

**ALH-2000 Liquid Cooling and Heating System
(Rev.1.3)**

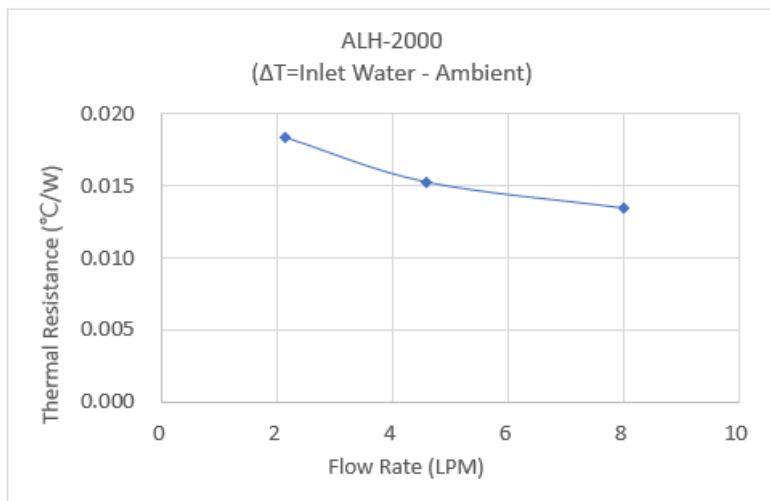
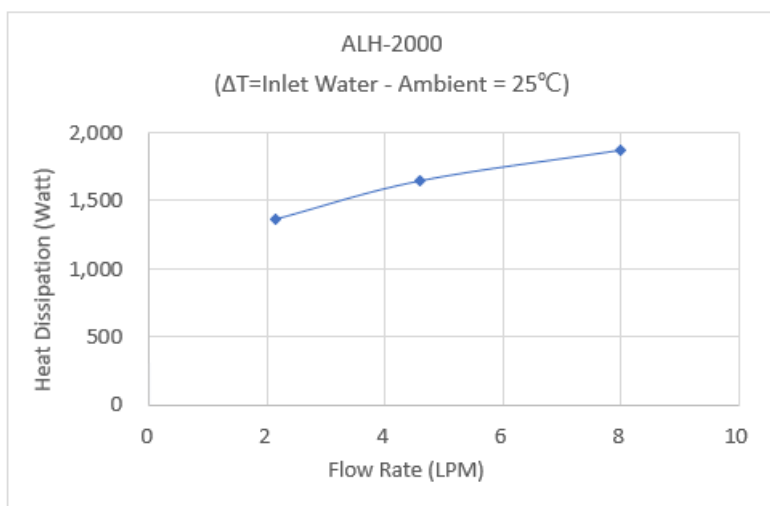
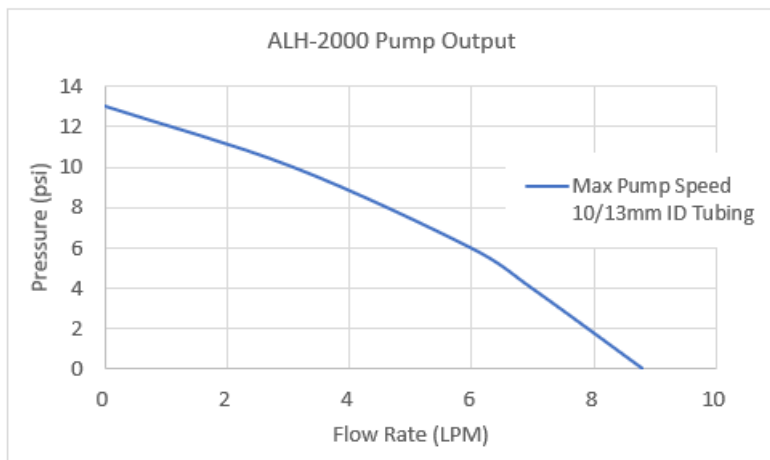

ALH-2000 is an ambient liquid cooling system with heating capabilities to maintain a steady temperature for a non-constant heat load, or for a cold plate/sample which must stay near or above the ambient room temperature.

