DELL Technologies | **intel**

SOLUTION OVERVIEW

Smart Power and Cooling Solutions

Anticipating your needs with scalable, adaptive technologies

Enterprises face rising power demands driven by advancements like AI, digital transformation tools, and innovations that enhance compute density. While these technologies offer significant opportunities, they also challenge infrastructures, pushing them to their operational limits.

Dell + Intel

30 years of technology partnership and counting

The latest portfolio of Dell PowerEdge servers with Intel® Xeon® processors gives businesses flexible options to meet their growing workload demands while managing data center, power, bandwidth, and budget constraints.

PURPOSE-BUILT:
Scale infrastructure and tackle your biggest data challenges from Core to Edge

LEADING PERFORMANCE:
Performance and power efficiency for diverse workloads, including Gen AI use cases

BUILT-IN SECURITY:
Hardware-enabled security and data safeguarding for reliable performance

Catching Up Before Ramping Up

Technology like AI can reduce business costs by up to 37%[1] by driving greater efficiency and supercharging digital transformations, but enterprises must adapt their power and cooling to handle advanced future applications.

80%

80% of organizations agree that **inadequate technology holds back progress and innovation**[2]

3x

Global **data center capacity demand** could triple by 2030[3]

46%

Data center industry body AFCOM found that just 46% of its members' facilities have **adequate cooling systems**[4]

What if You Could:

+ Expand your compute capabilities without overloading your data center?

+ Reduce energy consumption without compromising performance or density?

+ View and manage power and cooling at the system, rack, and data center levels?

+ Quickly adopt power and cooling strategies to fit budgets and objectives?

Dell and Intel Optimize Power and Cooling Through IT Transformations

Flexible Cooling Solutions

- **Liquid cooling:** Provides an array of solutions, including servers with Direct Liquid Cooling, Rack solutions, Modular Data Centers, and Heat Containment enclosures.

- **Air cooling advancements:** Airflow control algorithms, thermal and power sensors, innovative fans and heat sinks – to balance and direct airflow.

- **Thermal-aware designs:** Intel® Xeon® processors are designed to optimize cooling efficiency and support higher-density data center configurations.

Power Management and Efficiency

- **Real-time power management tools:** Leverage Intel® Xeon® processors' telemetry and Dell's systems management tools to dynamically adjust energy use, ensuring predictive remote management and optimized performance per watt.

- **Automated real-time dashboards:** Provide a holistic view of server, power, networking, and cooling, enabling dynamic load balancing and high performance per watt. Analytics accurately track power and cooling, delivering faster resolutions as temperatures elevate.

Enable scalable, efficient data center growth

Optimize performance and density

Reduce costs

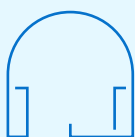Improve sustainability

Future-proof your environment

Prepare your data center today for the technologies that will make you competitive tomorrow.

Learn more about Dell PowerEdge with Intel solutions to optimize your infrastructure.

POWERING INNOVATION. SCALING TOMORROW.

[Optimize your data center](#) strategy with smart power and cooling

Contact your Account Manager

[View technical PowerEdge resources](#)

Join the conversation with #PowerEdge

1 Forbes, "Anticipating the Future: How AI Will Impact Business in 2024," February 21, 2024; 2 NTT Data, "2024 Infrastructure Lifecycle Management Report," June 2024 ; 3 McKinsey & Company, "AI power: Expanding data center capacity to meet growing demand," October 29, 2024; 4 AAFCOM, "2024 State of the Data Center Report"

D∕ELL Technologies