

# STALWART

## Thermal Cycler SES Series



## Introduction

SES Series thermal cycler uses long service life peltier. Its max. Ramping rate is 5 °C/s and cycle times is more than 1000,000. The product combines a variety of advanced technologies: Android system; color touch screen; gradient function; WIFI module built-in; support cell phone APP control; email notification function; big storage capacity and support USB device.

## Features

- Long service life Peltier heating units.
- 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 5°C/s, can save your precious time.
- Scalable hot lid fits tubes of different heights.
- TFT color capacitive touch screen ( 5 inches, 800×480 pels), graphical menu navigation interface, very easy to operate.
- Built-in 11 standard program file template, can quickly edit the required files.
- Folder management, user can build directory.
- He 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.
- 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.
- Support USB to store and copy PCR data, user can control PCR by USB mouse.
- Update software by USB and LAN.
- WiFi module built-in, one unit can control multiple PCR machine through computer or cell phone with internet connection.
- Support email-alert function when experiment is over.

## Specification

Item	SES-16	SES-32G
Capacity	16×0.2ml(4×4 layout)	32×0.2ml(4×8 layout)
Tube	0.2ml single tube	0.2ml single tube 8 strip
Temperature Range	4-100°C	4-100°C
MAX. Heating Rate	5°C/s	5°C/s
MAX. Cooling Rate	4°C/s	4°C/s
Uniformity	≤±0.2°C	≤±0.2°C
Accuracy	≤±0.2°C	≤±0.2°C
Display Resolution	0.1°C	0.1°C
Temperature Control	BlockTube	BlockTube
Ramping Rate Adjustable	0.1-5°C	0.1-5°C
Gradient Temp. Range	—	30-100°C
Gradient Spread	1-30°C	1-30°C
Hot Lid Temperature	30-110°C	30-110°C

## Specification

Number of Programs	10000 +(USB FLASH)	10000 +(USB FLASH)
Max. No. of Step	30	30
Max. No. of Cycle	100	100
Time Increment/Decrement	1 Sec - 600 Sec	1 Sec - 600 Sec
Temp. Increment/Decrement	0.1-10.0°C	0.1-10.0°C
Pause Function	Yes	Yes
Auto Data Protection	Yes	Yes
Hold at 4	Forever	Forever
Touchdown Function	Yes	Yes
Long PCR Function	Yes	Yes
Language	English	English
Computer Software	Yes	Yes
Mobile phone APP	Yes	Yes
LCD	5 inch 800×480 pels, 65K color	5 inch 800×480 pels, 65K color
Communication	USB2.0 , WIFI	USB2.0 , WIFI
Dimensions	267mm×190mm×115mm (L×W×H)	267mm×190mm×115mm (L×W×H)
Weight	2.5kg	2.5kg
Power Supply	85-264VAC , 47-63Hz , 120 W	85-264VAC , 47-63Hz , 200 W