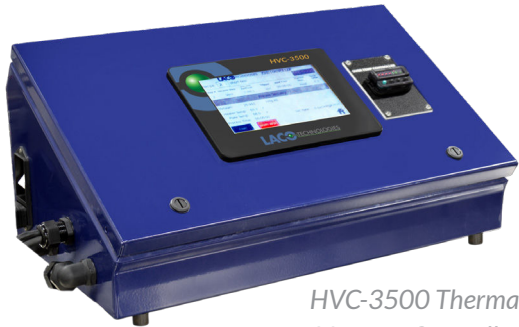


LACO TECHNOLOGIES

HVC-3500 THERMAL VACUUM CONTROLLER

For ultimate flexibility and control of your vacuum system, the feature-packed HVC-3500 Thermal Vacuum Controller provides automated vacuum and temperature control, customizable software, and adjustable test recipes for your unique and complex vacuum processes. The HVC-3500 is ideal for any vacuum system requiring heating or cooling, and integrates vacuum gauges and valves for either automated mode or interlocked manual mode operation.



HVC-3500 Thermal Vacuum Controller



Replicate extreme pressure and temperature environments using the customizable HVC-3500 Controller in your thermal vacuum system.

STANDARD FEATURES

- Can customize to include unique test or I/O requirements
- Turbo pump valve sequencing with interlocks and pumpdown timers from 10^{-3} Torr to 10^{-7} Torr
- Program evacuation, vent, and hold conditions in any sequence from ATM to 10^{-3} Torr
- Log data directly to USB drive
- Auto control electric or pneumatic valves
- Test up to 20 recipe configurations with adjustable parameters
- Display temperature readings from multiple zones
- Full RS232 serial interface control for remote integration
- Manual or auto control for valves (gate, vent, rough, foreline, purge)
- Controller includes gauge, valves, and cords

SOFTWARE CUSTOMIZATION EXAMPLES

- Door Sensors
- Lighting
- Purge Gas
- Chiller Circulators
- Electrical Heaters
- Multiple Chambers
- Overpressure Control
- Vacuum Ramping Control
- Light Towers
- N2 Thermal Condition Units

SPECIFICATIONS

	DESCRIPTION
CONTROL SYSTEM	Micro Controller with 7-inch Color Touch Screen
COMMUNICATION INTERFACE	RS232
ELECTRICAL REQUIREMENTS	120 VAC/20 Amp or 208-240 VAC/20 Amp
DATA STORAGE	Ethernet, Micro SD Card, USB Drive
DIMENSIONS (WxHxD)	24 x 9 x 12 in (61 x 23 x 30.5 cm)
CONFIGURATION	Table-top, Cart, or System Frame Mount
TEMPERATURE READING DISPLAY	Multiple
TEMPERATURE SETPOINT PID CONTROL	Multiple Zones
RECIPES	Vacuum, Time, Hold, and Temperature
VACUUM LEVEL	ATM to 10^{-7} Torr







Cart-mounted HVC-3500



MORE INFO

LACO CONTROLLER SPECIFICATIONS

	VC-1000	VC-2500	VC-3500	HC-1000	HVC-2500	HVC-3500
IMAGE						
DESCRIPTION	Vacuum Control Package	Vacuum Controller	Vacuum Controller	Heat Controller	Heat & Vacuum Controller	Thermal Vacuum Controller
CONTROL SYSTEM	N/A	Micro Controller with 7-inch Color Touch Screen		N/A	Micro Controller with 7-inch Color Touch Screen	
COMMUNICATION INTERFACE	N/A	RS232	RS232/Ethernet	RS485	RS232	RS232/Ethernet
ELECTRICAL REQUIREMENTS	110-250 VAC (5 amps max)	110-240 VAC (15 amps max)	120 VAC/15 Amp or 208-240 VAC/15 Amp	110-240 VAC (15 amps max)	120 VAC/20 Amp or 208-240 VAC/20 Amp	120 VAC/20 Amp or 208-240 VAC/20 Amp
DIMENSIONS (WxHxD)	8 x 7.5 x 8 in 20 x 19 x 20 cm	12 x 9 x 8 in 30.5 x 23 x 20	12 x 9 x 12 in 30.5 x 23 x 30.5 cm	10 x 12 x 6 in 25.5 x 30.5 x 15 cm	24 x 9 x 12 in 61 x 23 x 30.5 cm	24 x 9 x 12 in 61 x 23 x 30.5 cm
CONFIGURATION	Table-top or Cart Mount	Table-top, Cart, or System Frame Mount	Table-top, Cart, or System Frame Mount	Table-top or System Frame Mount	Table-top, Cart, or System Frame Mount	Table-top, Cart, or System Frame Mount
RECIPE TYPES	N/A	Vacuum, Time, and Hold	Vacuum, Time, and Hold	N/A	Vacuum, Time, Hold, and Heat	Vacuum, Time, Hold, and Temperature
RECIPE CONFIGURATIONS	N/A	Up to 5 configurable recipes	Up to 20 configurable recipes	N/A	Up to 5 configurable recipes	Up to 20 configurable recipes
SOFTWARE CUSTOMIZATION	N/A	No	Yes	N/A	No	Yes
DATA STORAGE	N/A	USB Drive	Micro SD Card, USB Drive	N/A	USB Drive	Micro SD Card, USB Drive
TURBO PUMP CONTROL	N/A	N/A	Auto	N/A	N/A	Auto
VALVE OPERATION MODE	Manual Vent and Evacuation, Auto Evacuation	Manual or Recipe	Manual or Recipe	N/A	Manual or Recipe	Manual or Recipe
VACUUM LEVEL	ATM to 10 ⁻³ Torr	ATM to 10 ⁻³ Torr	ATM to 10 ⁻⁷ Torr	N/A	ATM to 10 ⁻³ Torr	ATM to 10 ⁻⁷ Torr
VACUUM PUMP ON/OFF RELAY OPTION	N/A	Yes	Yes	N/A	Yes	Yes
VACUUM VALVE TYPE	Electric	Electric	Electric or Pneumatic	N/A	Electric	Electric or Pneumatic
TEMPERATURE CONTROL TYPE	N/A	N/A	N/A	Heat	Heat	Heat or Cool
TEMPERATURE READING DISPLAY	N/A	N/A	N/A	Single	Multiple	Multiple
TEMPERATURE SETPOINT PID CONTROL	N/A	N/A	N/A	1 Zone	1 or 2 Zones	Multiple Zones
HEAT OVER-TEMPERATURE ALARM	N/A	N/A	N/A	No	Yes	Yes
VACUUM UNITS	Torr	Torr, psia, psig, inHgA, inHg, mbar, ATM, Pa, feet, meters, hPa, microns		N/A	Torr, psia, psig, inHgA, inHg, mbar, ATM, Pa, feet, meters, hPa, microns	