

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 |

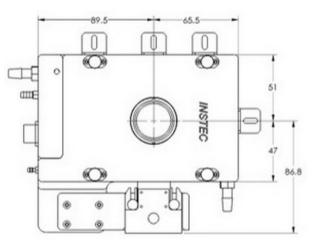
OPTICAL FEATURES

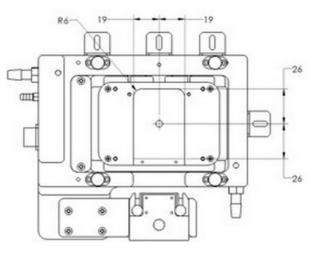
| Optical access | Reflection and transmission capability |
|------------------------------------|--|
| Optical windows | Removable and exchangeable windows permit full-spectrum transparency |
| Minimum Objective Working Distance | 5.6 mm |
| Minimum Condenser Working Distance | 10.7 mm |
| Top Window | 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 |

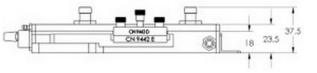
THERMAL FEATURES

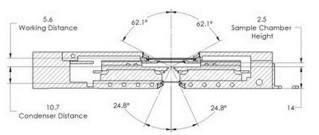
| Temperature Control | mK2000 with programmable precision switching PID method |
|-------------------------------------|--|
| Thermal Block | Black anodized aluminum |
| Temperature Minimum | -30C with optional chiller |
| | -40C optional |
| Temperature Maximum | 120°C |
| Temperature Sensor | 100 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 |











www.instec.com sales@instec.com 1.303.444.4608

Updated date: 2019.08.22