

# HEATING AND COOLING STAGES

## HCS206-STC200 MICROSCOPE HOT AND COLD STAGE SYSTEM

### Features:

- Up To 5.5"X5.8" Sample Size
- Fast Heating And Cooling Rate
- Variable Sample Chamber Height
- Programmable Precision Temperature Control From -40 °C To 200 °C
- Optional IEEE488 Communication Port
- RS232 Communication Port Included
- Liquid Nitrogen Cooling
- Large Viewing Window
- Free Labview Driver For IEEE488
- Windows 8/2000 Based Software For RS232



### Description

The HCS206-STC200 is one of Instec's largest sample volume, microscope hot and cold stage systems, with large viewing aperture.

All of the windows on the HCS206 stage are removable and exchangeable allowing the HCS206 to be used for large angle X-ray diffraction, FTIR, and other experiments requiring beam access to the sample.

The HCS206 stage can also be mounted vertically for applications requiring horizontal beam access to the sample chamber.

The interior of the HCS206 is large enough to accommodate 5.5"X5.8" sample.



View of HCS206 Without Cover

### Technical Specification

Temperature Control Sensor	Platinum RTD
Control Method	Switching PID, optional variable DC PID control available
Temperature Range	-40°C to 200°C.
Temperature Accuracy	±0.1°C at 37°C
Temperature Stability	±0.1°C at 37°C
Minimum Heating and Cooling Rate	±0.1°C/Hour
Maximum Heating Rate	+50°C/Min. at 37°C
Maximum Cooling Rate	-50°C/Min. at 37°C
Minimum Working Distance	5.0 mm
Minimum Condenser Distance	18 mm
Sample Area	5.5"X5.8" with inner cover
Sample View Aperture (for transmission)	0.2" (5 mm) (Optional larger viewing aperture up to 20mm available)
Sample View Aperture (for reflection)	0.9" for reflection mode



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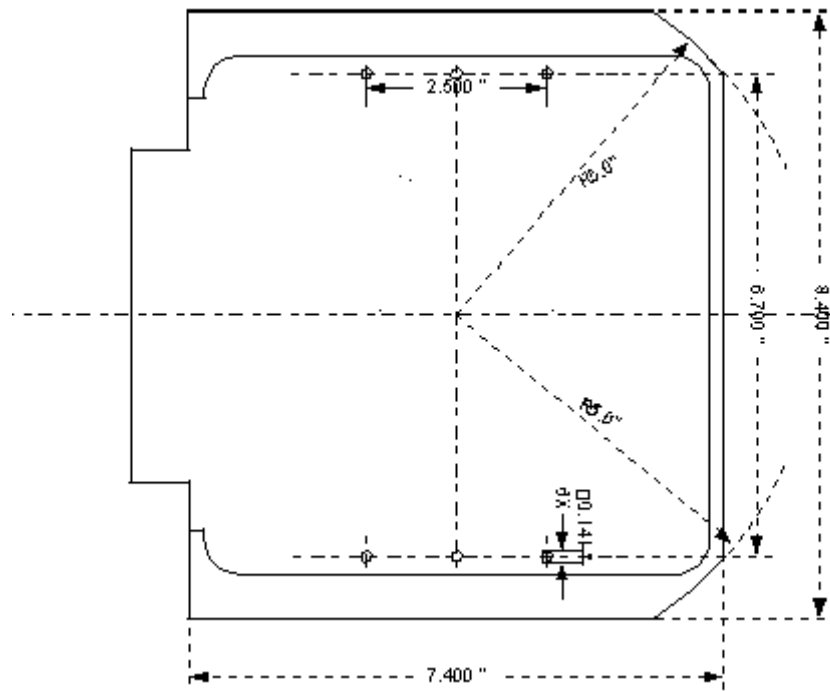
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### Physical Dimensions and Mounting Holes

There are six mounting holes on the base of the HCS206 stage. The physical dimension of the stage is about 8.2"x8.4"x1.4".



### Ordering Information

Part Number	Description
HCS206-STC20A	HCS206 microscope hot and cold stage with one STC200 controller configured for this stage, RS232 included, input voltage 115V, one 3mm (0.12") spacer included.
HCS206-STC20U	HCS206 microscope hot and cold stage with one STC200 controller configured for this stage, RS232 included, input voltage 230V, one 3mm (0.12") spacer included.
HCS206-LVDC	Optional linear variable DC heater output to eliminate electrical noise.
IEEE-STC200	The IEEE488 port for STC200 with sample LabView driver.
LN2-P4AF4	LN2-P4, the super-powered liquid nitrogen pump with LN2-F4, the 4.5 liter liquid nitrogen flask, input voltage 115V
LN2-P4UF4	LN2-P4, the super-powered liquid nitrogen pump with LN2-F4, the 4.5 liter liquid nitrogen flask, input voltage 230V
WP115V	Circulation water pump for cooling the HCS206 base, with input line voltage 115V.
WP230V	Circulation water pump for cooling the HCS206 base, with input line voltage 230V.