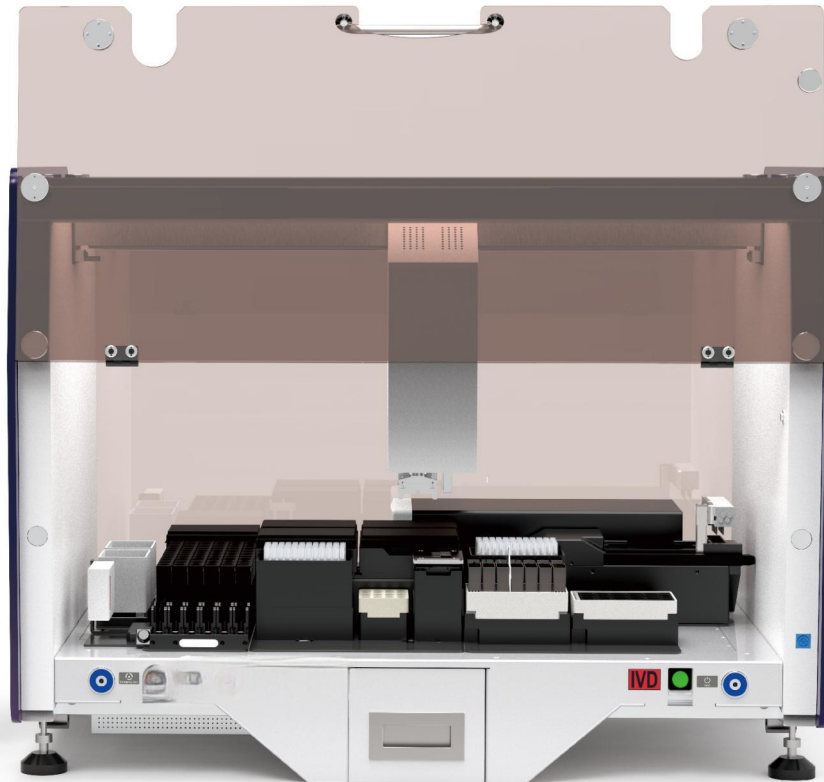


## Automated ELISA System

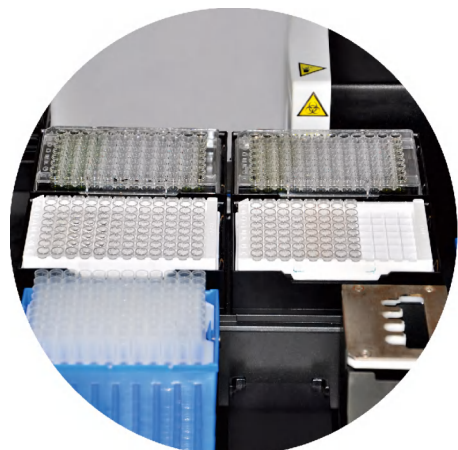




is a dedicated system to automate microplate-based ELISA tests and deliver accurate results with high efficiency. Adopting the modular automation concept, equips with liquid handling module, incubation module, plate washing module, microplate readers, flexible mechanical grippers to transfer microplates between different modules, and intelligent software control.

## Standard specifications

96	sample positions
1	working cabin
1	arm
2	pipetting channels
4	microplate positions
1	microplate washer
1	microplate reader



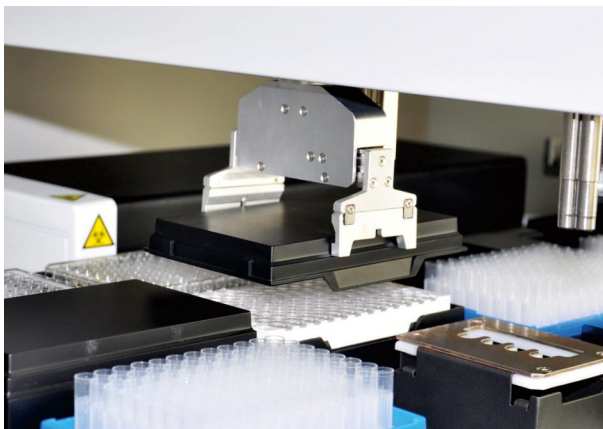
### **Liquid Handling Module** / **fast and precise pipetting**

- ◉ Automating sample distribution, sample predilution, reagent pipetting etc.
- ◉ Use of high-quality disposable tips, zero carryover.
- ◉ Use of disposable tips, sample volume could be 5-1000 $\mu$ l.
- ◉ Parallel pipetting for rapid sample distribution in multiple plates.
- ◉ Using sensitive pressure-sensing clot detection and liquid level detection technology.



