

# STALWART

## Thermal Cycler STG-S Series



## Introduction

STG-S series thermal cycler uses long service life peltier. Its max. ramping rate is 4.5°C/s and cycle times is more than 1000,000. The product combines a variety of advanced technologies Android system; Color capacitive touch screen; several block as options; built-in WIFI module, mobile APP and PC software control function; email notification function; big storage capacity and etc. All above functions allow PCR's excellent performance and meet higher experiment's need.

## Features

- Six pieces of long service life Peltier heating units and form 3 circuits to control 3 temperature zones;
- Reinforced aluminum module with anodizing technology can keep rapid heating-conducting property and have enough corrosion resistance.
- High heating and cooling rate, max. Ramping rate 4.5°C/s, can save your precious time.
- Stepless adjustable hot lid, fit tubes of different heights to avoid tube melt and evaporation.
- Android operating system, capacitive touch screen, high-definition TFT display (8", 800×600 pixels, 16 colors) with graphical interface provides easy use for setting up and monitoring.
- Built-in 11 standard program file template, can quickly edit the required files.
- Folder management, user can build directory.
- The running program and left time can be displayed in real time, allow to edit file when program is running.
- One-click quick incubation function can meet experiment's needs such as denaturation, enzyme cutting/enzyme-link and ELISA.
- Internal flash memory for 10000 typical PCR files in free configurable folders.
- Hot lid temperature and hot lid work mode can be set to meet different experiment's need.
- Automatic restart after power failure. When power is restored it can continue to run unfinished program.
- GLP report records every step to provide accurate data support for experiment result analysis.
- User Login Management, three-tier permission, password protection function to ensure data security.
- support U disk to get PCR data, to update software, and USB mouse can also be used to control the PCR instrument;
- Built-in WIFI module, one machine can control multiple PCR machines at the same time through mobile APP or PC software;
- Support email-alert function when experiment is over.

## Specification

Item	STG612-S	STG32-S	STG622-S	STG642-S
Capacity	96×0.2ml	96×0.2ml+ 77×0.5ml	60×0.5ml	384well
Temperature Range	0-100°C	0-100°C	0-100°C	0-100°C
Heating Rate	4.5°C/s	4.5°C/s	4.5°C/s	4°C/s
Cooling Rate	4°C/s	4°C/s	4°C/s	3°C/s
Uniformity	≤±0.2°C	≤±0.2°C	≤±0.2°C	≤±0.2°C
Accuracy	≤±0.1°C	≤±0.1°C	≤±0.1°C	≤±0.1°C
Display Resolution	0.1°C	0.1°C	0.1°C	0.1°C
Temperature Control	BlockTube	BlockTube	BlockTube	BlockTube
Ramping Rate Adjustable	0.1-4.5°C	0.1-4.5°C	0.1-4.5°C	0.1-4.5°C
Gradient Uniformity	≤±0.2°C	≤±0.2°C	≤±0.2°C	≤±0.2°C
Gradient Accuracy	≤±0.2°C	≤±0.2°C	≤±0.2°C	≤±0.2°C
Gradient Temp. Range	30-100°C	30-100°C	30-100°C	30-100°C

## Specification

Gradient Spread	1-30°C	1-30°C	1-30°C	1-30°C
Hot Lid Temperature	30-110°C	30-110°C	30-110°C	30-110°C
Hot Lid Height Adjustable	Stepless Adjustable	Stepless Adjustable	Stepless Adjustable	Stepless Adjustable
Number of Programs	10000 +(USB FLASH)	10000 +(USB FLASH)	10000 +(USB FLASH)	10000 +(USB FLASH)
Max.No.of Step	30	30	30	30
Max.No.of Cycle	100	100	100	100
Time Increment/ Decrement	1 Sec - 600 Sec	1 Sec - 600 Sec	1 Sec - 600 Sec	1 Sec - 600 Sec
Temp. Increment/ Decrement	0.1-10.0°C	0.1-10.0°C	0.1-10.0°C	0.1-10.0°C
Pause Function	Yes	Yes	Yes	Yes
Auto Data Protection	Yes	Yes	Yes	Yes
Hold at 4°C	Forever	Forever	Forever	Forever
Touchdown Function	Yes	Yes	Yes	Yes
Long PCR Function	Yes	Yes	Yes	Yes
Language	English	English	English	English
Mobile App	Android	Android	Android	Android
LAN to computer	Yes	Yes	Yes	Yes
LCD	8 inch, 800× 600 pels,	8 inch, 800× 600 pels,	8 inch, 800× 600 pels,	8 inch, 800× 600 pels,
Communication	USB2.0 , LAN, Wifi	USB2.0 , LAN, Wifi	USB2.0 , LAN, Wifi	USB2.0 , LAN, Wifi
Dimensions	390mm×270mm× 255mm (L×W×H)	390mm×270mm× 255mm (L×W×H)	390mm×270mm× 255mm (L×W×H)	390mm×270mm× 255mm (L×W×H)
Weight	9.0kg	9.0kg	9.0kg	9.0kg
Power Supply	85-264VAC, 47-63Hz, 600 W	85-264VAC, 47-63Hz, 600 W	85-264VAC, 47-63Hz, 600 W	85-264VAC , 47-63Hz, 600 W