From AI Data Centers to AI Factories

Powering the AI revolution with
high-performance, complete infrastructure.

se.com

Life Is On | Schneider Electric

INTRO

AI workloads are re-defining power and cooling demands.

Learn how AI demands are transforming every industry.

WHY US?

Your trusted partner for the world of AI.

Discover how to deliver AI infrastructure with speed, scalability, and sustainability.

OUR SOLUTIONS

Our complete AI factory portfolio.

Explore our end-to-end solutions tailored for AI workloads.

- Cooling solutions
- Power distribution
- Modular infrastructure
- Intelligence and software
- Lifecycle services

AI workloads are re-defining power and cooling demands.

AI workloads are **re-defining power and cooling demands.**

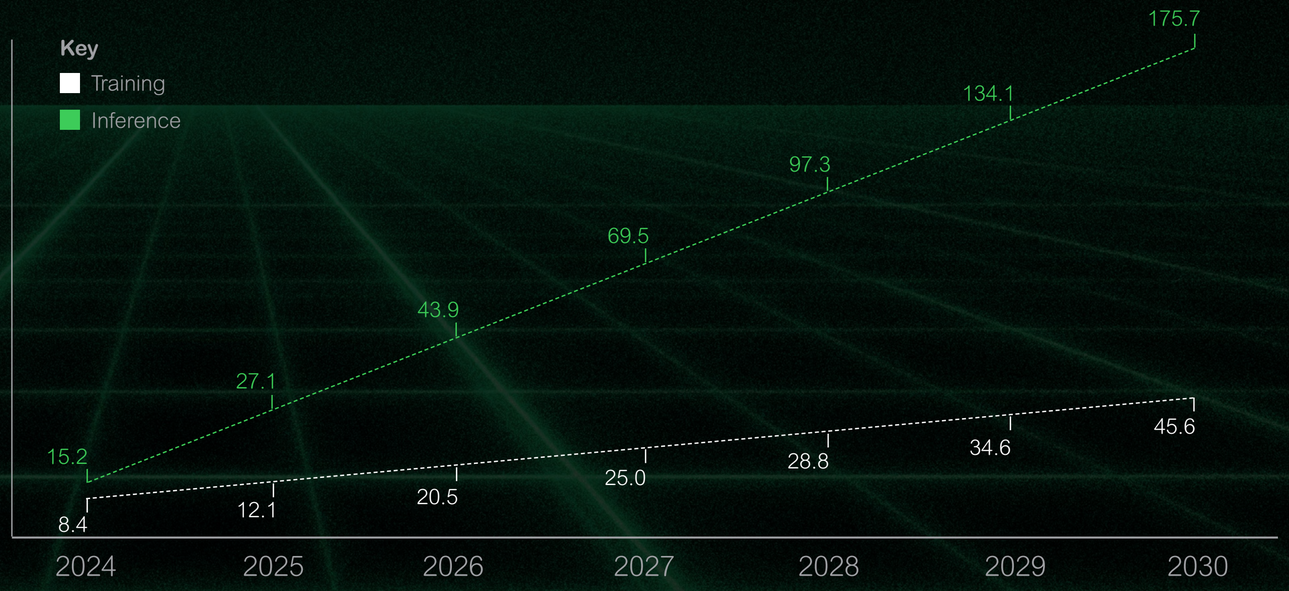
Today's challenge?

How can you keep up and design infrastructure that is **smarter, faster, more sustainable,** and **more efficient.**

At Schneider Electric, we are the **world's largest provider** of data center solutions, spanning power, cooling, software, and services.

With proven global leadership, we bring unmatched scale in manufacturing and R&D, combined with the broadest AI partner ecosystem.

AI load power capacity workload (GW)



*Graph Source: Omdia

Today, AI is transforming **every industry.**

Accelerated computing is driving **huge infrastructure shifts,** redefining how data centers are designed, powered, and cooled and demanding **smarter, more efficient infrastructure** at every level.

