EASY SAMPLE **ES96 Fully Automated Blood Dispensing System**

The Easy Sample fully automated blood dispensing system utilizes patented image acquisition and recognition technology to accurately identify the plasma, buffy coat, and red blood cell components within the blood collection tubes. Equipped with automated lid-opening robotic arms and pipetting robotic arms, it achieves automated separation of the different components.

1. Deep Learning Cameras + Intelligent Exposure Systems + Auxiliary Light Sources

- Deep Learning cameras, intelligent exposure systems, and auxiliary light sources are used to obtain positional information of blood layers and identify blood components.
- A large number of sample images are collected to train customized sample databases for improved recognition efficiency, with a success rate of over 99% in sample identification.
- Combined with the ADP module for liquid level recognition and visual recognition data, the accuracy of identification is further improved.



2. Fully Automatic Capping and Decapping, as well as Component Dispensing

- Automatic capping and decapping function, allowing direct placement of closed tubes without prior lid removal.
- The automated liquid dispensing module is efficient and stable, capable of dispensing different components into the desired recipient sample tubes.
- It supports users in setting the quantity and position of component dispensing according to their specific requirements.



3. Comprehensive Sample Information Tracking

- Support 1D or 2D barcodes on the side walls of blood collection tubes and recipient sample tube racks to accurately record sample information.
- Integrate with LIS or LIMS, allowing for customized formatting of sample information output.
- Save all sample image information to facilitate user troubleshooting, subsequent experiment data analysis, and expansion.





5. High Compatibility

10ml, etc. tubes, and sample collection tubes from different brands.

Product Features



• Equipped with ultraviolet disinfection lamps and a dual-layer HEPA filtration negative • Efficient visual recognition system capable of detecting abnormal sampling situations

an aerosol filtration efficiency of up to 99.995%

It can be adapted to various common types of blood collection tubes, such as 2ml, 5ml,

• Supports sample collection from various standard SBS plates, 8-well strips, centrifuge





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Product Parameters

Product Model	ES96 Fully Automated Blood Dispensing System	
Appearance	Dimensions	1100mm(L)×680mm(D)×763mm(H)
	Weight	< 150kg
Power Supply	AC voltage	100~240V AC
	AC frequency	50/60Hz
	Maximum power	150W
Environmental Conditions	Temperature	Operating temperature: 19°C~25°C Transportation and storage temperature: -40°C~+55°C
	Humidity	20%RH to 80%RH, non-condensing
Processing Speed	≥ 40s/sample	
Scan Function	Supports side barcodes on blood collection tubes, including Code 128, Code 39, Codabar, etc.	
	Supports side one-dimensional and two-dimensional barcodes on sample storage consumables.	
Recognition Module	High-precision camera	Supports capturing and saving images of blood collection tubes.
	Al machine recognition algorithm	Automatically identify the positions of plasma, buffy coat, and red blood cells, and calculate the volume and height information of each component.
	ADP module	Enables liquid level recognition functionality.
Component Separation	Plasma, buffy coat, and red blood cells	Each component can be divided into 1-3 portions as needed. Product Storage: 96-well deep plates or cryotubes, etc.
Liquid Handling Module	Volume range	1~1000µl
Safety Protection	Ultraviolet lamp	
	Negative pressure HEPA system	Aerosol filtration efficiency higher than 99.99%.
Compatibility	Compatible with various common types of blood collection tubes such as 2ml, 5ml, 10ml, etc.;	
	Supports standard SBS plates, 8-well strip tubes, centrifuge tubes, and sample collection tubes from various brands.	



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