



**Performance
Multiplied**

Data Center Solutions

Your Cooling Strategy Just Became Your Growth Strategy



Unlock Potential in Your Thermal Management Strategy

Trane's data center solutions support both hyperscale and colocation data centers by ensuring uptime, reducing operating costs and optimizing capital investments across all scales.

For colocation centers, flexible designs and smart controls provide efficient, reliable operations and future-ready expansion. For hyperscale facilities, we deliver scalable, automated systems to meet high-density computing needs while maximizing energy efficiency and sustainability. Our streamlined designs and smart controls protect CapEx and reduce OpEx to help ensure long-term value in the fast-evolving data center sector.



Transforming Vision Into Impactful Strategy



PROVEN THERMAL MANAGEMENT SOLUTIONS

With over a century of cooling experience, building uptime, efficiency and long-term reliability into data center infrastructures is in our DNA.



INTEGRATED SYSTEM EXPERTISE

From co-design to system-level modeling, we work across your team and the broader AI ecosystem to engineer smarter, cleaner and more reliable solutions from the start.



TAILORED SERVICE AT SCALE

With 4,000+ technicians, we deliver responsive, scalable support across the lifecycle, local to operations so performance keeps pace with growth and uptime is protected.



BUILDING AHEAD OF THE MOMENT

Trane brings clarity with advanced solutions. We invest in training and strategically position our teams close to your operations to deliver maximum value. Backed by in-region, for-region manufacturing and deep experience, our solutions enhance your operations.



SUSTAINABILITY-FORWARD

From smart planning and system adjustments to ecosystem collaborations, we ensure ongoing performance by evaluating your facilities for efficiency, emission reduction and resilience.

Calming the Complexity

The data center market is rapidly evolving, with increasing pressures from AI adoption and power constraints.



GPU-as-a-Service is projected to grow 22.9% (CAGR) 2025-2030¹.

We design scalable cooling systems for AI's increasing heat loads.



Workforce shortages are causing an expertise gap, leaving operations vulnerable².

Our data-center-trained technicians provide reliable, trusted local service to keep your operations running.



Liquid cooling can cut energy use by up to 30% but can present infrastructure and safety concerns if improperly implemented³.

We deliver fully integrated liquid cooling solutions with expert guidance and safer deployment.



Some countries are halting new grid connections until 2028⁴.

Our thermal energy storage solutions offset grid constraints by separating cooling loads from real-time energy use.



Power access continues to be a primary challenge⁵.

We reduce grid strain with energy-efficient systems that minimize waste and enable energy reallocation.



Supply chain constraints and tariffs are impacting access and cost of components⁶.

Our in-region manufacturing and global network help reduce delays and mitigate costs.

We help you enhance efficiency by prioritizing thermal management, enabling smarter scaling and more reliable uptime.

Fueling Your Performance Through Collaboration

We collaborate with you from concept to completion and leverage key ecosystem relationships to deliver on your requirements. From new innovations to meet your design, performance improvements and retrofits at every stage, our trusted specialists help you move faster and scale smarter.



1

Our Approach

Collaborative Solutioning

This is where clarity begins. No matter your data center type or scale, we collaborate with your team to define goals, analyze needs and set parameters for a more efficient thermal management strategy.

2

Simulation, Analysis and Modeling

We test your unique system specifications before going live with advanced digital modeling, giving your team data-backed insight into how each choice impacts energy use, capacity and ultimately ROI.

3

Performance Validation

Before your system goes live, we invite you to witness it in action. From flow rates to heat transfer and control responsiveness, we test it all — confirming your system meets the exact specs and performance standards that matter most to you.

4

Commissioning

Trane works with your team to ensure your facility meets requirements from the start, reducing risks in support of on-time, on-budget completion. Our seven step, flawless commissioning process includes early planning and strict verification across every step to deliver optimal performance for your high-stakes environment.