Explosion of GPU clusters

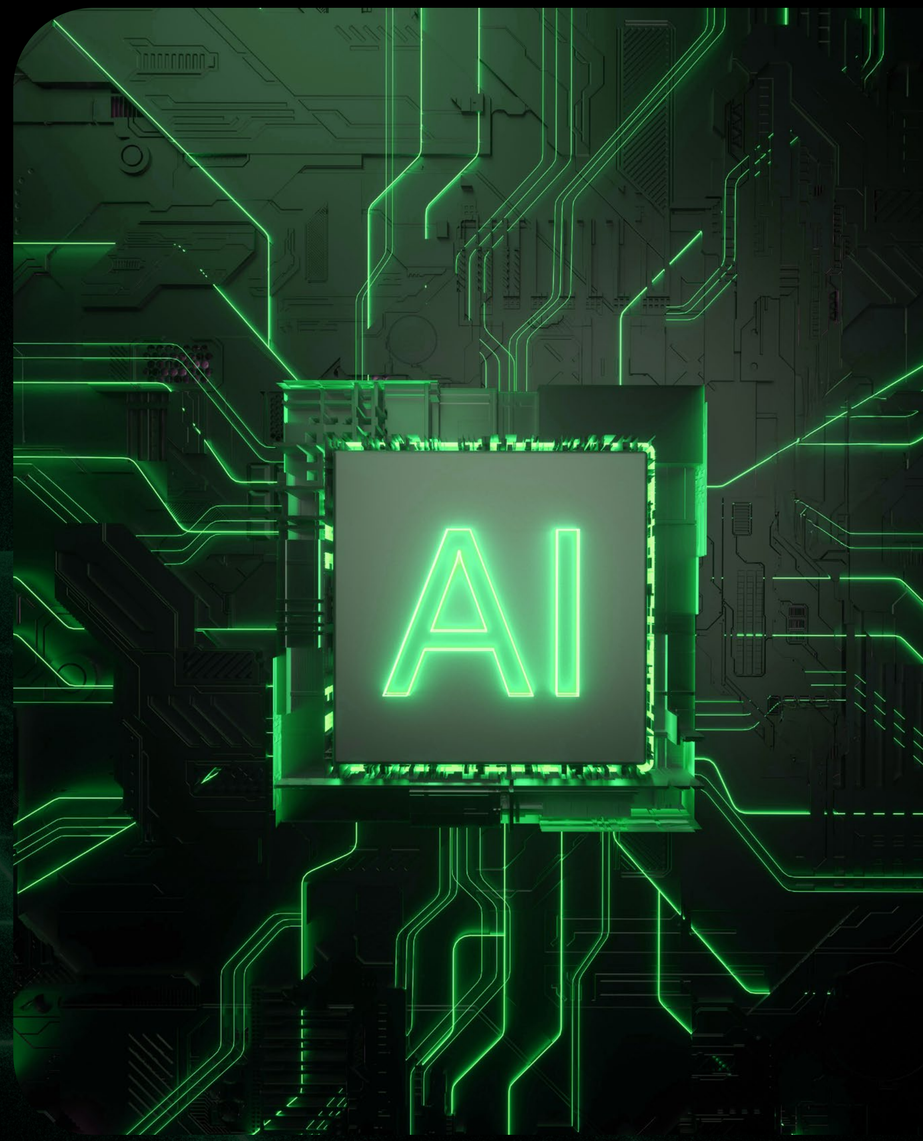
Resulting in 10x rack density.[1]

200% Demand

Global AI demand set to triple by 2030.[2]

Evolving regulations

Sustainability regulations rising in parallel.[3]



[1] McKinsey & Company - “AI power: Expanding data-center capacity to meet growing demand” (April 2024)
[2] Uptime Institute - “Density choices for AI training are increasingly complex” (September 2024)
[3] European Commission - “Green cloud and green data centres” (March 2024)

Traditional data centers **weren’t designed for AI.**

Cooling shift

With precision now mission-critical, cooling is shifting from air to liquid.

Power density

Multi-megawatt clusters are rising demanding unprecedented power density.

