

## **SmartSense CDU**

High-Performance Cooling for Power-Intensive Racks

# Scalable, High-Capacity Cooling for Power-Dense Racks

SmartSense CDU is a high-performance, rack-mounted liquid-to-liquid Coolant Distribution Unit designed to meet the rigorous demands of GPU-dense, high-power racks. Capable of cooling up to 300kW per rack or across neighboring racks, it effectively manages heat in power-intensive environments, ensuring your data center infrastructure remains optimized for next-generation workloads.

#### **Complete Liquid Cooling Solution**

When paired with JetCool's advanced cold plates, SmartSense CDU delivers a full rack and row-level liquid cooling solution, seamlessly supporting both single and multiple racks and scaling up to row-based configurations with over 2MW of cooling capacity. This robust pairing provides unmatched efficiency and performance for data centers, offering a powerful, end-to-end solution for cooling even the most compute-intensive environments.





### **SmartSense CDU**

SmartSense CDU delivers efficient, reliable cooling for high-performance AI workloads. With low-speed redundant pumps, warm inlet compatibility, and advanced filtration, it integrates seamlessly into modern data centers, accelerating AI time-to-solution.

- **Ultra-efficient, redundant pumps** operate at low speeds (2,900 RPM nominal, 3,600RPM max) for quiet, efficient, and reliable performance.
- Maximize GPU utilization with warm inlet temperatures up to 60°C, run at peak performance longer, accelerate computation-intensive processes and reduce time-to-solution for Al models.
- **Automatic pump switching** ensures uninterrupted operation in case of pump failure or error.
- Advanced cross-connected filtration delivers low-loss, ultra-clean fluid distribution for enhanced system efficiency.
- **Versatile rack design** compatible with 42-inch+ (1070 mm) deep racks in the 19-inch or ORV3 form factors, enabling seamless integration into modern data centers.
- Ultra-low thermal loading for flow ensures more uniform device temperatures and extended device lifetimes (>1 LPM/kW). ASHRAE W4 and W+ compatible.

## **Physical Specifications**

	Low Approach	Nominal	Max
Height		<b>6</b> U	
Length	950 mm		
Weight	101 kg		
Fluid Temp. Range	15°C to 70°C		
Secondary Side Fluid	PG25		
Cooling Capacity	72 kW	192 kW	301 kW
Flow Rate	288 LPM	288 LPM	400 LPM
Available Pressure	24 psi	24 psi	20 psi
Approach Temp.	2°C	5°C	7°C
Power Consumption	2,000 W	2,000 W	3,400 W
Power Usage (PUE)	2.8%	1.1%	1.1%
Electrical Supply	230 VAC, Single-Phase		
Comm Protocol	TCP/IP, Redfish, SSH, Webserver		

Patented Technology, Additional Patents Pending. Pre-release specifications subject to change\*