

LCM-600

Liquid Chiller Module

Compact, Lightweight, Industrial Reliability

Part# FP00039



Background

Aspen was frequently approached by customers who wanted to make use of Aspen's miniature refrigeration expertise, but also wanted a system which used their own controls and coolant loop. Based on these inquiries, Aspen developed a com-pact Liquid Chiller Module, the LCM-600 which provides purely the "guts" of the re-frigeration system and allows the end user to adapt the compact module directly into their system.

System Definition

The LCM-600 consists of a compact, hermetically sealed refrigeration system (including a miniature variable speed compressor and drive board, condenser, thermostatic expansion valve, and an evaporator). The system is fully charged with R-134a, insulated and mounted to a baseplate to drop directly into the end application. The user connects their cool-ant loop to the evaporator and provides airflow over the condenser. The user can interface with the drive board to provide compressor speed control as desired.

System Highlights

- Efficient operation
- Compared to the compared to
- Compact footprint
-) Low noise
- Easy to integrate
- O Low cost



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.

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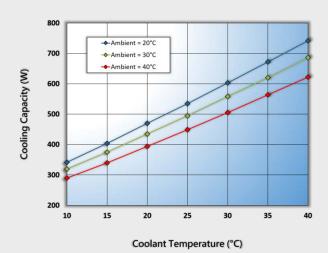
high performance, liquid cooling module

Specifications	LCM-600
Cooling Capacity	See graph below.
Compatible Fluids	Water, Water/Glycol Mix
Coolant Temperature	0°c to 50°c
Maximum Power Draw	360 W at 24 VDC
Voltage	22-30 VDC
Maximum Current	15 A
Noise	<50 dBA
Dimensions	191 x 161 x 134 mm (7.8 x 6.3 x 5.3 in)
Orientation	<30° of tilt
Weight	2.7 kg (6 lb)
Operating Ambient Temperature	0°c to 50°c (32°F to 122°F)
Storage Temp	-20°c to 50°c (-4°F to 122°F)

Applications

- Laser Cooling
- Medical Devices
- Medical Aesthetics
- Electronics & Enclosures
- Electric Vehicle Systems & Components
- Laboratory Equipment
- Bio-sample Analyzers
- Patient Cooling
- Sensors & Detectors

Any application that requires small size, light weight or high efficiency.



Custom Configurations

To satisfy customers' application requirements, Aspen Sys-tems can custom-design air conditioning or cold plate cooling systems. Please contact one of our application engineers about your cooling requirements.