



# ETC821DG

## Double-block Thermal Cycler

ETC821DG is a Double-block model built on the basis of the classic ETC821 model. The instrument adopts a Double-block design and can run two different PCR programs independently. It is especially suitable for small throughput experiments, such as teaching and scientific research PCR experiment.

## Features

01

One instrument with multiple uses

**Double-block design.**  
Different programs can be run independently.

02

More guaranteed experiment

Long life Peltier.

03

Intelligent operation experience

Simple software interface,  
powerful system functions.

04

Inherited classic features

**Double block gradient.**  
Professional temperature control,  
excellent performance.



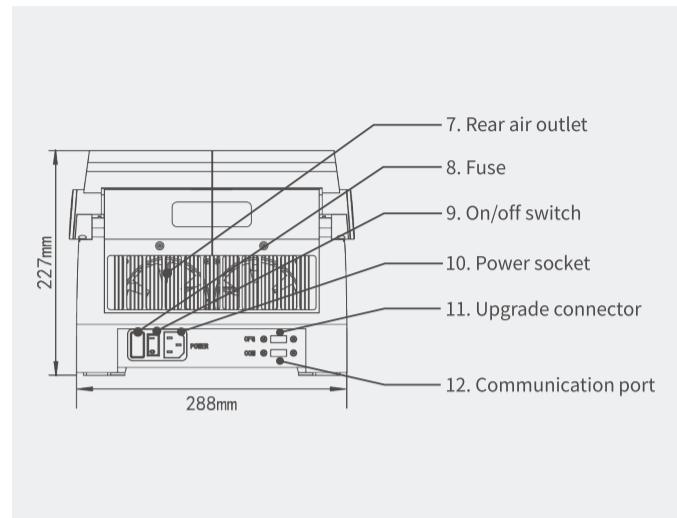
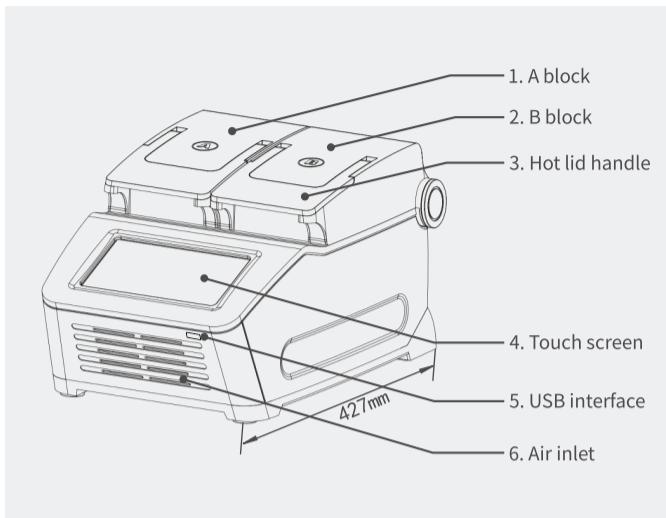
## Model Explanation

ETC 821DG

Double-block 48 wells + temperature gradient

EASTWIN brand series thermal cycler

## Shape Structure



## Typical PCR Programming Examples

### Experimental Procedure

STEP1: 30°C2min30s

STEP2: 95°C30s } 40 cycles

STEP3: 60°C30s }

STEP4: Auto soaking at 8°Cafter experiment



### Programming Method

Program creation: Click "  " to pop up a program template, edit and save on this template for experiment program.

1) Double click the blank area of the step section to jump out the parameter editing interface, and then click the parameter number to modify the parameter. Press "OK" finally.

2) After the main parameter of the steps are set up, the hot lid and capacity of the reagent also need to be set.

**Hot lid:** The temperature of the hot lid is 105°C in default (the temperature setting range is 30 ~ 105°C, which should be higher than the setting temperature of the module). Set it to "Auto", temperature of the hot lid is calculated and assigned automatically (the highest temperature in the module setting within the effective range is +10°C). Set it to "OFF", that means closing the hot lid operation.

**Capacity:** Default value is 25μl. Be sure to correctly key in the actual reaction capacity of the reagent.

3) Click "  " to save the program after all settings are completed, and enter the program name (a combination of capital and small letters, numbers and symbols). Click "OK" to save.

