



Sample Processing System Magic-8400 Series

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Product introduction

With a daily processing capacity of nearly 20,000 sample tubes, Magic-8400 series is a device that can support 20/10 swabs or 1 swab in 1 sample tube for testing. And different manufacturers' 20 in 1, 10 in 1, and 1 in 1 tubes can be loaded on the machine simultaneously. In all, Magic-8400 series can be used to handle a large quantity of nucleic acid detection.

Fast& accurate

- There are 4 non-equidistant grippers built into the gripper arm, and each gripper is equipped with an independent code scanner;
- Slim pipetting can be added at irregular spacing, with spacing adjustable from 9-270mm;
- Effective pipetting range: 1 μ L-1000 μ L;
- Pipetting accuracy: 2 μ L CV≤5%、10 μ L CV≤2.5%、≥50 μ L CV≤0.5%;
- The dual-channel pipetting module adopts capacitive sensing and pressure sensing detection to realize micro and precise pipetting;
- Complete the code scanning, uncapping, pipetting, and capping of 96 sample tubes in 7 min.
- Build a PCR system for 96 sample tubes in 4 minutes;
- Daily throughput: about 20000 sample tubes, improve the detection flux, save manpower input.



Safety protection

- Automatic unloading, real-time monitoring of pin loading/unloading, improve the efficiency and reliability of unloading;
- Built-in filtration system and UV disinfection system, the filtration efficiency of 0.3um diameter particles is not lower than 99.9%, effectively prevent aerosol pollutants leakage;
- With startup self-check, error alarm, the whole closed loop state monitoring function;
- With a safety protection panel and a door lock sensor, it can prevent illegal entry and suspend at any time to deal with abnormal accidents;
- There are sound and light indications of running status, warning reminders such as insufficient reagents and collisions;
- With two-way LIS or HIS communication system.

System parameter

Instrument model	Magic-8400	Magic-8400Plus
Loaded sample tubes	For 20 mixes in 1 tube, it can load 48 sample tubes at a time. For other modes, 96 sample tubes are loaded at one time.	
Sample tube specification	20 mixed in a tube with a diameter ranging 19-26mm, compatible with sampling tube with diameter of 11-17mm and height of 50-150mm.	
Sample information entry	One dimensional code, two-dimensional code	
Oscillating sample pipe rack	The oscillation amplitude is adjustable from 1 to 10 levels to prevent cell precipitation.	
Opening and capping module	4 channels	
Sampling Channel	4 channels	
Pipetting performance	Pipetting range: 1-1000 μ L, 2 μ L CV≤5%, 10 μ L CV≤2.5%, ≥50 μ L CV≤0.5%.	
Liquid dispensing mode	One suction and one spray, one suction and multiple spray	
Sample adding function	Capacitance sensing and pressure sensing detection, clot detection, air suction detection and tip head detection.	
Tube splitting speed	Complete the code scanning, uncapping, pipetting, and capping of 96 samples in 7 min.	
PCR reaction system	The PCR system of 96 sample tubes was constructed within 4 min.	
Reaction tube type	Compatible with 0.1ml/0.2ml single tube, 8-tube, 96 well PCR reaction plate system.	
Throughput	About 20000 sample tubes	
Deep well plate position	2	6
Equipment size (length, width and height)	1100mm*900mm*900mm	1200mm*900mm*900mm
Operating environment	Temperature:10 ~ 35°C, humidity:15% ~ 99% (relative humidity), Altitude: 50-4000m.	
Power	Voltage: 100V-120V/200V-240V AC, frequency: 50/60 HZ;	
Anti pollution system	Built in filtration system and ultraviolet disinfection system.	