamic curve, engineering interface.
*	41	Inhibit Non-specific amplification	Yes. Before running the cycle program, the block is cooled to 10°C until the hot lid temperature get set value during hot lid warming up.
	42	Tube mode	Yes. Precise control according to reagents volume.
	43	Adaptive lid	Auto adapts to various heights of tubes (high tube, low tube, flat top tube and dome tube).
	44	Self-test when power on	Yes.
	45	Auto report after running	Yes.
*	46	Self-diagnosis and report	Yes.
	47	Soaking after running	Yes. The lowest soaking temperature is 0°C.
	48	Memory function of power-down	Yes.
	49	Total time / Remain time prediction	Yes.
*	50	Peltier life warning	Yes, automatically assess Peltier's health status and give maintenance suggestions.
	51	Screen calibration	Yes.
*	52	Block temperature calibration	Yes. Engineering mode only.
	53	Key tone	On/off
	54	Screen brightness adjustment	Yes
	55	System	Including system configuration, self-test, factory setting, software upgrade, engineering interface (Engineering mode only).
	56	Help	Product features, software features, quick guides, error codes, contact information.
*	57	Interface language	Chinese / English switch freely.
*	58	WeChat Service	Yes. User can contact us by sending photos to WeChat when errors occur.

\* Refers to the special function of Eastwin.

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# Introduction

ETC821D is a Double-block model meticulously built on the basis of the classic ETC821 model. The instrument adopts a Double-block module design and can run two different PCR programs independently. It is especially suitable for small throughput such as teaching and scientific research PCR experiment.

# Features

One machine with multiple uses

## Double-block design You can run different programs independently

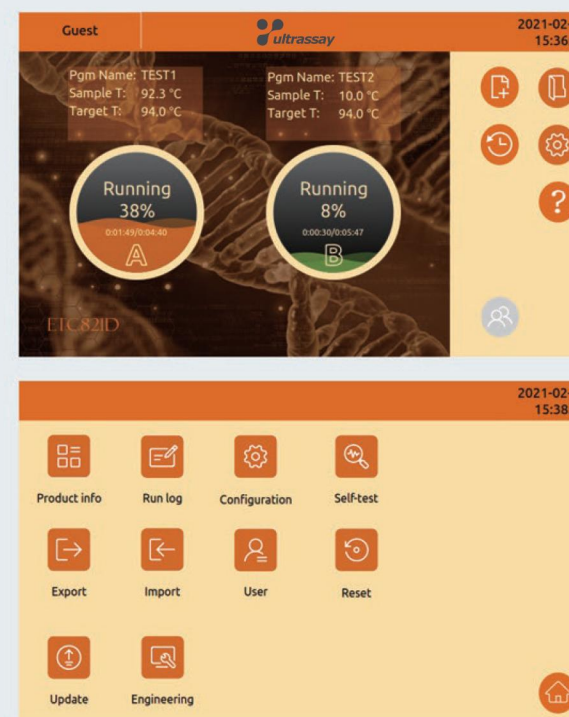
Two 48 wells\*0.2ml modules can be set up separately to run programs, independently and in parallel, flexible to meet the various needs of users for PCR experiments.



The experiment is more secure

## Long life Peltier

- Using Marlow series Peltier, higher quality and longer life.
- The early warning function of the working status of the Peltier, which automatically evaluates the health status of Peltier, and provides maintenance recommendations, so that you will be confident in the smooth completion of the experiment and will know the reliable use of the instrument.



Intelligent operation experience

## Minimal software interface powerful system functions

- Windows style operation interface, easy to use for software operation.
- One-click data import and export, U disk upgrade, efficient and convenient conversion between stations.
- Personal file management system, separate protection of program data.
- A variety of interfaces can be switched at needs for browsing, observation, maintenance to research.



Inherited classic features

## Professional temperature controls, excellent performance

- Intelligent suppression of non-specific amplification
- Perfect constant rate temperature change
- Intelligent suppression of reagent evaporation in small volumes

