

High-throughput Nucleic Acid Detection Workstation



Features:



Automatic sealing machine
The automatic sealing machine is a fully automatic equipment for sealing PCR plates, deep well plates, microplates, etc. It can effectively prevent sample loss and cross-contamination, and meet the diverse needs of laboratories.



Daily Detection Capacity ≥ 6000 tubes
4-channel independent capping machine, 4-channel high-precision pipetting, can complete the processing of 96 samples within 30 minutes.



Sample zero contact
It can complete the loading of the original tube, capping and sub-cup, nucleic acid extraction, PCR system
The whole process of construction and amplification detection is automated, avoiding manipulation
The staff has direct contact with the samples to be processed.
Introduction(This set of assembly line scheme is mainly composed of the following 4 parts)



Samples In, Results Out
The nucleic acid detection pipeline solution realizes from sample input to Full automation of results analysis.



Efficient &Precise
Automated mechanical operation to reduce human error
Equipped with a fast PCR system to improve experimental efficiency



LEIA-X4 Fluorescent quantitative PCR instrument
The fluorescent PCR analysis system is very suitable for multiple combined detection of infectious disease pathogens, and can be linked to an external output system to realize full automation of the entire program from sample loading to result output.



BK-AutoHS96Pro Automatic Nucleic Acid Extractor
The automatic nucleic acid extractor is a high-throughput sample nucleic acid processing system tailored for large laboratories, PCR shelters, inspection centers, disease control centers, and hospital inspection departments. The daily processing capacity is greater than 6,000 tubes, which can realize flow loading of samples and consumables without stopping the machine midway. It can complete the loading of the original tube, capping and dividing into cups, nucleic acid extraction, and PCR system construction. To avoid direct contact between operators and samples to be processed, multiple biosafety protection measures greatly reduce the risk of infection of operators and the risk cross-contamination between samples.



Automatic sample loading components
The automatic sample loading component uses the robotic arm to complete the continuous sample loading function of multiple sample containers, which realizes the high-throughput standard of the program, improves efficiency, and has stable continuous operation capabilities. The entire assembly line scheme adopts a closed extraction chamber design, with a unique anti-aerosol cross-contamination device and a UV ultraviolet disinfection system to achieve full-process biological safety protection. Comprehensive security considerations greatly enhance the reliability of this solution.

Technical Parameters:

Throughput	1-96
Speed	Daily inspection volume ≥ 6000 tubes
Adding Sample	2-1000ul
Temperature Accuracy	±0.3℃
Temperature Uniformity	±0.3℃
Module Temperature Range	4-100℃
Sample Volume	10-50ul
Fluorescence Channel	4 channels, FM , VIC , ROX , Cy5
Machine Function	Putting the original tube on the machine + sample splitting + nucleic acid extraction + R C R system construction + amplification detection
Sample Loading Method	Flow loading, single sample volume 96
Consumables Added	Flowing consumables, running without stopping
Liquid Detection Scheme	Pneumatic liquid level detection scheme, intelligent detection of blocked needle
Sample Needle Specifications	50μl, 200μl, 1000μl optional, disposable black conductive needle with filter
Sampling Tube Adaptation	Suitable for conventional 5mL, 10mL, 20/30mL virus sampling tubes
Protective Function	Power-on self-test, high temperature alarm, over-temperature protection, needle removal and needle removal protection
Disinfection & Decontamination Methods	UV lamp (cup compartment + extraction compartment + extraction area + sealing compartment + testing compartment), multi-directional disinfection
Touch Screen	Four 10.1-inch capacitive touch screens
External Size	6300*750*1900mm