



# Sample Processing System Magic-8200Plus

## Sample Processing System Magic-8200Plus

### Product introduction

With a daily processing capacity of nearly 10,000 sample tubes, Magic-8200 is China's first 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-8200 can be used to handle a large quantity of nucleic acid detection.

### Fast & accurate

- Built-in independent double channel: open the cover module, pipetting module;
- Slim pipetting can be added at irregular spacing, with spacing adjustable from 9-270mm;
- Effective pipetting range: 1μL-1000μL;
- Pipetting accuracy: 2μL CV≤5%, 10μL CV≤2.5%, ≥50μL CV≤0.5%;
- The dual-channel pipetting module adopts capacitive sensing and pressure sensing detection to realize micro and precise pipetting;
- Code scanning, uncapping, pipetting, and capping of 48 tubes of 20 in 1 sample shall be completed within 7min, while other samples 96 tubes within 14min;
- Build a PCR system for 96 samples in 8-13 minutes;
- Daily throughput: about 10000 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-8200Plus		
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	2 channels	Sampling Channel	2 channels
Pipetting performance	Pipetting range: 1-1000μL, 2μL CV≤5%, 10μL CV≤2.5%, ≥50μL 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	Code scanning, uncapping, pipetting, and capping of 48 tubes of 20 in 1 sample shall be completed within 7min, while other samples 96 tubes within 14min.		
PCR reaction system	The PCR system of 96 samples was constructed within 8-13 min.		
Reaction tube type	Compatible with 0.1ml/0.2ml single tube, 8-tube, 96 well PCR reaction plate system.		
Throughput	About 10000 sample tubes		
Deep well plate position	6	Equipment size (length, width and height)	1150mm×750mm×950mm
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.		



### Compatibility

- Compatible with mixed sampling and mixed inspection, support single inspection, 5 mixed 1, 10 mixed 1, 20 mixed 1 sampling tube, no need to take out swabs for sampling;
- 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;
- Different manufacturers' 20 in 1 tube, 10 in 1 tube, and 1 in 1 tube can be loaded on the machine simultaneously;
- Suitable for virus sampling tubes such as coronavirus, influenza, hand, foot, and mouth disease;
- Compatible 10 μL, 50 μL, 200 μL, 1000 μL tip on the machine at the same time;
- Compatible with 16/48/96 deep well plate for nucleic acid extraction;
- Compatible with various systems to prepare PCR reaction tubes: the carrier can be equipped with 0.1ml/0.2ml single tube, 8-tube and 96 well PCR reaction plate.