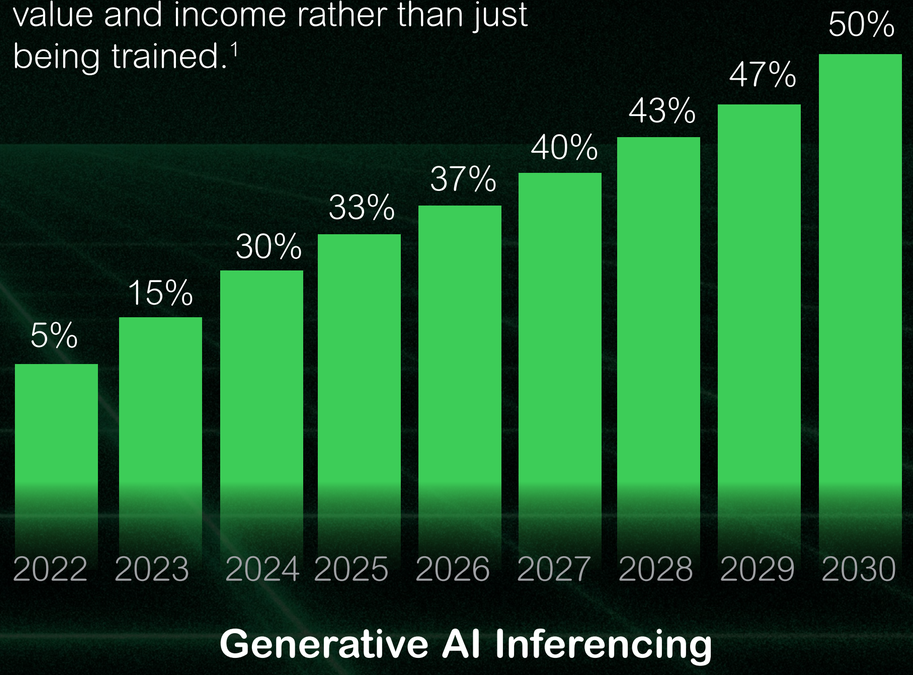
Speed of deployment

Time to market has become a key differentiator.

Rapid growth

Inference workloads and training demands are increasing.

By 2030, it’s predicted that **50%** or more of the installed AI base will be focused on inference, meaning more AI systems will be actively used to generate value and income rather than just being trained.[1]



