

STALWART

Real-time PCR System STN-96E



Introduction

STN-96E is a real-time quantitative fluorescence PCR system designed by Stalwart to meet the experimental needs of high-end users. The product has various advantages including advanced efficient temperature control system and photoelectric system, powerful and easy-to-use software analysis function, and user-friendly control method, etc. and can easily process downstream multiplex gene detection, quantitative analysis, SNP analysis, dissociation curve analysis and other applications. It is widely used in medical institutions at all levels, universities and research institutes, CDC, Entry-Exit Inspection and Quarantine Bureau, Public Security Criminal Evidence Identification Center, veterinary centers, food and dairy product factories, as well as other fields and industries.

Features

- Rapid heating and cooling, with a maximum heating rate of 6.1°C/s, a maximum cooling rate of 5.0°C/s, and a temperature uniformity of $\pm 0.1^{\circ}\text{C}$.
- High-brightness, maintenance-free LED light source with 6 (STN-96E)/4 fluorescence detection channels for rapid fluorescence scanning.
- With a 10.4-inch full-color touchscreen, the device can operate independently from the computer and store over 1,000 experimental data.
- 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.

Specification

Model	STN-96E
Through Out	96
Fluorescence Channels	6
Compatible Fluorophores	Channel 1: FAM, SYBR Green I, SYTO 9, Eva Green, LC Green Channel 2: HEX, VIC, TET, JOE Channel 3: ROX, Texas Red Channel 4: Cy5 Channel 5: Alexa Fluor 680 Channel 6: FRET
Light Source	High -brightness long-life and maintenance-free LED light source excitation from the top
Detector	Photodiode (PD), top scanning
Heating Rate	Maximum Heating Ramp rate $\geq 6.1^{\circ}\text{C/s}$; Average heating ramp rate $\geq 4.5^{\circ}\text{C/s}$
Cooling Rate	Maximum Cooling Ramp rate $\geq 5.0^{\circ}\text{C/s}$; Average heating ramp rate $\geq 2.8^{\circ}\text{C/s}$
Temperature Uniformity	$\pm 0.1^{\circ}\text{C}$
Temperature Accuracy	$\leq 0.1^{\circ}\text{C}$
Special Temperature Setting function	Support Thermal gradients PCR, Touch down PCR
Suitable Consumables	0.2mL 96-well plates, 8-tube strips, single tubes,

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: 10.4-inch touch screen control; Cloud-enabled: PC software control via direct connection or LAN (local area network)
Power Failure Protection	Automatic recovery of the experiment and other function 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	A single machine can store more than 1000 experimental data files, which can be imported and exported via USB disks
Reporting Function	Built-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	Win 7, Win 10
Instrument Dimension	355mmx475mmx484mm (WxLxH)
Weight	30kg (net)
Power Supply and Power Consumption	AC 100-240V, 50-60Hz; 900VA