

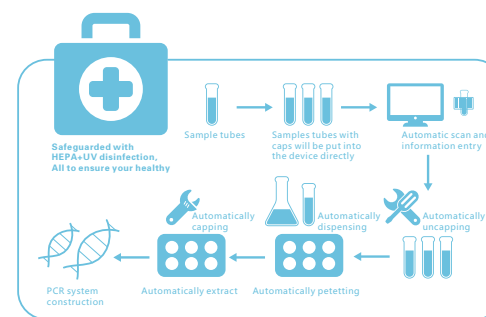


Automatic Nucleic Acid Extractor SMART-4596 Series

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Product introduction

Smart-4596 Series is an advanced nucleic acid extractor integrating functions of automatic sample processing system and nucleic acid extractor. Original samples can be put into the device directly and sample scanning, uncapping, dispensing, pipetting, capping, nucleic acid extraction and purification, and PCR system construction can be completed with one-button click without any extra manual intervention will be needed. Compatible with your own nucleic acid extraction kit.



Fast & accurate

- With 4 built-in non equidistant grippers and 4 independently code scanners, the grasping arm can complete the dispensing of 96 samples within 10 minutes;
- The minimums time to finish code scanning, uncapping, sample dispensing, pipetting, capping, nucleic acid extraction and purification, and PCR system construction of 96 tubes samples is 30 minutes and it can greatly improve the test capability of your laboratory. But your actual processing time of 96 samples may vary due to the different reagents supplied by various manufacturers.
- The pipetting module adopts capacitive sensing and pressure sensing detection to realize micro and precise pipetting;
- 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%.

Strong Compatibility

- For the COVID test, 20 samples can be mixed in a tube with a diameter ranging from 19-26mm. Compatible with sampling tubes with a diameter of 11-17mm and a height of 50-150mm.
- For HPV test, it can compatible with sampling tubes with a diameter of 25-35mm and a height of 50-75mm.
- Brands like BD, Hologic, KingCreat, etc. are compatible.
- Customization is available for other HPV sample tubes.
- Compatible with tubes for collecting samples of COVID, influenza, hand, foot, and mouth virus.

Safety protection

- Automatic unloading, real-time monitoring of tip 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 99.9%, effectively prevent aerosol pollutants leakage;
- With startup self-check, error alarm, the whole closed loop state monitoring function.

System Parameter

Model	SMART-4596	SMART-4596Plus
Sample No.	For tubes containing 20 swabs to test COVID or HPV samples to test, it can load 48 sample tubes at a time. For other modes, 96 sample tubes are loaded at one time.	
Sample tube specification	For HPV test, it can compatible with sampling tubes with a diameter of 25-35mm and a height of 50-75mm. Customization is available for other HPV sample tubes.	
Oscillating sample rack	The oscillation amplitude is adjustable from 1 to 10 levels to prevent cell precipitation.	
Processing Time	Dispense 96 samples within 10 minutes, the minimums time to finish code scanning, uncapping, sample dispensing, pipetting, capping, nucleic acid extraction and purification, and PCR system construction of 96 tubes samples is 30 minutes and it can greatly improve the test capability of your laboratory. Though your actual processing time of 96 samples may vary due to the different reagents supplied by various manufacturers.	
Pipetting	The 4-channel pipetting module adopts capacitive sensing and pressure sensing detection to realize micro and precise pipetting, pipetting can be added at irregular spacing, with spacing adjustable from 9-270 mm.	
Sample Type	Serum, plasma, whole blood, secretions, exfoliated cells, tissues, pharynx swabs, anal swabs, urine, feces, etc.	
Nucleic acid extraction method	Magnetic bead separation	
Type of extraction kit	96-prep kits	16-prep kits
Magnetic rod No.	96	
Equipment size	L1600*W900*H900mm (length, width and height)	
Consumables	96 well deep plate, magnetic rod sleeve, disposable liquid transfer tips	
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.	