

HCS60 Inverted Microscope Thermal Stage



Instec's HCS60 Peltier-based microscope thermal stage is an ideal choice of temperature-controlled environment for applications such as Cell Culture, Cell Biology, and Thermal Microscopy for inverted microscopes. The thermal stage accommodates 35 mm Petri dishes, and a sample chamber lid is provided for precision temperature control, gas purge, and atmosphere control. The HCS60 stage can also be mounted vertically for applications requiring horizontal beam access to the sample chamber.



Features

- Programmable Precision Temperature Control from 5 °C to 60 °C
- Peltier Based Thermal Stage Designed for Inverted Microscopes
- Suitable for 35mm Petri Dishes
- Controlled Fast Heating and Cooling Rate
- Large Viewing Aperture
- Removable and Exchangeable Windows
- Dual Pane Windows for Better Thermal Isolation
- Gas Purge Sample Chamber
- Optional Higher Temperature Limit Available

Technical Specifications

Temperature Range	5 °C to 60 °C Optional higher temperature limit available
Temperature Resolution	0.01 °C with mK1000
Temperature Stability	±0.01 °C at 37 °C with mK1000
Minimum Heating and Cooling Rate	±0.1 °C per hour
Maximum Heating Rate	+50 °C per minute at 37 °C
Maximum Cooling Rate	-50 °C per minute at 37 °C
Temperature Control Method	PID with Linear Variable DC
Temperature Control Sensor	100 Ω Platinum RTD
Minimum Objective Working Distance	5.6 mm (with optional insert) 0 mm (with insert removed)
Minimum Condenser Working Distance	19.1 mm (with removable cover installed) 0 mm (with cover removed)
Sample Area	35 mm diameter
Chamber Height	19 mm
Sample Viewing Aperture	13 mm for transmitted light, with optional insert 20 mm for transmitted light, without optional insert

Ordering Information

Part Number	Description
HCS60-mK1000	HCS60 inverted microscope thermal stage with mK1000, 115V/230V, WP115F or WP230F and software included
HT-A+90C	Optional higher temperature limit to 90 °C, for TSA02i, HCS60

Accessories	Description
mK1000 Options	Please refer to the mK1000 Temperature Controller section for mK1000 controller options (e.g. IEEE-mK1000: IEEE 488 communication port)

Cross Section View

