

Solution Overview

Maximizing Enterprise Compute Without Rebuilding Your Data Center

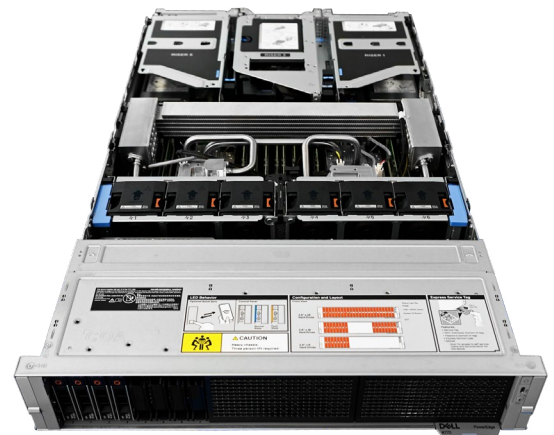
Enterprise IT infrastructure is under significant pressure as increasingly compute-heavy mission- and business-critical applications place new demands on existing data centers. These facilities store and protect massive datasets, run high-availability, low-latency applications, support global operations, and meet strict security, compliance, and data sovereignty requirements. At the same time, they must accommodate new AI, machine learning, and computing workloads that require specialized hardware, consume significant energy, and generate substantial heat. Faced with fixed power, space, and cooling budgets, enterprises need low-risk, minimally disruptive ways to keep pace with growing compute demand while extending the value of existing infrastructure.

JetCool's SmartPlate™ System meets the challenge by extending power and space resources and unlocking greater server performance without the cost, risk or disruption of large-scale facility upgrades. Designed for 17th generation Dell PowerEdge R770 and R7725 server platforms powered by the latest Intel® Xeon 6 and 5th Gen AMD® EPYC™ processors, the SmartPlate System offers a practical path to direct-to-chip liquid cooling adoption.

The JetCool Solution

SmartPlate System is a fully sealed, liquid-assisted air cooling solution designed for rapid deployment in air-cooled facilities. The system uses a closed loop design with precision cold plates to remove heat from the processors, ultimately rejecting it through an integrated liquid-to-air radiator into the data center hall. With no facility water system or plumbing required, organizations can increase compute density while preserving their existing infrastructure.

By replacing stock air heat sinks with closed-loop liquid cooling, SmartPlate System helps organizations maximize the return on AI and server infrastructure investments. Reducing average server power consumption by 13%, SmartPlate System frees more of the available power budget for compute, enabling higher AI workload density within existing constraints. Beyond performance gains, the solution cuts fan speeds in half and reduces server noise by up to 60%, making it ideal for edge, colocation, and on-premises environments where noise levels can impact placement.



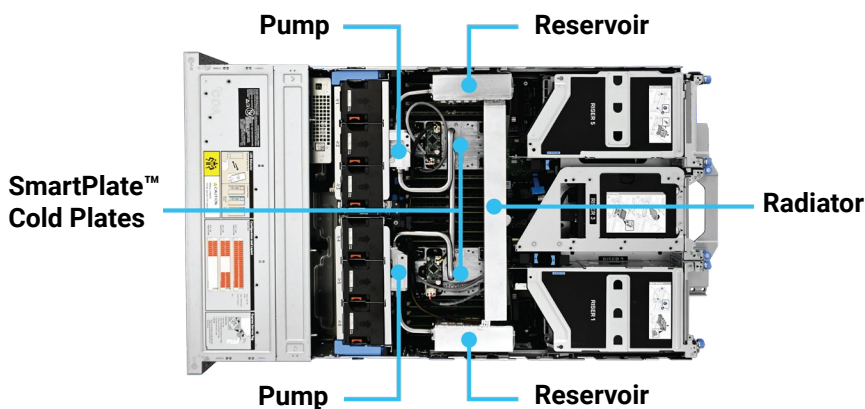
JetCool's SmartPlate System for the Dell PowerEdge R770

Customers deploying SmartPlate System are experiencing:

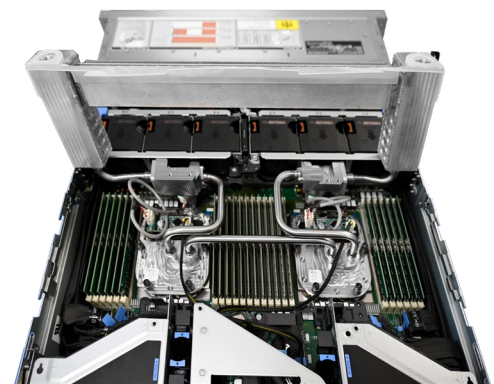
- **More compute density** in the same power envelopes
- **An average of 13% power savings** with no facility plumbing
- **Liquid-cooled performance** without costly facility upgrades
- **Up to 60% less server noise** for greater deployment flexibility
- **Low-risk adoption** through a server-by-server upgrade path
- **Complete warranty** with global services and support



The latest generation SmartPlate System is designed for durability and serviceability. Its all-metal construction uses stainless steel liquid pathways instead of flexible hoses and clamps to create a robust cooling loop. The integral radiator features integrated hinges, allowing it to rotate up and out of the way during DIMM replacement, eliminating the need to remove and reinstall the system during servicing.



Labeled JetCool SmartPlate System for the Dell PowerEdge R770



JetCool's SmartPlate System for the Dell PowerEdge R7725

With deployments in data centers worldwide, SmartPlate System technology is helping organizations in financial services, healthcare, manufacturing, telecommunications, and petrochemical production adopt new technology, keep pace with growing compute demands, and extend the capacity of their existing infrastructure.

Partnership with Dell Technologies

Dell OEM Solutions partners with JetCool to provide advanced liquid cooling solutions for Dell PowerEdge platforms, helping customers deploy high-performance compute infrastructure within existing data center environments. By combining Dell's OEM engineering expertise and global reach with JetCool's innovative liquid cooling technology and global manufacturing and supply chain capabilities, customers gain access to a scalable, production-ready solution that can be deployed worldwide. Together, Dell and JetCool provide a practical path to liquid cooling adoption as AI and high-performance computing demands continue to accelerate.

Customer Value

SmartPlate System gives organizations a practical path to AI-ready infrastructure by delivering liquid-cooled performance within air-cooled facilities. Backed by Flex manufacturing and JetCool's liquid cooling expertise, the system helps customers increase compute density, improve thermal efficiency, reduce power and noise, and adopt liquid cooling with less complexity and disruption. For more information on SmartPlate Systems for Dell PowerEdge R770 and R7725 servers, please visit <https://jetcool.com/Dell>.