

CLM77K STAGE

- · For correlative cryo-light (upright) and cryo-electron microscopy (CLEM)
- -190°C 120°C with resistive heating and liquid nitrogen cooling option
- Grid holder allows nine EM grids, 3 mm round, to be imaged via bright field and fluorescence light microscopy to improve productivity
- Grid holder designed for vitreous operation and transfer far below the amorphous ice phase transition temperature

STRUCTURAL FEATURES

Sample Area	Holds 9 grids of 3mm in diameter	
Grid Height	0.25 mm	
Sample Access	Quick sample access cover pivots from any corner with spring-loaded screws Side-loading holder to fit sample grid	
Frame Cooling	Integrated frame cooling with optional chiller system	
Mounting	Horizontal mounting capability	
Frame Dimensions	218.8 mm x 116.8 mm x 24.5 mm	
Weight	1500 g	

OPTICAL FEATURES

Optical Access	Reflection and transmission capability
Optical Windows	Removable and exchangeable windows permit full-spectrum transparency
Minimum Objective Working Distance	5.0 mm
Minimum Condenser Working Distance	17.6 mm
Top Window Aperture	46 mm diameter
Top Viewing Angle	±45.73° from normal
Transmission Aperture	2 mm diameter (9x)
Bottom Window Aperture	19 mm diameter
Bottom Viewing Angle	±9.95° from normal
Window Defrost	Integrated external window defrost

THERMAL FEATURES

Temperature Control	mK2000 with programmable precision switching PID method
Thermal Block	Black anodized aluminum body
Sample Thermal Cover	Integrated slide cover on grid holder to eliminate moisture condensation on samples
Temperature Minimum	-190°C (with optional liquid N ₂ cooling)
Temperature Maximum	120°C
Temperature Sensor	100 Ω Platinum RTD
Maximum Heating Rate	+60°C per minute at 100°C
Maximum Cooling Rate	-50°C per minute at 100°C
Minimum Heating and Cooling Rate	±0.1°C per hour
Temperature Resolution	0.01°C
Temperature Stability	±0.05°C (>25°C), ±0.1°C (<25°C)
Power Supply	Universal power input
Software	Windows software to record and export temperature-time data









