



# Sample Processing System Magic-8200Plus

## Sample Processing System Magic-8200Plus

### Product introduction

Double channels in the cice treatment system: open the cover module, dual channel pipette, can complete the sample scan code, information entry, open cover, pipette, stream and PCR reaction system formulation, and full it is in a closed negative pressure environment to avoid pollutants leakage.

### 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, opening, pipetting and capping of 48 tubes of 20 in 1 samples 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 : More than 10000 samples, 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 HEPA negative pressure filtration system and UV disinfection system, the filtration efficiency of 0.3um diameter particles is not lower than 99.999%, effectively prevent aerosol pollutants leakage;
- With startup self-check, error alarm, the whole closed loop state monitoring function;
- Equipped with XYZ axis manipulator, grasping the tube body transfer, avoiding the risk of grasping the cover transfer and falling, and the positioning accuracy is ±0.1mm;
- 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		
Sample size	For 20 mixes in 1 tube, it can process 48 samples at a time. For other modes, 1-96 samples are processed 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 channel	Sampling Channel	2 channel
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, opening, pipetting and capping of 48 tubes of 20 in 1 samples 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	Process ≥ 10000 samples per day		
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 HEPA negative pressure filtration system and ultraviolet disinfection system.		



### Compatibility

- Compatible with dry mixing tubes and supports 1 in 1, 5 in 1, 10 in 1 and 20 in 1 sampling tubes, allowing you to take a sample without taking a swab out;
- Compatible with the wet mixing cup mode: 2 in 1, 3 in 1, 4 in 1, 5 in 1, 10 in 1, 20 in 1 etc;
- 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;
- Support not less than 8 sampling tubes of different specifications to operate on the machine at the same time;
- 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 a variety of nucleic acid extraction deep well plates: 8 / 16 / 48 / 96 person / plate nucleic acid extraction plate;
- 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.