

## CRYOSTAT MICROTOME

AST 500 SEMI-AUTOMATIC CRYOSTAT MICROTOME AST 550 FULLY-AUTOMATIC CRYOSTAT MICROTOME

## **Main Features**

## AST 500 Semi-automatic Cryostat Microtome

AST 550 Fully-automatic Cryostat Microtome

Streamlined appearance, ergonomic design, emphasis on environmental protection.

AI-powered working interface, easy operation, simple to learn.

Specimen retraction function prevents sample from contacting the blade during ascent.

Equipped with a counter function, displaying total slice thickness.

Low-temperature refrigeration system with forced cooling structure, using R404A environmentally friendly fluorine-free refrigerant.

Disinfection using UV (ultraviolet light) + O3 (ozone), 30 minutes each time.

Sample clamp with semiconductor independent refrigeration system, fast cooling speed, with the option to open and close for different tissue freezing temperatures.

- Two running ways: manual and automatic.

Emergency stop function: Press the red button to stop running when any emergency happens.

Visual window with double-layer defogging glass, with heating defogging function.

Defrosting available in timed and manual modes.

The microtome unit is located outside the freezer, avoiding the influence of thermal expansion and contraction on the unit, minimizing maintenance and upkeep.

Waste debris suction function, for easier, faster, and more efficient daily cleaning and maintenance.

AI LCD touchscreen with shortcut keys for simpler and more convenient operation.

The touchscreen displays more comprehensive information, including slice thickness, total number of slices, time, temperature, timing, etc. Sleep function: When enabled, the machine temperature is maintained at -1° to -10°C; when disabled, the machine temperature will return

to the set temperature within 30 minutes.

Keyboard lock function to prevent erroneous operation.

Hand-wheel locking function

Spacious refrigeration work area, capable of holding 8 specimens simultaneously, with 2 equipped with separate semiconductor cooling for

different tissue freezing temperatures..

## **Technical Specifications**

	AST 500	AST 550
Cryochamber minimum temperature	-35°C±2°C	
Freezing shelf minimum temperature	-45°C±5°C	
Lowest temperature of Peltier unit on freeze shelf	-55°C±5°C	
Lowest temperature of Peltier unit on Specimen Clamp	-50°C±5°C(working time of Peltier is 15 minutes.)	
Maximum specimen size	35×35mm	
Specimen vertical stroke	48±1mm	
Specimen horizontal stroke	15±0.2mm	
Coarse feeding speed	300μm/s (slow) or 900μm/s(rapid)	
Section thickness range	0μm ~ 100μm adjustable; 3μm ~ 10μm, in 1μm increments; 20μm ~ 100μm, in 5μm increments;	0μm ~ 3μm, in 0.5μm increments; 10μm ~ 20μm, in 2μm increments;
Trimming thickness range	10μm ~ 600μm adjustable; 50μm ~ 100μm, in 10μm increments;	10μm ~ 50μm, in 5μm increments; 100μm ~ 600μm, in 50μm increments;
Specimen retraction	0~80µm adjustable, in 5µm increments	
Motorized cutting speed	75-230mm/s±10%;	
Voltage and frequency	$220 \text{ V} \pm 10\%$ , $50 \text{ HZ}$ ,	$110 \text{ V} \pm 10\%$ , $60 \text{ HZ}$
Nominal Power	1000 W	
Weight	about 130 KG	
Dimensions(W×D×H)	805×715×1210mm	