5

Operational Optimization

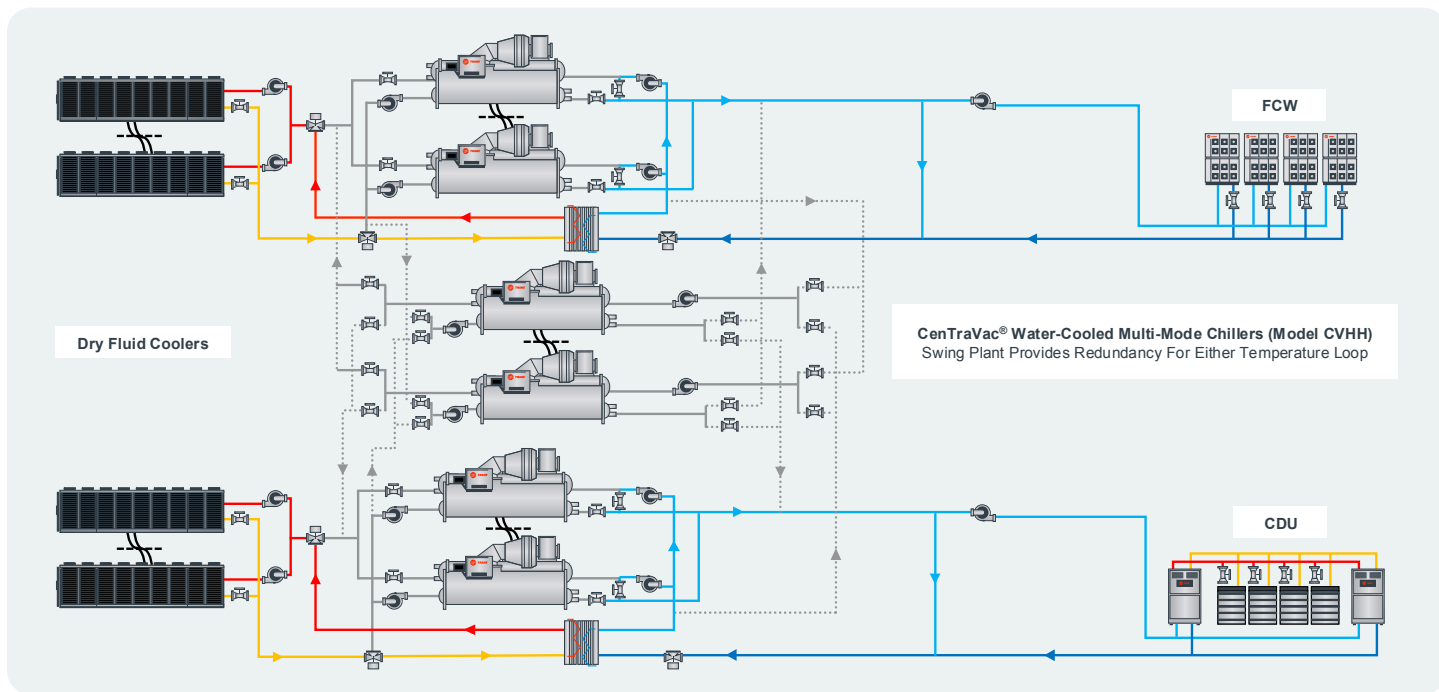
As your data center grows, Trane supports you with advanced systems and local service teams. We enhance performance through real-time diagnostics, remote monitoring and predictive servicing, ensuring maximum efficiency and reliability.

Enhance Your Operations With Tailored Cooling Solutions

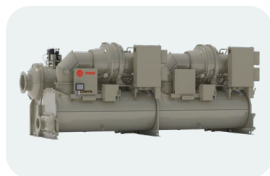
Our cooling solutions are built to meet the toughest demands of data center system operations. Powered by expertise, they're purposefully engineered to deliver peak performance today and seamlessly scale with your growth tomorrow.

Empower Rapid Execution at Scale With Trane's Reference Design

Engineer-ready reference designs are available and include detailed system layouts, temperature and flow data and best practices for integrating air- and liquid-cooling, optimizing redundancy and maximizing free cooling. Use them as a proven blueprint to accelerate design, reduce energy and water use and balance performance with sustainability.



WATER-COOLED CENTRIFUGAL CHILLERS



Efficient Cooling at Scale

Designed for energy-efficient thermal management, these chillers tackle tough applications, reduce operational costs and minimize environmental impact, making them a smart, sustainable choice.

AIR-COOLED CHILLERS



Fast Deployment, Consistent Results

Ideal for quick projects or expanding facilities, these systems provide reliable controls, rapid restart, low power consumption, quiet operation and efficient performance at high temperatures, managing heat from modern GPU and AI workloads.

LIQUID COOLING SOLUTIONS



AI-Ready Cooling With Maximum Efficiency

We offer direct-to-chip efficiency with our liquid cooling solutions to support the demands of AI and high-performance computing without compromising uptime or energy performance.

AIR HANDLING SOLUTIONS



Reliable Airflow, Smarter Space Usage

Designed for high-density computing, our air handlers offer exceptional airflow and precise temperature control, enhancing your space and easing your system load for optimal performance.

