

# Cryostat GS-2100



## Newly Designed Cryostat

To promote and support high quality tissue sectioning in pathology, dermatology, and histology labs, we have designed and created the GS-2100 cryostat as a state-of-the-art freeze microtome.

The GS-2100 cryostat is a high precision microtome with dual compressors, UV light disinfection, LED touch screen control panel, and much more.

## Key Features

- Extra-large freeze chamber has UV light sterilization, automatic defrost, and standby mode.
- LED touch screen control panel is large and easy to use, it show all information including thickness for section and trimming, retraction, temperature control, defrost control, time on / off and so on.
- Top of cryostat allows for easy storage and access to glass slides, stains, and tools.
- Smooth turning hand wheel with 360° locking mechanism.

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- Double compressor system allows for fast freezing and robust lifespan of cryostat, and total 5 parts including Chamber, blade holder, clamp, freezing shelf and smoothing board in freezing condition
- Waste collection for liquid condensate is safe and easily accessible.
- Specimen holder is easily adjustable and clamps to specimen disc for stability.
- Knife holder is fully adjustable with anti-rolling plate and blade guard. Anti-roll plate with knife guard
- One-Click to return specimen clamp to initial position automatically when clamp reach to limited position
- Molds shaped one-time, Germany accessory and high-quality Teflon surface treatment
- Specimen retraction function, protects specimen from blade injury
- Trimming/Cutting button makes it easy to switch from trim and section mode
- Equip with counter to calculate total pieces and thickness.
- The low temperature refrigeration system with pro-environment refrigerant R404
- Temperature can drop to working condition in 40 minutes after switching on.
- Adopt to UVC sterilize for 35 minutes every time to optimize safety for cutting cryosections
- Peltier may be on or off manually.
- Heated, removable sliding window.
- Two defrost methods: definite time and manual, automatic defrost system built in, with cool air circulation that automatically starts to cool air circulating around the cutting specimen, knife, and anti-roll guide
- Fully encapsulated microtome for maintenance free reliability. The high-precision microtome is enclosed outside the cryostat chamber to protect it from thermal expansion and contraction and keep minimum service and maintenance.
- Self-explanatory symbols for all functions and displays, easy to learn and operate.
- Standby mode, after initializing, temperature in cryostat chamber can be controlled between -5°C and -15°C by computer automatically; when stop initializing, the temperature in freeze chamber will arrive to working temperature within 15 minutes
- Control panel with locking function to avoid wrong operation.
- With vacuum cleaner easy to clean the chamber
- Sensor self-diagnosis function, with a auto detected and alarm system for temperature sensor status
- Wide freezing shelf can put 36 specimens discs and including 8 stations with the Peltier fast-freeze mechanism (blue).
- Knife holder for both of low-profile blade and high-profile blade

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## Technical Specifications

MODEL	GS-2100
Freeze chamber temperature range:	0°C ~ -50°C
Blade holder and clamp temperature range:	0°C ~ -50°C
Cooling down time to -50°C:	40 min
Freeze shelf routine temperature:	0°C ~ -50°C
Lowest temperature of Peltier unit on freeze shelf:	-60°C
Peltier working time:	15 minutes
Maximum specimen size:	55mm×80mm
Specimen vertical stroke:	65mm (70mm is optional)
Specimen horizontal stroke:	22mm
Coarse feeding speed:	0.9mm/s; 0.45mm/s
X/Y-axis:	12°
Z-axis:	360°, the specimen holder has 360-degree specimen orientation
Section thickness range:	1-100µm 0.5µm ~ 100µm adjustable: 0.5µm ~ 5µm, in 0.5µm increment; 5µm ~ 20µm, in 1µm increments; 20µm ~ 50µm, in 2µm increments; 50µm ~ 100µm, in 5µm increments
Trimming thickness range	0µm ~ 600µm 0µm ~ 600µm adjustable: 0µm ~ 50µm, in 5µm increments; 50µm ~ 100µm, in 10µm increments; 100µm ~ 600µm, in 50µm increments;
Retraction range:	0µm ~ 60µm adjustable; in 2µm increment
Voltage and frequency:	AC220V±10% 50Hz (Standard) Special requirement may customize by order.
Power:	500W
Weight:	150kg
Dimensions (W × D × H):	700 × 760 × 1160mm