

HCS402 Microscope Hot and Cold Stage

INTEC® FOCUS ON EXCELLENCE



#HCS402-60417

Features

- Dual-Heater Microscope Hot and Cold Stage for Increased Temperature Gradient Uniformity
- Programmable Precision Temperature Control from -190 °C to 400 °C with 0.1 °C Temperature Precision
- Controlled Fast Heating and Cooling Rate
- Large Viewing Aperture
- Removable and Exchangeable Windows
- Variable Sample Chamber Height
- Gas Purge Sample Chamber
- Easy Side Sample Loading with Standard Microscope Slides
- Configured with STC200 Standalone Temperature Controller with RS232 Communication Port and Windows Based Software
- Optional IEEE488 Communication Port
- Free LabVIEW Drivers for IEEE488 and RS232



Technical Specifications

Temperature Control Sensor	Platinum RTD
Control Method	Switching PID
Temperature Range	-190 °C to 400 °C Optional wider temperature range available Below ambient operation requires optional cooling accessory
Temperature Precision	0.1 °C
Temperature Stability	±0.1 °C at 100 °C
Minimum Heating & Cooling Rate	±0.1 °C/Hour
Maximum Heating Rate	+100 °C/Min. at 37 °C
Maximum Cooling Rate	-50 °C/Min. at 37 °C
Minimum Working Distance	6.5 mm
Minimum Condenser Distance	10 mm
Sample Area	38 mm X 50 mm
Chamber Height	2.0 mm, up to 12.5 mm (using optional spacers)
Sample View Aperture	5 mm dia.
XY Positioner (Optional)	10 µm resolution

Ordering Information

Part Number	Description
HCS402-STC20A	HCS402 dual-heater hot and cold stage configured with STC200 temperature controller. RS232 Communication Port. WinTemp software. 115V input power.
HCS402-STC20U	HCS402 dual-heater hot and cold stage configured with STC200 temperature controller. RS232 Communication Port. WinTemp software. 230V input power.
XY-HCS402	Precision XY positioner with adaptors for HCS402
SP06-HCS402	Optional 1.5 mm spacer set to increase sample chamber height
SP12-HCS402	Optional 3 mm spacer set to increase sample chamber height

Accessories	
Optional Parts for STC200	Please refer to the STC200 Temperature Controller brochure for add-on STC200 controller optional parts (e.g. IEEE-STC200: IEEE 488 communication port).
LN2-SYS	Liquid Nitrogen Cooling Accessory. Please refer to the LN2-SYS brochure for selections of liquid nitrogen cooling accessories.
WP115C/WP230C	115V or 230V circulation water pump for sample chamber cooling to below ambient temperatures (as low as 5 °C).
WP115V/WP230V	115V or 230V circulation water pump for frame cooling.

Contact Intec today for further product information. Inquires for a hot and cold stage, a hot and cold chuck, a hot and cold plate, and/or the liquid crystal testing products customized to your special requirements are also welcome. Above information is subject to changes without notice.

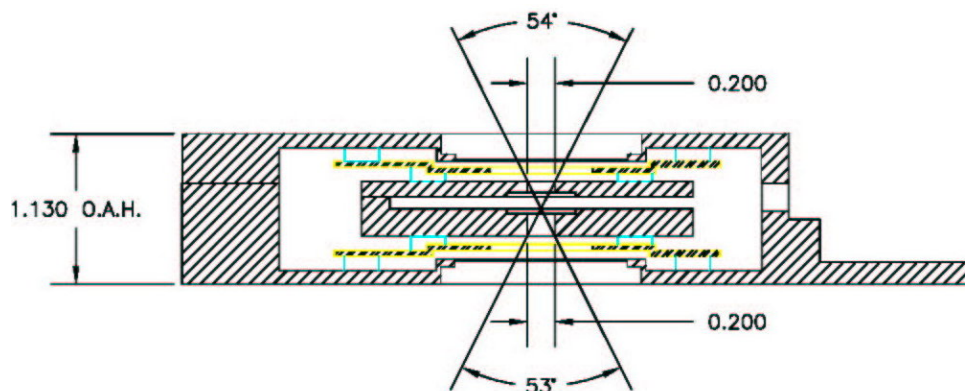
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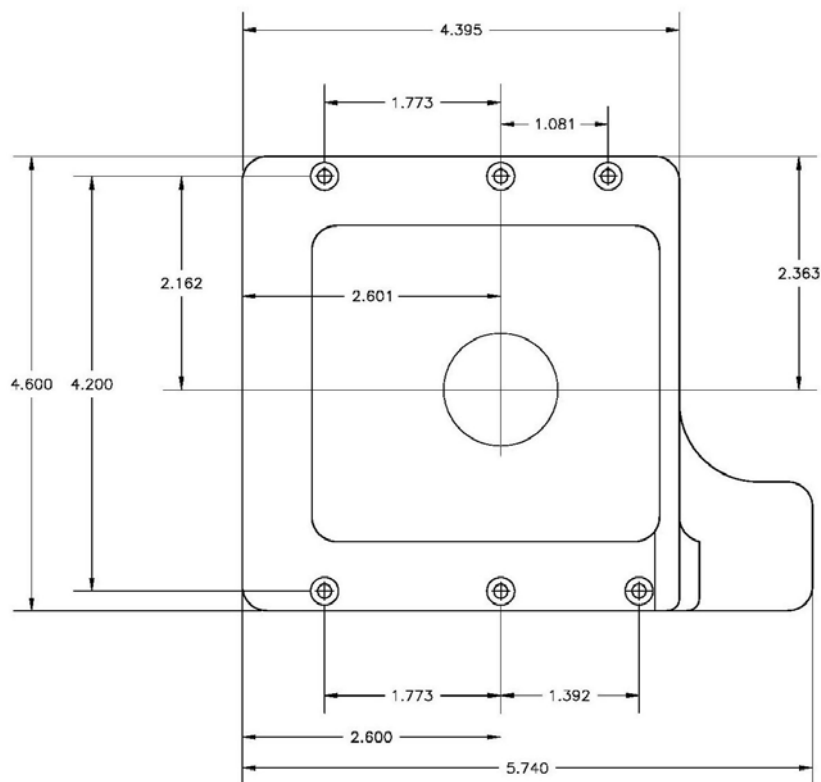


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Cross Section View



Mounting Hole Pattern



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