

## Automatic Cell Culture System



### Introduction:

The automatic cell culture system provides a clean, closed, and automated environment to achieve cell inoculation, observation, medium replacement, subculture, cultivation, and collection. It can complete cell separation and extraction, amplification and formulation, storage and resuscitation, etc., reducing traditional human errors and improving operational efficiency.

### Features:

- \* Aseptic Environment: The closed chamber is equipped with FFU (Fan Filter Unit) high-efficiency filters on the top to ensure a Class A clean environment inside the chamber.
- \* Labor Liberation: It realizes automated cell inoculation, observation, medium replacement, subculture, cultivation, separation and extraction, storage, and resuscitation, replacing manual operations.
- \* Detachable Three Compartments: Composed of a storage room, an operation room, and a culture room, it is convenient for transportation and assembly.
- \* Data Monitoring: The process is intelligent, with visualized storage management and traceable monitoring throughout the entire experimental process.
- \* Complete Equipment: It features a large-size display screen, high-definition monitoring, imported robotic arms, a centrifuge, fully automatic microscopic imaging, incubator heating and a CO<sub>2</sub> incubator.
- \* Space Saving: The integrated design saves occupied space.

### Composition:



#### Robotic Arm

It can automatically perform actions such as cell subculture, medium replacement, and pipetting to assist in completing these tasks, thus realizing the standardization of the operation process.



#### Centrifugal System

When paired with various counterbalanced centrifuge tubes, it is capable of performing automatic centrifugation, thereby attaining the stratification and separation of cell suspensions.



#### Resuscitation System

Maintain resuscitation system at a precisely controlled constant temperature of 37°C. This provides an ideal incubation environment for trypsin, thereby enhancing the efficiency of digesting adherent cells.



#### CO<sub>2</sub> incubator

Utilizing high-temperature dry heat sterilization, it is capable of precisely regulating the temperature and CO<sub>2</sub> concentration within the incubator, thereby safeguarding the survival rate of cell cultures.



#### Liquid Handling System

High-precision peristaltic pumps and pipettes can automatically and quickly perform the operation of cell medium replacement.

### Technical Parameters:

Model	AutoCE-001	
Hardware	Display Screen	15.6 inches LCD touch screen
	Monitoring	800W High-definition Cameras*2
	Disinfection	150W Ultraviolet Lamp*3
	Robotic Arm	VS-050, 6-axis
	Centrifuge	15ml*8, 3000 rpm
	Microscope	Fully Automatic Analytical Microscopic Imaging System
	Resuscitation System	37°C
	ULPA Purification Efficiency	99.9995% @ 0.12 μm
	Empty Bottle Storage Rack	120 Culturing Positions for T75 Culture Bottles
CO <sub>2</sub> Incubator	Incubator Volume	220L
	Culturing Capacity	84 Culturing Positions for T75 Culture Bottles
	Temperature Control Range	RT~60°C
	CO <sub>2</sub> Control Range	0~20%
	Humidity	≥ 90% RH
Disinfection Method	140°C Dry Heat Sterilization	
Power Supply	AC220V,50/60Hz(Standard); 110V, 60Hz(Optional, External transformer)	
Consumption	4kW	
External Size(W*D*H)mm	2760*1280*1900	
Package Size(W*D*H)mm	Storage room: 1000*1350*2050	
	Operation room: 660*1350*2050	
	Culture room: 1300*1350*1950	
Net Weight(kg)	1085	
Gross Weight(kg)	Storage room: 400	
	Operation room: 300	
	Culture room: 550	