

For ultimate flexibility and control of your vacuum system, the feature-packed VC-3500 Vacuum Controller provides automated vacuum control with customizable software and test recipes for your unique and complex vacuum processes. Capable of vacuum applications incorporating both single pumps and multiple pump high vacuum systems, the VC-3500 integrates vacuum gauges and valves for either automated mode or interlocked manual mode operation.



VC-3500 Vacuum Controller



Vacuum System with VC-3500 Vacuum Controller

### STANDARD FEATURES

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

### APPLICATION EXAMPLES

- Vacuum Degassing
- Altitude Simulation
- Vacuum Coating
- Package Testing
- Product Testing
- Research & Development

### SPECIFICATIONS

COMPONENT	DESCRIPTION
Control System	Micro Controller with 7-inch Color Touch Screen
Communication Interface	RS232/Ethernet
Electrical Requirements	120 VAC/15 Amp or 208-240 VAC/15 Amp
Dimensions	12" D x 12" L x 9" H
Data Storage	Micro SD Card, USB Drive
Configuration	Table Top or System Frame Mount
Pneumatics	Compressed Air for "P" Versions, 20-120 psig, 1-3 scfm
Recipes	Vacuum, Time, and Hold
Vacuum Level	Atm to $10^{-7}$ Torr
Units	Torr, psia, psig, inHgA, inHg, mbar, Atm, Pa, feet, meters, hPa, microns

### SOFTWARE CUSTOMIZATION EXAMPLES

- Door Sensors
- Multiple Chambers
- Purge Gas
- Overpressure Control
- Lighting
- Vacuum Ramping Control
- Light Towers

*For applications requiring automated vacuum and temperature control, upgrade to LACO's HVC-3500 Thermal Vacuum Controller.*

# VACUUM & TEMPERATURE CONTROLLERS

## LACO CONTROLLER SPECIFICATIONS

	VC-1000	VC-2500	VC-3500	HC-1000	HVC-2500	HVC-3500
						
<b>Description</b>	Vacuum Control Package	Vacuum Controller	Vacuum Controller	Heat Controller	Heat & Vacuum Controller	Thermal Vacuum Controller
<b>Control System</b>	N/A	Micro Controller with 7-inch Color Touch Screen	Micro Controller with 7-inch Color Touch Screen	N/A	Micro Controller with 7-inch Color Touch Screen	Micro Controller with 7-inch Color Touch Screen
<b>Communication Interface</b>	N/A	RS232	RS232/Ethernet	RS485	RS232	RS232/Ethernet
<b>Electrical Requirements</b>	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
<b>Dimensions</b>	8" D x 8" W x 7.5" H	8" D x 12" L x 9" H	12" D x 12" L x 9" H	6" D x 10" W x 12" H	12" D x 24" L x 9" H	12" D x 24" L x 9" H
<b>Configuration</b>	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
<b>Recipe Types</b>	N/A	Vacuum, Time, and Hold	Vacuum, Time, and Hold	N/A	Vacuum, Time, Hold, and Heat	Vacuum, Time, Hold, and Temperature
<b>Recipe Configurations</b>	N/A	Up to 5 configurable recipes	Up to 20 configurable recipes	N/A	Up to 5 configurable recipes	Up to 20 configurable recipes
<b>Software Customization</b>	N/A	No	Yes	N/A	No	Yes
<b>Data Storage</b>	N/A	USB Drive	Micro SD Card, USB Drive	N/A	USB Drive	Micro SD Card, USB Drive
<b>Turbo Pump Control</b>	N/A	N/A	Auto	N/A	N/A	Auto
<b>Valve Operation Mode</b>	Manual Vent and Evacuation, Auto Evacuation	Manual or Recipe	Manual or Recipe	N/A	Manual or Recipe	Manual or Recipe
<b>Vacuum Level</b>	Atm to 10 <sup>-3</sup> Torr	Atm to 10 <sup>-3</sup> Torr	Atm to 10 <sup>-7</sup> Torr	N/A	Atm to 10 <sup>-3</sup> Torr	Atm to 10 <sup>-7</sup> Torr
<b>Vacuum Pump On/Off Relay Option</b>	N/A	Yes	Yes	N/A	Yes	Yes
<b>Vacuum Valve Type</b>	Electric	Electric	Electric or Pneumatic	N/A	Electric	Electric or Pneumatic
<b>Temperature Control Type</b>	N/A	N/A	N/A	Heat	Heat	Heat or Cool
<b>Temperature Reading Display</b>	N/A	N/A	N/A	Single	Multiple	Multiple
<b>Temperature Setpoint PID Control</b>	N/A	N/A	N/A	1 Zone	1 or 2 Zones	Multiple Zones
<b>Heat Overtemperature Alarm</b>	N/A	N/A	N/A	No	Yes	Yes
<b>Vacuum Units</b>	Torr	Torr, psia, psig, inHgA, inHg, mbar, Atm, Pa, feet, meters, hPa, microns	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	Torr, psia, psig, inHgA, inHg, mbar, Atm, Pa, feet, meters, hPa, microns