

# Liquid Chiller System LCS-600

Compact, Lightweight, Industrial Reliability

Compact size, minimal weight and industrial-class reliability are essential components for many cooling applications. Aspen Systems is proud to introduce the LCS-600, a new turnkey liquid chiller system. The LCS-600 is a result of Aspen Systems' cumulative years of expertise in supplying OEM refrigeration solutions to the military, medical, laser and electronics industrial markets and it is ideal for a multitude of applications.

The Aspen Q-series compressor is the world's smallest compressor and its brushless DC motor permits variable speed to match the cooling load regardless if steady-state or dynamically changing. Power consumption is best in class and has been used in a number of battery powered applications. Each system is hermetically sealed, charged, and tested prior to shipment.

### Typical Applications

- » Laser Cooling
- » Electronics Cooling
- » Personal Cooling
- » Medical Devices
- » Thermal Regulation
- » Environmental Control
- » Laboratory Equipment
- » Centrifuge Processing
- » Blood Treatment
- » Patient Cooling

### Application: Medical Laser Chiller



Active thermal management is vital in a number of medical device applications including laser and skin cooling for modern aesthetic systems, patient thermal management for pre- and post-operation care, combating hyperthermia and more. Medical device designers need a highly efficient and compact refrigeration engine that can be integrated into their systems, often with the option of battery power for mobility.

The LCS-600 addresses many of these applications and Aspen has customized the system to ideally match the customer's requirements!

[www.aspensystems.com](http://www.aspensystems.com)

### LCS-600 Refrigerated Liquid Chiller



### System Highlights

- » LCS-600: 600 Watts of cooling
- » **3-5 X** the efficiency of thermoelectrics
- » Ultra compact
- » Extremely lightweight
- » Compressor: >90,000 hour MTBF



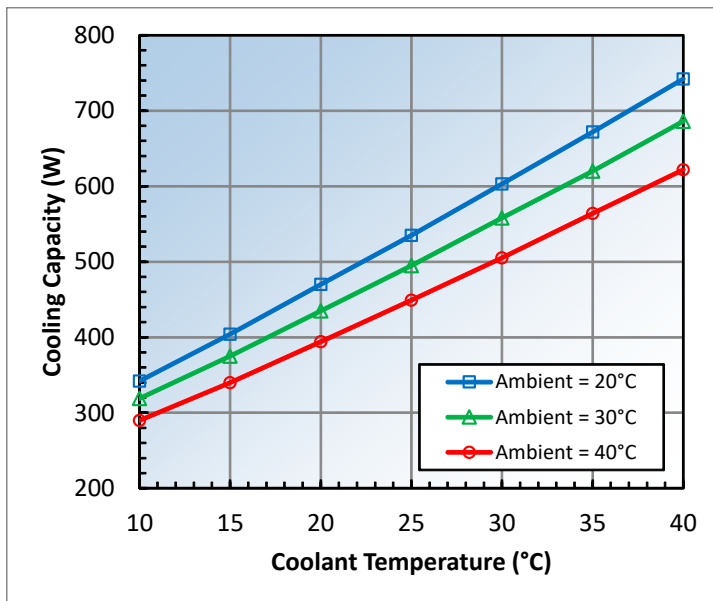
World's Smallest Rotary Compressor

Aspen Systems is an ISO 9001:2008 registered company.

# Liquid Refrigeration System LCS-600

high performance, turn-key liquid cooling

## Performance Curves

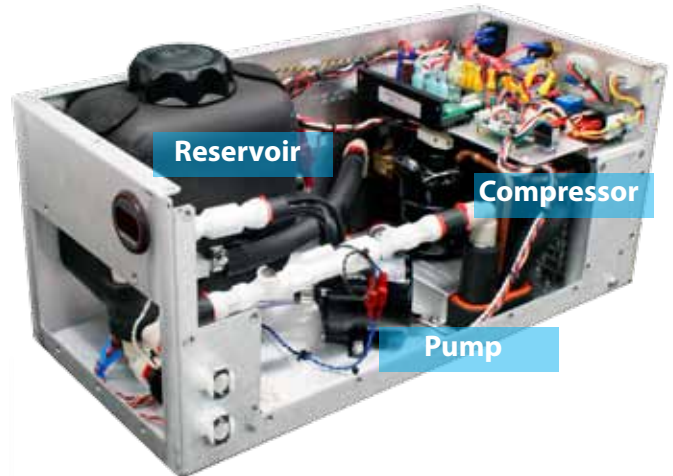


## Custom Configurations

If a change in physical dimensions, flow/pressure requirements, etc. is required for your application, Aspen specializes in volume manufacturing of refrigeration systems tailored to your application. Please contact one of our application engineers about your cooling requirements.



## Complete Turn-Key System



## Specifications

Specifications	LCS-600
Cooling Capacity (BTU/hr) <sup>1</sup>	2,050
Cooling Capacity (Watts) <sup>1</sup>	600
Temperature Stability (°C)	±0.1
Working Temp. Range (°C)	-30 to 50
Coolant Flow Rate (l/min) <sup>2</sup>	2
Max. Coolant Pressure (Bar) <sup>2</sup>	1.1
Weight (kg)	8
Dimensions LWH (cm)	46x22x20

<sup>1</sup>20 °C ambient, 30 °C coolant

<sup>2</sup> pumps available with other flow/pressure requirements

Contact us today for a free evaluation of your application:  
508-281-5322 or e-mail [info@aspensystems.com](mailto:info@aspensystems.com)

### Aspen Background

Aspen Systems is the world leader in miniature refrigeration systems. We have created refrigeration systems to meet specifications for dozens of customers with thousands of installations in personal cooling, manufacturing, mobile electronics, airborne electronics, lasers, military, and medical.