

## TS102/TS102XY STAGE

- Versatile stage with streamlined design for long duration experiments without additional fluid cooling systems
- -40°C 120°C with thermoelectric heating and cooling
- Large chamber to fit standard 25 mm × 75 mm microscope slides and liquid crystal cell holders
- Easy side-loading
- Optional removeable XY sample positioning

## STRUCTURAL FEATURES

Sample Area	38 mm × 52 mm
Chamber Height	2.5 mm with removeable inner cover
	1.5 mm and 3.0 mm height spacer options
Sample Positioning	10 mm fine travel with Vernier XY dials for remote manipulation in sealed chambers
Frame Cooling	Integrated frame cooling via hose barb ports with optional chiller system
Mounting	Horizontal and vertical mounting capability
Frame Dimensions	155 mm × 98 mm × 23.5 mm
Weight	800 g, black anodized aluminum body

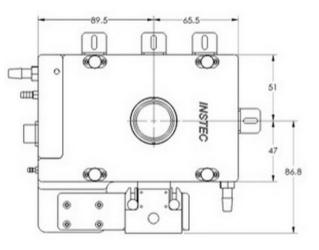
## **OPTICAL FEATURES**

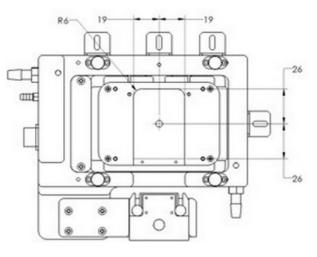
Optical access	Reflection and transmission capability
Optical windows	Removable and exchangeable windows permit full-spectrum transparency
Minimum Objective Working Distance	5.6 mm
Minimum Condenser Working Distance	10.7 mm
Top Window	27 mm diameter
Top Viewing Angle	±62.1° from normal
Transmission Aperture	5 mm diameter
Bottom Window	11 mm diameter
Bottom Viewing Angle	±24.8° from normal
Window Defrost	Integrated external window defrost

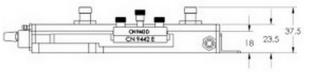
## THERMAL FEATURES

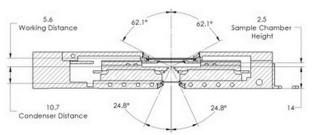
Temperature Control	mK2000 with programmable precision switching PID method
Thermal Block	Black anodized aluminum
Temperature Minimum	-30C with optional chiller
	-40C optional
Temperature Maximum	120°C
Temperature Sensor	100 Ω Platinum RTD
Maximum Heating Rate	+30°C per minute at 37°C
Maximum Cooling Rate	-15°C per minute at 37°C
Minimum Heating and Cooling Rate	±0.1°C per hour
Temperature Resolution	0.01°C
Temperature Stability	±0.05°C
Power supply	Universal power input
Software	Windows software to record and export temperature-time data











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