## Performance Parameters

Basic parameters of ETC821DG			Block thermal performance of ETC821DG		
1	Model	ETC821DG	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	Size( L*W*H)	Product size: 427*288*227mm Carton size:540*450*385mm	11	Avg. Ramp rate	$\geq 2^\circ\text{C/s}$
6	Weight	Net weight: 9.7kg Gross weight: 14.5kg	12	Temperature control technology	Peltier
Features of ETC821DG					
13	Gradient	Yes, Double blocks gradient, 8 columns arranged vertically, gradient range 0.1-24°C.			
14	Block control mode	Tube (reagent volume setting) / Block			
15	Block temperature range	0-105°C			
16	Hot lid temperature range	30-105°C, ON/OFF			
17	Time setting range	1s-9h0m0s, $\infty$ means infinite			
*	18	Auto hot lid	Yes. Auto setting temperature of the hot lid according to the PCR parameter.		
	19	Real-time curve	Yes. Displays dynamic temperature curve of block and hot lid.		
	20	Temperature touch down	Yes. $\pm 0.1 \sim \pm 10^\circ\text{C}/\text{cycle}$		
	21	Time touch down	Yes. $\pm 1 \sim \pm 120\text{s}/\text{cycle}$		
	22	Waiting for operating	Yes. Auto pause and hold temperature waiting for user operation according to program.		
	23	Cycles setting range	1-150x, non cross dual nest loops can be set.		
	24	Adjustable ramp rate	Yes. 0.1-3.5°C/s, constant temperature change.		
	25	Step setting range	1-100		
	26	Memory capacity	Total 1 million PCR programs. Max. 1000 folders, each folder includes max. 1000 files.		
	27	Wizard template	Yes. The wizard template guides to edit and errors prompt.		
	28	Double-block independent operation	Yes, double-block display, independent operation.		
File management of ETC821DG					
29	Administrator	Create user account, set password, software upgrade, system reset.			
30	Guest	No password			
31	User	Create accounts as needed. Data will be protected independently.			
*	32	Read-only protection	Yes. File name suffix " #" makes files read-only.		
	33	Run log and export	Yes. Including programs, running time, status, can be exported as quality records.		
*	34	Run history	Yes.		
	35	Editing during runtime	Yes.		
	36	File template	Provide programmable templates.		
	37	USB interface	Yes. Files can be imported / exported with one click. Easy exchange files between PCR instruments. Software upgrade.		
More features of ETC821DG					
38	Display	7 "WVGA 64000, LED backlight, high sensitive touch screen.			
39	User friendly interface	Yes. Dynamic temperature and color background, animation running status, breathing light indication, buzzing prompt.			
40	Screen lock	For big users, in order to prevent the machine from being misoperated by others in the experiment, the operator can lock the screen and then enter with the password.			
*	41	Easy interfaces switch	Simple main interface, operating interface, dynamic curve interface, engineering interface.		
*	42	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.		
	43	Tube mode	Yes. Precise control according to reagents volume.		
	44	Adaptive lid	Auto adaptation to various heights of tubes (high, low, flat top and dome tubes).		
	45	Self-test when power on	Yes.		
	46	Auto report after running	Yes.		
	47	Self-diagnosis and report	Yes.		
	48	Soaking after running	Yes. The lowest soaking temperature is 0°C.		
	49	Memory function of power-down	Yes.		
	50	Total time / Remain time prediction	Yes.		
*	51	Peltier life warning	Yes, automatically assess Peltier's health status and give maintenance suggestions.		
	52	Screen calibration	Yes.		
	53	Block temperature calibration	Yes. Engineering mode only.		
	54	Key tone	ON/OFF		
	55	Screen brightness adjustment	Yes		
	56	System	Including system configuration, self-test, factory setting, software upgrade, engineering interface (Engineering mode only).		
	57	Help	Product features, software features, quick guides, error codes, contact information.		
	58	Interface language	Chinese / English switch freely.		
	59	WeChat Service	Yes. User can contact us by sending photos to WeChat when errors occur.		

\* indicates the features of EASTWIN product.