

# STALWART

## Thermal Cycler STG-D Series



## Introduction

STC-D/D+ series thermal cycler has Android operation system and 10.1 inch capacitive touch screen. Independent operation of double blocks. Air channel is in front and back and it allows machine placed side by side. Self-adapting pressure hot lid makes closing lid and tightening lid in one step. It has long service life peltier heating units and max. ramping rate is 8°C/S. Wifi unit is built in and user can control many units of PCR through mobile App

## 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 8 °C/s, can save your precious time.
- Double blocks design, 64 well block on the left can set two-dimensional gradient, 32 well module on the right can set conventional gradient.
- Self-adapting pressure hot lid makes closing lid and tightening lid in one step.
- Air channel is in front and back and it allows machine placed side by side.
- It has Android operation system and 10.1 inch capacitive touch screen. It has graphical menu navigation interface and operation is very simple.
- Built-in 11 standard program file template, can quickly edit the required files.
- 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.
- 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.
- Email notification after experiment is over.

## Specification

| Item                    | STC-19DC                                 |                                    | STC-22DL                                 |                    | STC-56DP                                 |                    |
|-------------------------|--|------------------------------------|--|--------------------|--|--------------------|
| Capacity                | ×0.2ml (A Block) +<br>32×0.2ml (B Block) |                                    | ×0.2ml (A Block) +<br>32×0.2ml (B Block) |                    | ×0.2ml (A Block) +<br>32×0.2ml (B Block) |                    |
| Tube                    | 0.2ml tube, 8 strips                     |                                    | 0.2ml tube, 8 strips                     |                    | 0.2ml tube, 8 strips                     |                    |
| Temperature Range       | 0-105°C                                  |                                    | 0-105°C                                  |                    | 0-105°C                                  |                    |
| MAX. Ramp Rate          | 5°C/s                                    |                                    | 5°C/s                                    |                    | 8°C/s                                    |                    |
| Uniformity              | ≤±0.2°C                                  |                                    | ≤±0.2°C                                  |                    | ≤±0.2°C                                  |                    |
| Accuracy                | ≤±0.1°C                                  |                                    | ≤±0.1°C                                  |                    | ≤±0.1°C                                  |                    |
| Display Resolution      | 0.1°C                                    |                                    | 0.1°C                                    |                    | 0.1°C                                    |                    |
| Temperature Control     | BlockTube                                |                                    | BlockTube                                |                    | BlockTube                                |                    |
| Ramping Rate Adjustable | 0.1-5°C                                  |                                    | 0.1-5°C                                  |                    | 0.1-8°C                                  |                    |
| Gradient Temp. Range    | 30°C105°C                                |                                    | 30°C105°C                                |                    | 30°C105°C                                |                    |
| Gradient Type           | Normal<br>Gradient<br>(A<br>BLOCK)       | Normal<br>Gradient<br>(B<br>BLOCK) | Two-<br>Dimensional<br>Gradient          | Normal<br>Gradient | Two-<br>Dimensional<br>Gradient          | Normal<br>Gradient |

## Specification

|                               |                               |   |  |        |  |        |
|-------------------------------|-------------------------------|---|--|--------|--|--------|
| Gradient Spread               | 1-30°C                        | - | Horizontal:<br>1-30°C<br>Vertical:<br>1-24°C | 1-30°C | Horizontal:<br>1-30°C<br>Vertical:<br>1-24°C | 1-30°C |
| Hot Lid Temperature           | 30-115°C                      |   | 30-115°C                                     |        | 30-115°C                                     |        |
| Number of Programs            | 20000 +(USB FLASH)            |   | 20000 +(USB FLASH)                           |        | 20000 +(USB FLASH)                           |        |
| Max.No.of Step                | 40                            |   | 40   |        | 40   |        |
| Max.No.of Cycle               | 100                           |   | 100  |        | 100  |        |
| Time Increment/<br>Decrement  | 1 Sec - 600 Sec               |   | 1 Sec - 600 Sec                              |        | 1 Sec - 600 Sec                              |        |
| Temp. Increment/<br>Decrement | 0.1-10.0°C                    |   | 0.1-10.0°C                                   |        | 0.1-10.0°C                                   |        |
| Pause Function                | Yes                           |   | Yes  |        | Yes  |        |
| Auto Data Protection          | Yes                           |   | Yes  |        | Yes  |        |
| Hold at 4°C                   | Forever                       |   | Forever                                      |        | Forever                                      |        |
| Touchdown Function            | Yes                           |   | Yes  |        | Yes  |        |
| Long PCR Function             | Yes                           |   | Yes  |        | Yes  |        |
| Language                      | English                       |   | English                                      |        | English                                      |        |
| Computer Software             | Yes                           |   | Yes  |        | Yes  |        |
| Mobile phone APP              | Yes                           |   | Yes  |        | Yes  |        |
| LCD                           | 10.1 inch, 1280×800<br>pexels |   | 10.1 inch, 1280×800<br>pexels                |        | 10.1 inch, 1280×800<br>pexels                |        |
| Communication                 | USB2.0 , WIFI                 |   | USB2.0 , WIFI                                |        | USB2.0 , WIFI                                |        |
| Dimensions                    | × 270mm× 255mm<br>(L×W×H)     |   | × 270mm× 255mm<br>(L×W×H)                    |        | × 270mm× 255mm<br>(L×W×H)                    |        |
| Weight                        | 11kg                          |   | 11kg   |        | 18kg   |        |
| Power Supply                  | 100-240VAC, 50/60Hz,<br>600 W |   | 100-240VAC, 50/60Hz,<br>600 W                |        | 100-240VAC, 50/60Hz,<br>1200 W               |        |