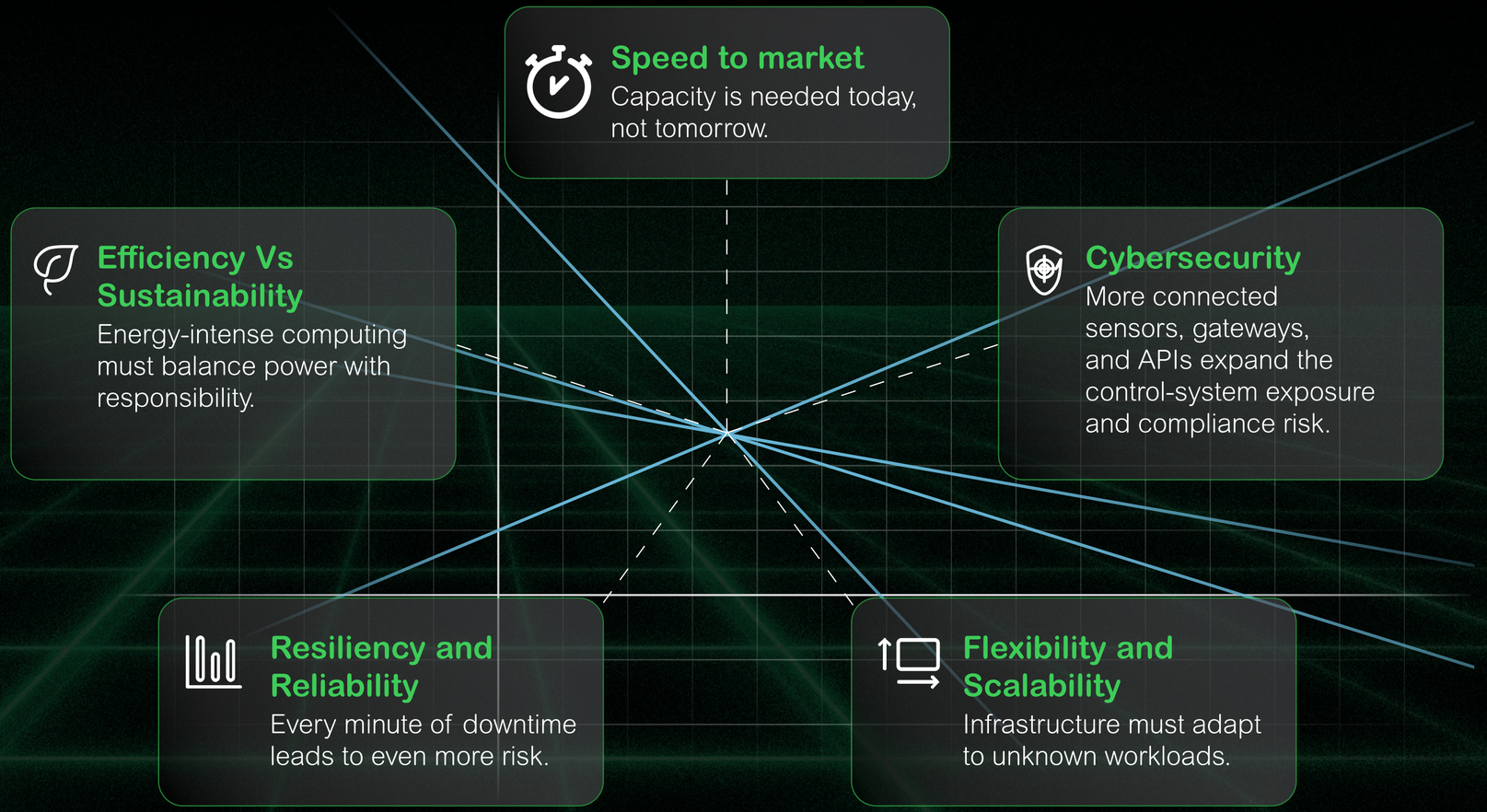
Generative AI Inferencing

[1]Alvarez & Marsal - “Rethinking AI Demand Part 1” (February 2025)

Five challenges **defining AI infrastructure.**

The rapid growth of AI is driving demand for high-performance, flexible, and sustainable infrastructure.

As workloads scale from pilot projects to production systems, AI computing is redefining the standards for **speed, scale, resiliency, and sustainability.**



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Your trusted partner for the world of AI.

Our complete AI Factory portfolio.

The cost of no **action is too high.**

AI is not just a technology race, it's a business survival challenge.

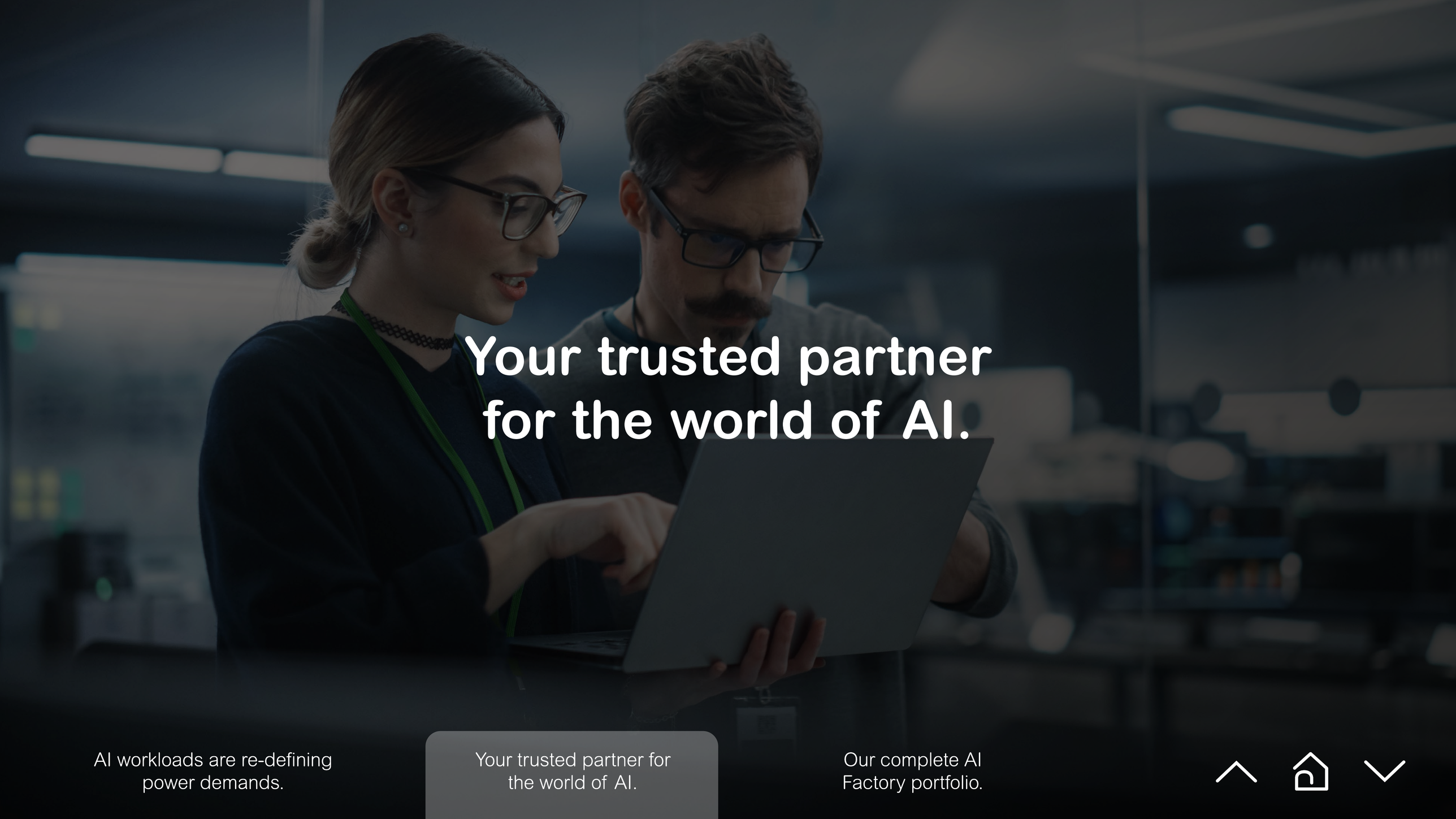
AI acceleration is exposing gaps at every level of infrastructure and leadership.