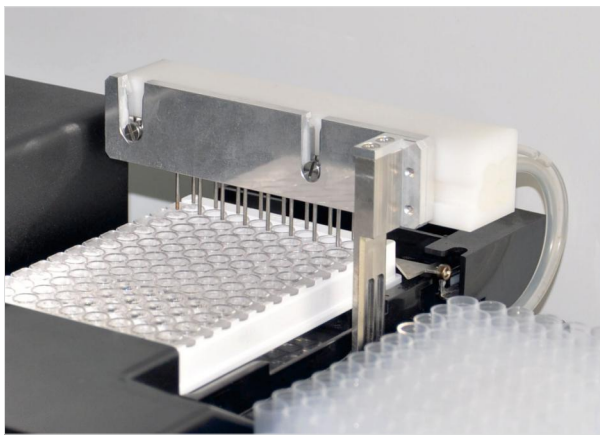
### **Incubation Module** / **accurate and stable temperature control**

- ◉ The functions of pipetting, shaking and incubation are integrated together on the microplate position to improve processing speed.
- ◉ Independent incubator in each microplate position for flexible and reliable temperature control.
- ◉ Blanket-type heating method, only 1 minute to reach the setting temperature.
- ◉ Multi-point monitoring technology, ensure stable temperature.



### **Plate Washing Module / flexible and intelligent washing control**

- ◉ 16 wash channels with 32 probes in total, the long probes for liquid absorbing and the short probes for liquid injection.
- ◉ Adjustable wash modes, soak time, dispensing volumes, and etc.
- ◉ Residual volume of wash buffer  $\leq 1\mu\text{l}$  per well.
- ◉ Hanging washer head allows easy maintenance.



### **Microplate Reader / reliable interpretation**

- ◉ Self-developed microplate reader.
- ◉ Wavelength range is 340-750 nm with single or dual wavelength measurement.
- ◉ Automatic switching of multiple filters.
- ◉ Comprehensive measurement methods (qualitative, quantitative, rate method and kinetics) meet the needs of different applications, providing fast and acute interpretation.





# ► Specifications

Model					
Application	Automated ELISA testing, including sample distribution, reagents pipetting, shaking, incubating, washing, reading, and etc.				
Sample positions	96	Arms	1	Pipetting channels	2
Disposable tips	Yes	Liquid level detection	Yes	Clot detection	Yes
Pipetting precision	Specification 1000µl	Pipetting volume 100µl 1000µl	Precision (CV%) ≤0.5% ≤0.3%	Accuracy ≤2.0% ≤0.5%	
Pipetting speed (8 probes)	Sample parallel distribution speed: ≤70 sec/96-well plate. Reagent continuous distribution speed: ≤50 sec/96-well plate.				
Microplate positions	4				
Barcode identification	Auto scanning of tubes and microplates, varied barcodes available. Scanning speed: 40 sec/96 tubes, 10 sec/96-well plate.				
Reagent module	Multiple reagent positions can be set flexibly, and specific reagent positions can be identified automatically with Hall detection principle.				
Incubators/shakers	The microplate positions integrate incubating and shaking functions together. Each microplate has independent incubating and shaking function. Adjustable temperature ranges from room temperature to 60°C with precision ±0.4°C. Adjustable shaking time 0-240 mins with 20 level shaking frequency.				
Microplate washers	1				
	Each washer with 16 probes, 0-9 wash cycles, 2-8 wash buffers. Variable soak time, dispensing volumes, and wash modes. Residual volume of wash buffer ≤1µl per well.				
Microplate reader	1				
	Wavelength range is 340-750 nm with single or dual wavelength measurement. Light filter: 405 nm, 450 nm, 492 nm and 630 nm as standard configuration or customized configuration. OD range is 0.000-4.000 with sensitivity 0.001OD, repeatability ±0.005OD, stability 0.005 OD.				
Software	Graphical User Interface, available to connect to LIS/HIS systems for bidirectional communication.				
Dimensions (mm)	1030*720*780				
Weight (kg)	100				
Environmental conditions	Temperature: 15-32°C Humidity: 30%-80%	Electric supply requirements	Voltage: 100-240 VAC Frequency: 50/60 Hz		