

## LEAK-PROOF & CUSTOMIZABLE COOLING SYSTEM

Chillydyne delivers dependable leak-proof direct-to-chip liquid cooling solutions for HPC, AI, Data Centers, Finance, Colocation Service Providers, Hyperscalers, Government, and Academia. Our patented, fail-safe systems use advanced negative pressure technology and smart redundancy to prevent leaks and maximize uptime. Easy to install and maintain, Chillydyne’s solutions ensure unmatched cooling performance for a sustainable approach to managing your server environment.



CF-CDU300 Cooling Distribution Unit (CDU) cools up to 300 kW of servers in high-density applications.



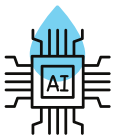
### LEAK-PROOF COOLING

Negative pressure system



### AI & ML READY

2,000+ Watt CPUs/GPUs



### DIRECT-TO-CHIP

Peak thermal performance



### MADE IN USA

Premium quality



### FAIL-SAFE DESIGN

Smart redundancy



### ENERGY EFFICIENT

Up to 40% savings



### EASY TO INSTALL

Easy to maintain



### ZERO-DOWNTIME UPGRADES

Maximize uptime

# CASE STUDY: SANDIA NATIONAL LABS



Sandia National Labs deployed two supercomputers equipped with Chillydyne's negative pressure liquid cooling system, operational since 2019 with zero leaks.

- Initially ranked #69 and #94 on Top500 Supercomputer List
- 1488 Skylake nodes each
- PUE: 1.016 with thermosyphon facility cooling

This system uses N+1 CDUs and automatic switchover valves to maximize uptime. The cold plates feature fins for backup air cooling.

Source:

<https://www.osti.gov/servlets/purl/1763558>

## HOW IT WORKS: SYSTEM ANATOMY

Chillydyne's innovative negative pressure technology creates a vacuum to circulate water by pulling it through the cooling system. This approach removes the need for costly, heavy-duty plumbing to the racks, ensures easy setup and upkeep, and eliminates leaks in a system with no single point of failure.

### 1) Cooling Distribution Unit (CDU)

The CF-CDU300 cools up to 300kW of servers.

### 2) Rack Manifold

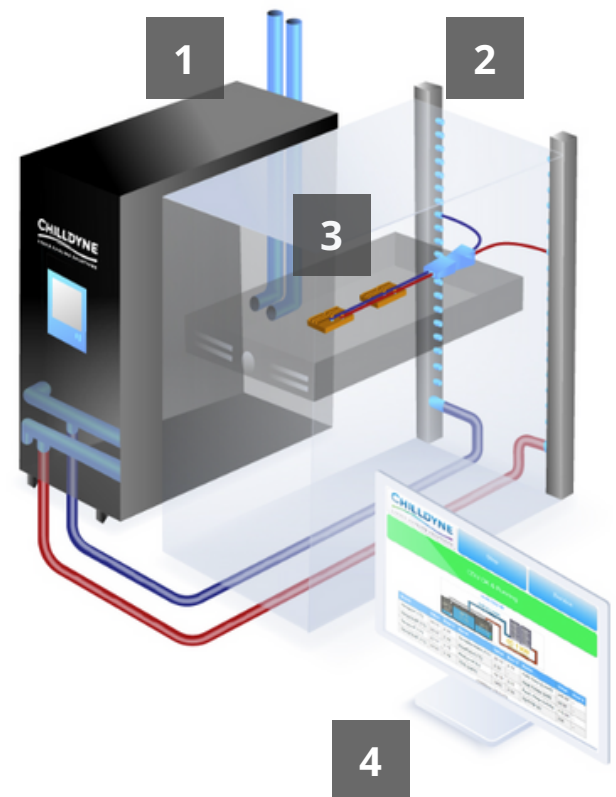
Delivers coolant to more than 100 servers while installed inside a standard server rack.

### 3) Cold Plates

Mounted directly to server processors, to remove heat at its source.

### 4) Cool-Flo Software

Remotely monitor and operate the Chillydyne CDU using a web-based interface, industry-standard protocol, or integration with DCIM and BMS software.



SCAN FOR  
MORE INFO