"I must cut carbon whilst demand soars."
Sustainability Officer

"I need capacity yesterday!"
Chief Operating Officer

"I'm facing densities I've never managed before."
Operations Lead

"I can't afford overbuild or underbuild."
Finance Leader



Your trusted partner for the world of AI.

One Partner offering **end-to-end confidence.**

Deploy faster. Scale further.

Schneider Electric and its AI partners deliver end-to-end, modular, and intelligent power solutions that ensure reliability, optimize resources, and enable sustainable, future-proof AI data centers worldwide.

Our unique advantage

We provide a single ecosystem built to design, deliver, and support AI-ready infrastructure globally.

Proof in action

Start Campus

The SIN01 26MW facility by Start Campus and Schneider Electric delivers 100% renewable, high-performance AI and cloud infrastructure for the future.

Benefits of working with Schneider Electric

- Only provider with a complete end-to-end physical infrastructure portfolio.
- Trusted partner at the start of every large-scale AI data center project.
- Delivering innovation, modularity, intelligence, and global scalability to secure and optimize prime and backup power systems.

Powering the next-generation of **AI infrastructure.**

Our partnership is growing.

Together with NVIDIA, we have co-created AI data center reference designs that support ultra-high-density GPU clusters with liquid-cooling and advanced power distribution.

These solutions underpin next-generation AI factories and infrastructure built for accelerated computing workloads supporting rack densities of over 140 kW today, with a clear roadmap toward the megawatt-scale racks of tomorrow.

Servers

Hewlett Packard Enterprise · Supermicro · DELL · Lenovo · IBM

Chips / GPUs

NVIDIA · intel. · AMD

System Integrators

Insight · Mark III Systems · STERLING · TD SYNNEX · World Wide Technology · CDW · quantiphi Solving What Matters · EXXACT · CONVERGE Technology Solutions

Reference Designs

Scan the QR code to view our latest reference designs.

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Our complete AI Factory portfolio.

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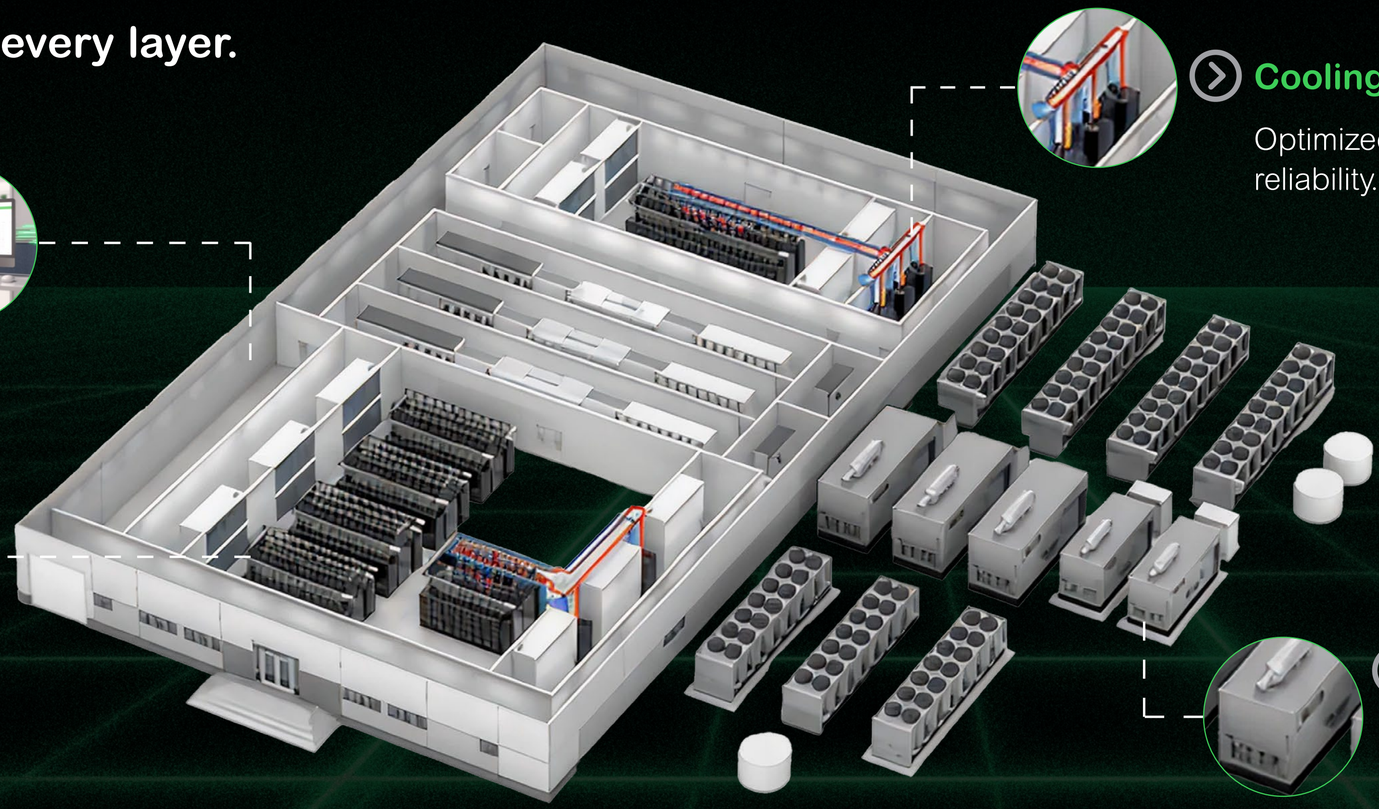
A **complete portfolio** built for the **AI factory era.**