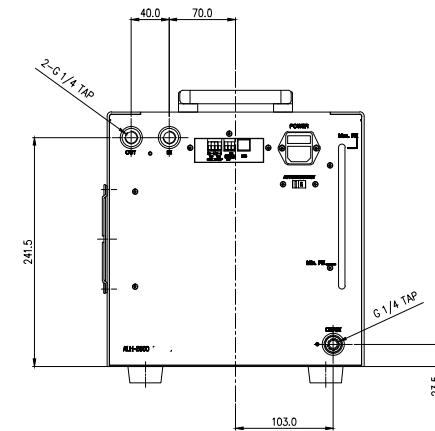
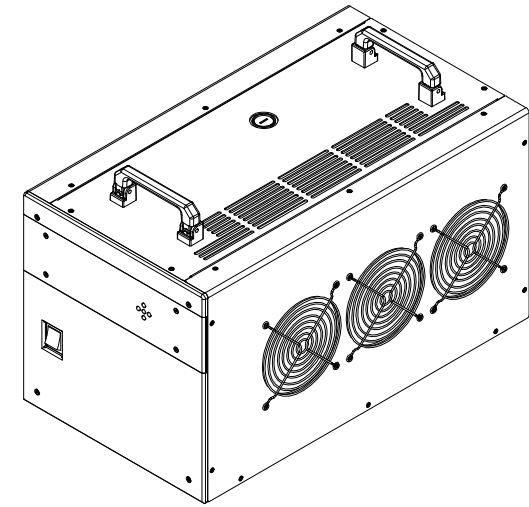
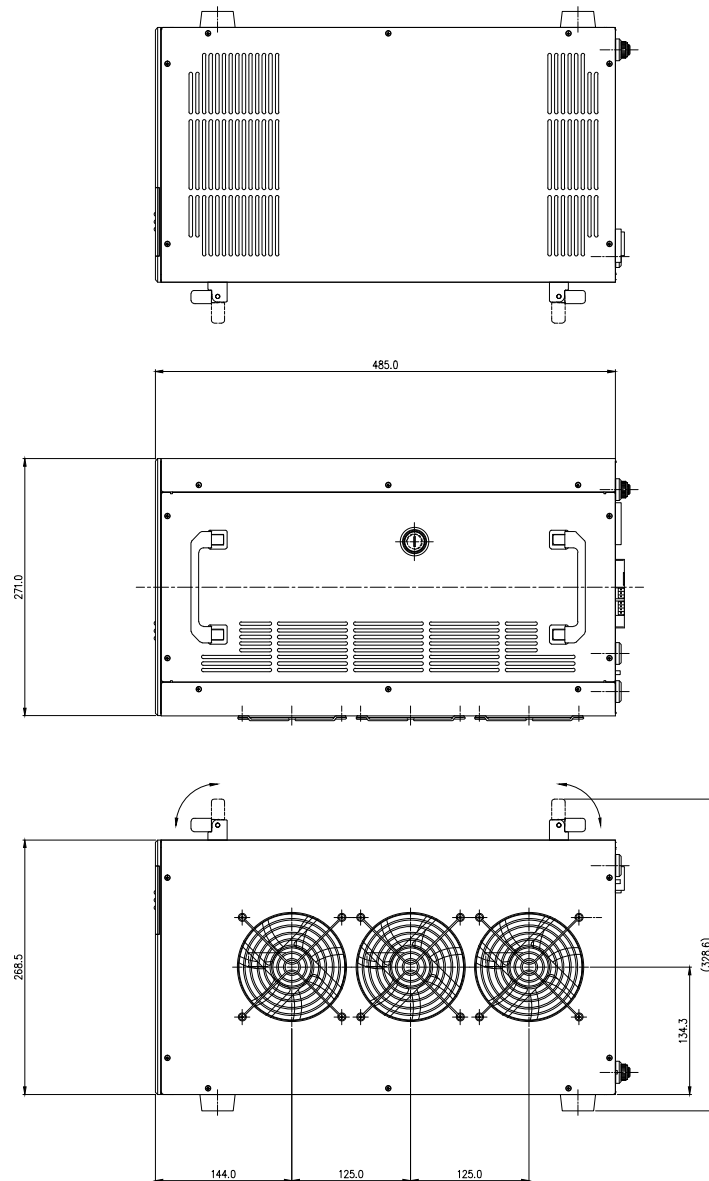
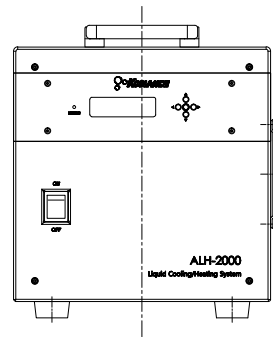
ALH-2000 monitors coolant flow rate, temperature, and reservoir level. It contains a large stainless steel coolant reservoir with an internal coolant pump outputting up to 8.8LPM (2.3GPM). A USB port allows control and logging of most features using the [Koolance System Monitor](#) application. A 0-5V differential voltage output is also provided for industrial process monitoring.


- Cooling capacity: 2000W (6824BTU/hr) with 25°C liquid-ambient delta @ 8.8LPM
- Heating capacity: 1000W
- Temperature in °C/°F with set-point based on: liquid, or one of two optional K-type thermocouples
- Pump: 10 manual levels, up to 8.8LPM (2.3GPM)
- Select only values you want displayed on the front 2-line OLED display (fixed or rotating)
- Show coolant flow rate in LPM/GPM
- Show pump impeller speed in RPM
- Enable audio alarm based on: temperature, flow rate, and/or reservoir coolant level
- Enable relay trigger (NO or NC) based on: temperature, flow rate, and/or reservoir coolant level
- Power input: 110/220VAC, 50-60Hz
- Max power consumption: 85W when cooling, 1040W when heating
- Reservoir capacity: 10L (338 fl oz)
- NPT 1/4in threads on back for fittings

General	
Weight	39.00 lb (17.69 kg)
Fitting Thread	NPT 1/4
Max Pressure Tolerance @ 25°C	2kgf/cm2 (28.5psi)
Max Temperature Tolerance	60°C (140°F)
Min Temperature Tolerance (*No Freezing)	-20°C (-4°F)
Noise (dBA)	37-50 (Heating), 43-67 (Cooling)
Cooling Systems	
Cooling Capacity	2000W (6824BTU/hr) @ 25°C liquid-ambient (25°C dT)
Display Type	OLED
Heating Capacity	1000W
Max Flow Rate (10-13mm ID)	8.8LPM (2.3GPM)
Max Power Consumption	85W when cooling, 1040W when heating

General	
Max Static Pressure (10-13mm ID)	0.9kgf/cm2 (13psi)
Power Source	110/220 VAC, 50-60Hz
Temperature Sensors	Liquid & Two K-Type Thermocouples (optional)
Temperature Stability	+/-0.5°C (with heat load) up to +/-1°C (without heat load)





NO.	DESCRIPTION				MATER'L	QUANTITY	REMARKS
					UNIT	MM	ITEM ALH-2000
					SCALE	N/S	TITLE
	DATE	BY	BY	APPRO BY	3RD ANGLE		
		S.J.LEE			CODE NO.		DWG. NO. PAGE