

STALWART

Real-time PCR System
STN-48R



Introduction

STN-48R Automatic PCR Analysis System is specially designed for small and medium-sized laboratories, mobile laboratories, field testing professionals and so on, to support absolute quantitative analysis, relative quantitative analysis, isothermal amplification, dissociation curve analysis, genotyping, and endpoint fluorescence analysis, etc. With its excellent performance and portability, it can make your experiments more easy-to-use, accurate and efficient

Features

- Rapid heating up and cooling down: maximum heating rate of 8.0°C/s; maximum cooling rate of 6.2°C/s.
- High-brightness, maintenance-free LED lightsource with 4 (Gentier 48E)/2 (Gentier 48R) fluorescence detection channels, allowing fluorescence scanning of all wells completed in just 2s.
- With a 7-inch full-color touchscreen, the device can operate independently from the computer and store over 1,000 experimental data.
- Immediate analysis of experimental data on the instrument, without the need for a computer; direct printing function by connecting to a thermal printer.
- Automatic recovery of the experiment when the power is on again after cutting off, without waiting for the power-on of the computer or software control.
- Small in size, light in weight, easy to move; and no calibration needed after moving.

Specification

Model	STN-48R
Through Out	48
Fluorescence Channels	2
Compatible Fluorophores	Channel 1: FAM, SYBR Green I, etc. Channel 2: VIC, HEX, TET, JOE, etc.
Light Source	High-brightness, long-life and maintenance-free LED light source
Detector	Photodiodes
Fluorescence Scanning Time	48-well 4-color detection completed within 2s
Heating Rate	Maximum Heating Ramp rate $\geq 8.0^{\circ}\text{C/s}$; Average Heating Ramp rate $\geq 6.2^{\circ}\text{C/s}$
Cooling Rate	Maximum Cooling Ramp rate $\geq 6.2^{\circ}\text{C/s}$; Average Heating Ramp rate $\geq 4.5^{\circ}\text{C/s}$
Temperature Accuracy	$\leq 0.1^{\circ}\text{C}$
Special Temperature Setting function	Support Thermal gradients PCR, Long PCR, Touch Down PCR
Suitable Consumables	0.2mL clear non-skirt 48-well plates, 8 tube strips single tubes, etc

Specification

Sample Testing Linearity and Repeatability	Linear Correlation: $r \geq 0.999$ Repeatability: cycle threshold (Ct) value CV $\leq 0.5\%$
Software Analysis	Qualitative Analysis, absolute quantitative analysis, relative quantitative analysis, end point fluorescence analysis, melting curve analysis, and genotyping analysis, etc
Control Method	Stand-alone Operation: 7 inch touchscreen control; Cloud-enabled: PC software control via direct connection or LAN (local area network) Up to 10 devices controlled by one PC
Power Failure Protection	Automatic Recovery of the experiment and other functions when the power is on again after cutting off, without waiting for the power-on of the computer or software control
Data Storage and Transmission	Automatic Recovery of the experiment and other functions when the power is on again after cutting off, without waiting for the power-on of the computer or software control
Stand-Alone Analysis Results	No need for an extra computer: experiment data analysis enabled within the instrument; Direct Printing function (optional) to output the sample amplification curve and CT value, simply by connecting to the compatible thermal printer
Reporting Function	Build-in experiment report templates for a variety of industries; Fully open universal reporting of which the contents and formats can be customized
Operating System for PC	Windows XP Pro or higher
Power Supply and Power Consumption	AC 100-240V, 50-60Hz, 600VA
Weight	11kg (net)
Instrument Dimension	260*400x260mm (WxLxH)