One partner for every layer.



Cooling

Optimized for density and reliability.

Software

Insight-driven optimization.

Lifecycle services

Designed to evolve alongside your AI growth.

Power

Resilient, efficient, and modular.

Modular infrastructure

Scalable by design.

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Your trusted partner for the world of AI.

Our complete AI Factory portfolio.

Innovative cooling, **purpose-built** for AI demand.

Back to AI factory

We deliver future-ready cooling that scales with your AI density.

With GPUs and AI accelerators reaching densities of up to 10 times higher than traditional IT, data centers require advanced cooling to maintain performance and reliability.

We offer comprehensive cooling solutions, including thermal-management solutions, advanced liquid and air cooling, high-performance chillers, heat-rejection systems, and scalable prefabricated modules. All backed by expert teams with a track record of cooling 6 of the world's top 10 supercomputers, including today's top 3.

Hybrid flexibility

Combining air and liquid cooling as AI evolves.

Energy efficiency

Lowering PUE through advanced thermal design.

Scalability

Modular systems that expand with your needs.

Resiliency

Built-in redundancy for uptime-critical AI clusters.

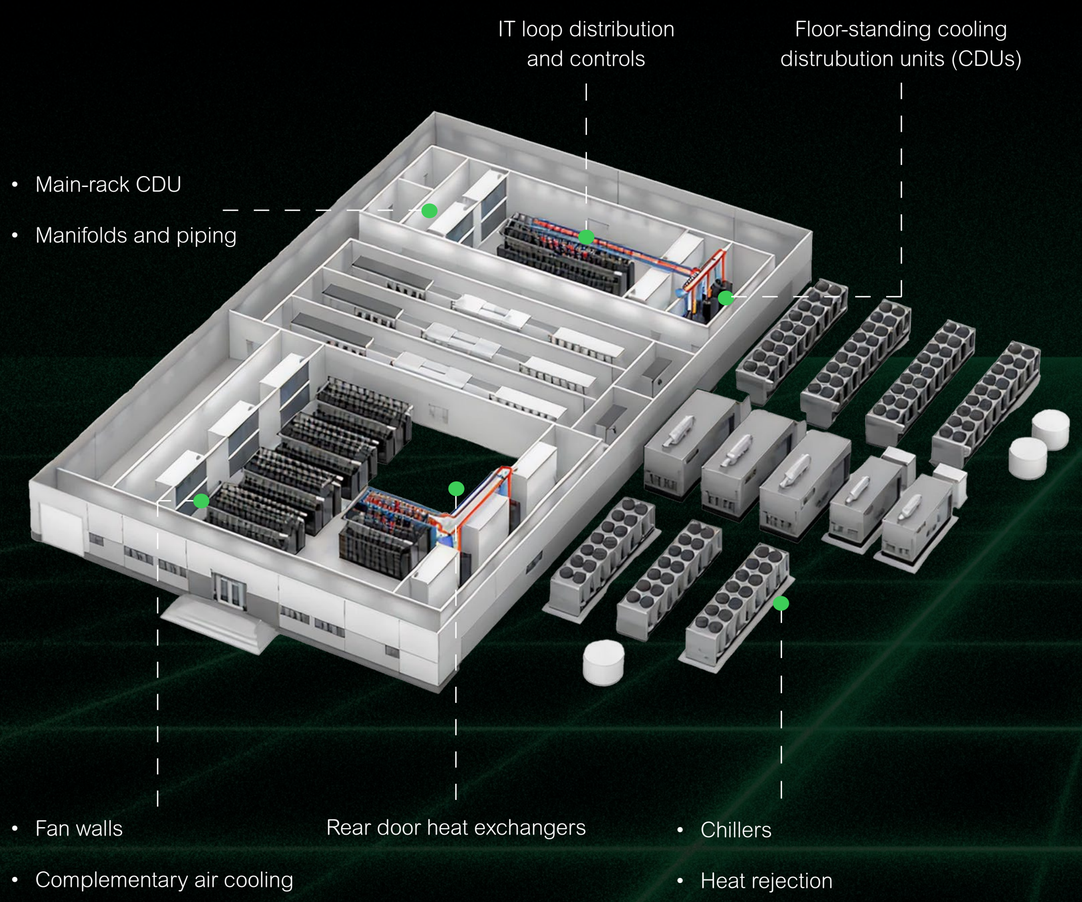
AI workloads are re-defining power and cooling demands.