CONTROLS



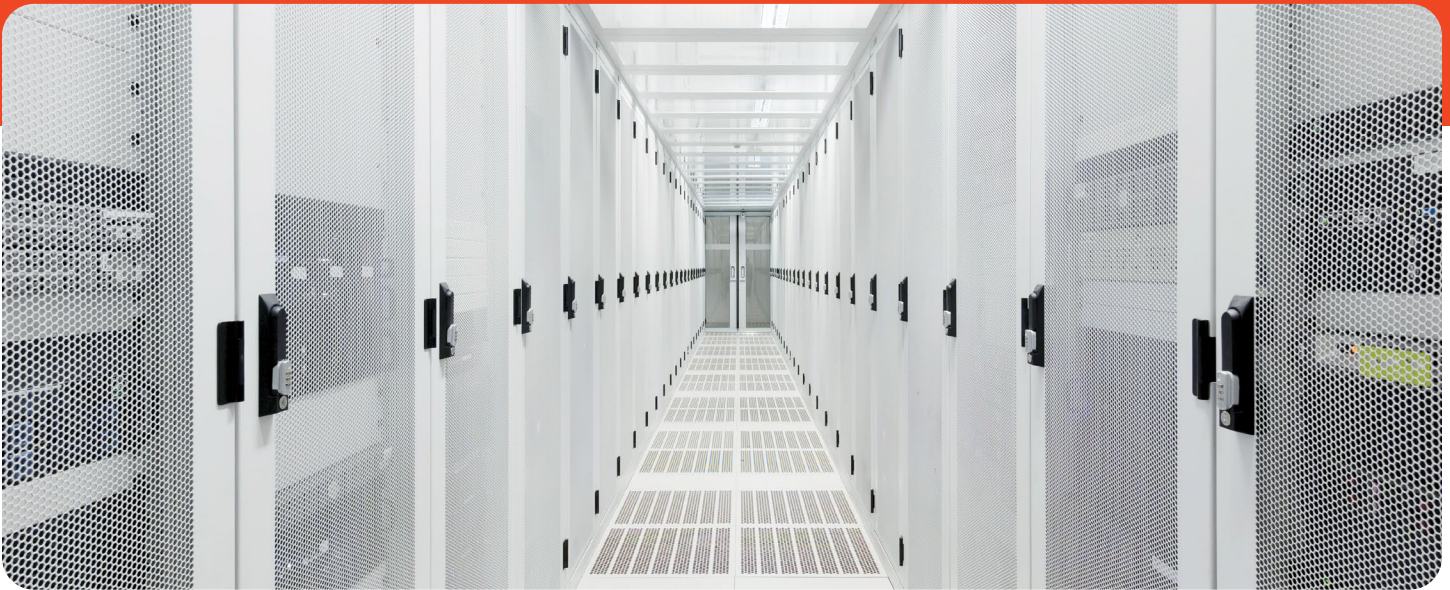
Intuitive System Management

Configurable controls efficiently manage multiple units, improving performance, increasing energy efficiency and reducing equipment strain, enhancing your thermal management investment over time.

DATA CENTER SERVICES THAT SCALE WITH YOU

Helping Your Equipment and Controls Perform at the Highest Level

Our tailored data center services are built to meet requirements from the start, maintain uptime and multiply performance. These services help ensure seamless integration and high quality during start-up and commissioning, smoother transitions during growth and a service plan built for long-term critical performance.



BUILDING MAINTENANCE AND OPTIMIZATION SERVICES

Ensuring Performance

End-to-End Data Center Services

- Scalable lifecycle support
- Performance matches growth
- Commissioning meets initial requirements
- Adheres to timelines, no start-up surprises

Responsive, Skilled Technicians When and Where Needed

- Largest service footprint in the industry
- Rigorous training at Advanced Technology Training Center
- Fast, dependable service and support

Proactive Monitoring With Rapid Response

- Designed for critical environments
- Remote diagnostics
- Predictive maintenance
- Faster issue resolution

Parts When and Where You Need Them

- Quick access to components
- Tailored to local needs
- Faster service
- Minimized downtime

Your Sustainability Goals Are Our Sustainability Goals

As the demand for data processing and storage grows, so does the need for sustainable practices.

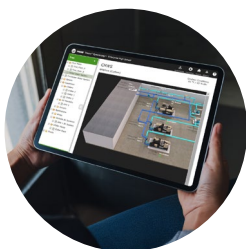
Trane is committed to helping data centers achieve their sustainability goals while maintaining operational efficiency and strengthening community relations.



Trane offers solutions to help mitigate community relations concerns, including noise reduction and community engagement.



As a global climate innovator and energy services provider we translate sustainability priorities into actionable tactics and strategies to lower carbon emissions, conserve resources and reallocate energy.



Trane provides scalable solutions that help customers grow as they go, helping to balance CapEx and OpEx.



Trane's innovative and scalable solutions create sustainable outcomes helping to ensure energy efficiency, regulatory compliance and cost savings.

You're Building For Tomorrow. So Are We.

This means we don't just help you plan for increased capacity, tighter timelines and higher expectations — we make it happen. With the right people, insights, services, systems and support, we deliver solutions that empower you to scale without limits. Less friction. Better outcomes.

Let's multiply your performance, together.
Visit Trane Data Center Solutions to learn more.



¹ GPU As A Service Market (2025 - 2030), [Grand View Research](#)

² Operators struggle to overcome ongoing staff and skills shortage, [Uptime Institute Intelligence](#)

³ Exploring Immersion Cooling – Part 2: The Challenges, [Upsite Technologies](#)

⁴ 8 Trends That Will Shape the Data Center Industry In 2025, [Data Center Frontier](#)

⁵ EirGrid pulls plug on 30 Irish data center projects, [Data Centre Dynamics](#)

⁶ Addressing Data Center Growth Constraints Key to U.S. Innovation, Leadership in AI, [POWER/Access Intelligence](#)



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.com](#) or [tranetechnologies.com](#).

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