

# HEATING AND COOLING STAGES

## HCX611V, HCX612V THERMAL VACUUM STAGE

### Features:

- Hot and Cold Stage with Closed Sample Chamber for Vacuum or Gas Purge
- Programmable Precision Temperature Control from -190°C to 600°C with 0.1°C Temperature Precision
- Includes Precision XY Positioner to Move Sample Inside the Stage
- Optional Inner Lid for Precision Temperature Control
- Optional Two Wire Feed-Through for Sample Probing
- Optional Spacer to Increase Sample Chamber Height
- Vertical or Horizontal Mounting
- Fast Heating and Cooling Rate
- RS232 Communication Port Included in Basic System with Windows Based Software
- Optional IEEE488 Communication Port
- Free LabVIEW Driver for IEEE488 and RS232



### Technical Specification

Temperature Control Sensor	Platinum RTD
Temperature Range	-190 °C to 600 °C Below ambient operation requires LN2 cooling system.
Temperature Precision	±0.1 °C
Temperature Stability	±0.2 °C at 100 °C
Heating Rate	Ambient to 300 °C in 2 min.
Minimum Working Distance	6.7 mm
Minimum Condenser Distance	11.5 mm
Sample Chamber	Vacuum or Gas purge
Sample Area	HCX611V: 20mm X 20mm (0.8" X 0.8") HCX612V: 38mm X 38mm (1.5" X 1.5")
Sample View Window (Reflected Light)	26.5 mm diameter
Sample View Window (Transmitted Light)	2.0 mm diameter
XY Positioner	10 µm resolution
Vacuum Port	1/8 NPT Female
Gauge Port	1/8 NPT Female

### Ordering Information

Part Number	Description
HCX611V-STC200	HCX611V Thermal Vacuum Stage System. -190°C to 600°C; Sample Area: 0.8"X0.8". System consists of a HCX611V thermal vacuum stage, a STC200 temperature controller, and WinTemp software. 115V/230V Universal Input Voltage.
HCX612V-STC200	HCX612V Thermal Vacuum Stage System. -190°C to 600°C; Sample Area: 1.5"X1.5". System consists of a HCX612V thermal vacuum stage, a STC200 temperature controller, and WinTemp software. 115V/230V Universal Input Voltage.
F2V-HCX611V	Two Electric Feed-through Leads for HCX611V or HCX612V Thermal Stage Vacuum Chamber

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.



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