Your trusted partner for the world of AI.

Our complete AI Factory portfolio.

Precision cooling for **every AI load.**

Back to AI factory



Leveraging decades of experience, we provide modular, hybrid, and energy-efficient systems engineered for evolving workloads.

Read the brochure

Liquid cooling

Ultra-high-density, energy-efficient cooling that removes heat at the chip for maximum AI performance and future-ready scalability.

Air cooling

High-efficiency air solutions that complement liquid cooling by managing the remaining heat load in hybrid AI data center architectures.

Chillers and heat rejections

High-performance, free-cooling-enabled chillers and heat-rejection systems engineered to deliver reliable cooling at scale.

Prefabricated modular pods

Factory-built, rapidly deployable modular pods that accelerate AI data center buildouts with scalable, flexible, ready-to-integrate infrastructure.

Powering AI at **every layer.**

Back to AI factory

Building reliable, scalable, sustainable, and resilient infrastructure, from grid to chip.

With AI clusters consuming megawatts per rack and operating 24/7, reliability is mission-critical. Our comprehensive power portfolio delivers unmatched density and uptime, covering every layer from MV to LV, supported by UPS, PDUs, advanced metering, and scalable BESS solutions.

Engineered for the most demanding AI workloads, our advanced powertrain is the foundation of resilient, high-performance data centers.

Modularity

Expand capacity as AI scales.

Monitoring

Predictive maintenance for reduced downtime.

Efficient designs

Providing a lower total cost of ownership.

Read our whitepaper.

AI workloads are re-defining power and cooling demands.

Your trusted partner for the world of AI.

Our complete AI Factory portfolio.

Reliable, scalable, and **intelligent** high-density power distribution.

Back to AI factory

LV and MV switchgears and switchboards

Robust, reliable, and scalable to handle massive AI loads.

Power Distribution Units (PDUs)

Intelligent PDUs with granular monitoring for AI rack densities.

UPS Systems

High-efficiency, modular UPS ensures uptime with flexible capacity.

Power Quality and Metering

Precision metering and power quality systems for stability.

Air Circuit Breakers

High-performance protection with encrypted smart monitoring to ensure maximum uptime and energy efficiency for heavy AI workloads.

Busways

Rapidly deployable, modular distribution for streamlining power, lighting, and IT networking in high-density AI environments.

Battery Energy Storage Systems (BESS)

Designed to minimize energy costs and maximize renewable energy utilization.

Build AI capacity **at speed.**

Back to AI factory

Prefabricated, modular solutions that enable faster, smarter scaling.

AI growth is accelerating beyond expectations, and yesterday's build models can't match the pace. The future demands infrastructure that's as dynamic and scalable as AI itself. That's why we've re-engineered our infrastructure approach with prefabricated, modular solutions that enable the rapid deployment of AI capacity, from edge to hyperscale.

Designed for flexibility and efficiency, they help you scale faster, and adapt as AI evolves.

Factory tested

Ensures quality and reduces on-site issues.

Scalable

Grow seamlessly with AI demand.

Speed-to-market

Deploy in weeks, not months.

Ensure performance

Repeatable designs cut uncertainty.

AI workloads are re-defining power and cooling demands.

Your trusted partner for the world of AI.

Our complete AI Factory portfolio.

Modular AI data centers to **full AI factories.**

Back to AI factory

Pod or module-based, end-to-end, factory-built, delivered, and ready to operate.

Prefabricated Data Centers

End-to-end, factory-built, delivered, and ready to operate.

Power and cooling modules

Self-contained, prefabricated modules for rapid capacity addition.

Rack solutions

High-density racks with integrated power and cooling distribution.

Integrated designs

Seamless integration of modular components with existing infrastructure.

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Our complete AI Factory portfolio.

Intelligent management for **smarter AI operations.**

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Bringing real-time control, insights, and optimization into every operational layer.

Without visibility, blind spots can lead to downtime, inefficiency, and wasted capacity. Our integrated software suite, including BMS, EPMS, and ETAP digital twin, connects, monitors, and optimizes the entire data center lifecycle to maximize performance and reliability.

Integration-first

Bridges facilities and IT management.

Predictive

Prevent issues before they impact operations.

Cybersecurity

Protecting critical data center intelligence.

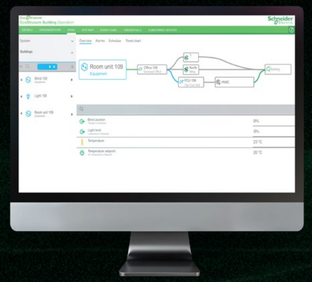
Sustainability

Cut energy and emissions in real-time.

The **digital brain** for your AI factory.

Back to AI factory

Connecting power, cooling, and IT, bridging visibility and action.



Building Management System (BMS)

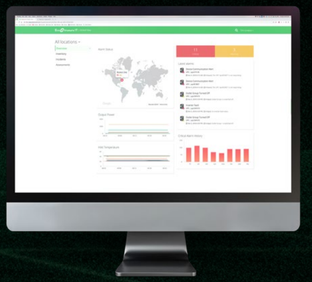
Centralized control of facility systems for reliability, efficiency, and cooling plant management.

Electrical Power Management System (EPMS)

Monitor, analyze, and optimize power distribution.

ETAP Digital Twin

Model, simulate, and predict system behavior before issues occur.



EcoStruxure IT

Delivering real-time visibility and monitoring across AI data center physical infrastructure, wherever it operates.

AI workloads are re-defining power and cooling demands.

Your trusted partner for the world of AI.

Our complete AI Factory portfolio.

Partnership **beyond deployment.**

Back to AI factory

Our end-to-end services, from consulting and design to operations and modernization, ensure your infrastructure performs today and adapts tomorrow.

Without expert lifecycle support, risks, downtime, and inefficiencies can quickly escalate.

Our global service network delivers end-to-end consulting, implementation, and operational expertise, all tailored for the demands of AI workloads.

Global expertise

24/7, everywhere you operate.

Predictive

AI-driven maintenance helps eliminate downtime.

Customer-first

Tailored service plans, not one-size-fits-all.

Sustainability

Efficiency upgrades drive ESG impact.

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Your trusted partner for the world of AI.

Our complete AI Factory portfolio.

A **service ecosystem** that extends your team.

Predictive, global, and tailored service excellence, wherever your AI journey goes.

Consulting and design services

Expert guidance to create AI-ready, sustainable data centers that balance performance, efficiency, and scalability.

Deployment and commissioning

Accelerate go-live with factory-tested, validated solutions for fast, seamless installation and integration.

Condition-based maintenance

Ensure uptime with 24/7 remote monitoring, predictive maintenance, and rapid on-site response when needed.

Digital services

Leverage real-time monitoring and data-driven analytics through intelligent, connected service contracts.

Modernization and upgrades

Extend asset life, increase efficiency, and scale effortlessly to meet growing AI demands.

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Our complete AI Factory portfolio.

Resources and reference designs.

AI Reference Designs

A collaboration between Schneider Electric and NVIDIA.

View our **RD 110 (IEC) for GB300.**

View our **RD 111 (ANSI) for GB300.**

Data Center Design Webpage

Power up your AI data center infrastructure.

View our **webpage.**

Report: AI-driven maintenance

Transforming Data Center Services: AI-Driven Condition-Based Maintenance.

View our **report.**

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To learn more information about the
Schneider Electric's **AI Data Center** visit

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