

ABB INTRODUCES INFINITUS DC PORTFOLIO FOR NEXT-GENERATION AI DATA CENTERS AT DCW ASIA

Media Product Brief | Zurich, Switzerland | 1 October 2026

ABB introduced its Infinitus Direct Current (DC) portfolio at Data Center World Asia, bringing together technologies from across ABB in an integrated source-to-rack power architecture for AI data centers.

The growing power demands of AI data centers are driving a fundamental shift in power infrastructure. Next-generation AI chips are expected to push rack power from almost 200 kW today to 1 MW and beyond. Meanwhile, global data center electricity demand is projected to more than double by 2030. ABB estimates that 25-40% of new data center capacity in 2030 is expected to be DC distribution. ABB's Infinitus DC Portfolio responds to this challenge with an integrated, source-to-rack DC power architecture spanning medium-voltage powertrains, DC sources and power quality, DC power distribution, DC power protection and cooling optimization. It is designed to deliver efficiency gains of more than 5% while supporting flexible architecture choices.

"AI is significantly increasing the power data centers need to deliver to each server rack, but the route from AC to DC will depend on each facility's existing infrastructure and future requirements," said Giampiero Frisio. "Some operators need to increase capacity within existing AC infrastructure, while others are preparing for hybrid AC/DC or DC-native architectures. At ABB we're developing practical options that meet today's requirements while maintaining the flexibility to adapt to future needs. The technologies we showcased at DCW Asia are important steps in that transition."

New technologies

At DCW Asia, ABB showcased technologies demonstrating how different elements of the Infinitus DC portfolio can address immediate AI power requirements while supporting the transition towards future DC hybrid infrastructure.

MNS 4.0 builds on ABB's proven platform - deployed in nearly 2 million panels globally - with AI-driven predictive maintenance, embedded cybersecurity, and support for both AC and DC applications. MNS 4.0 will help industries to build more capacity into available space while maintaining the flexibility to scale and reconfigure as operational needs evolve. It delivers the density, efficiency, and availability required

by advanced manufacturing and next-generation data centers. It does this while enabling customers to maximize energy savings. Cybersecurity is embedded into the design architecture ensuring secure integration into plant-wide control environments. As a key component of ABB's Infinitus Direct Current portfolio, MNS 4.0 also supports the transition to emerging direct current architectures. The MNS 4.0 will be available for customers in 2027.

SMISSLINE TP HP is the world's first plug-in distribution system to deliver 800A ampacity, bringing a new level of modular, high-capacity power distribution to AI data centers. Its revolutionary touch-safe design enables live maintenance, allowing technicians to replace protection devices without system shutdown, while its compact design and dual IEC + UL certification maximize floor space for IT infrastructure. The natively integrated InSite energy management system complements the power distribution providing real-time energy monitoring at branch circuit level reporting live data and alerting for overloads, imbalances and anomalies. SMISSLINE TP HP is designed for the DC transition – AC and DC components share the same physical footprint, allowing data center operators to evolve seamlessly toward 800 VDC architectures simply by swapping component modules, with no structural modifications or additional space requirements, enabling a seamless transition pathway from traditional to DC-native architectures.

Robotic inspection technology (FIDO) Beyond hardware, ABB is leveraging automated inspection technology. Advances in robotics, sensors and software have the potential to transform how field service teams assess and manage risk. In complex or potentially hazardous environments, automated inspections can provide something electrification service teams have rarely had before: visibility before exposure. By capturing thermal, acoustic and visual data from hard-to-reach locations, this technology can help teams assess risks, understand conditions faster, and prepare work with greater confidence. Engineers determine what should be inspected, interpret findings; automation handles the repetitive, high-risk or difficult-to-access inspection tasks.

Synchronous Condenser Package is a pre-engineered solution that stabilizes the grid at the interfaces between the utility grid and/or on-site generation and the data center. It provides physical inertia, dynamic reactive power support to maintain stable operation during rapid AI-driven load changes. The package combines a predefined foundation, a synchronous condenser, a flywheel with an integrated safety cage, a starting motor with support frame, a lube-oil system, eHouse, configurable cooling options (direct, air and water cooling) and optional noise enclosure into one integrated solution, helping accelerate deployment while ensuring reliable operation.

Modus LTO Battery is a high-power energy storage solution designed to help data centers manage the rapid, unpredictable demand peaks created by AI workloads. Based on lithium-titanate oxide (LTO) technology, it responds in milliseconds and handles frequent high-power charging and discharging with minimal wear, making it well suited to peak-load buffering applications. The solution helps operators improve energy resilience by managing fluctuating AI power demand on-site and supplying additional power during peak periods, supporting reliable data center operations. By combining fast response, inherent safety and long lifetime performance, Modus LTO battery supports reliable operations and a more resilient approach to AI data center growth.

Unlocking flexibility and competitive advantage

The ABB Infinitus DC portfolio gives data center operators the flexibility to evolve from existing AC infrastructure toward hybrid AC/DC or DC-native architectures. Its modular building-block approach allows solutions to be tailored to each facility's power requirements, layout and energy mix. According to ABB and BCG analysis, an efficiency gain of more than 5% at a 500 MW data center could make 25 MW available for additional IT loads, representing more than US\$300 million in potential additional annual revenue.

Proven leadership, future-ready

As the only major electrification supplier with both the world's first fully IEC-certified solid-state circuit breaker and an industry-first static medium-voltage UPS in production, ABB combines proven technology with 25+ years of DC expertise and over 700 patents to serve our customers' current and future needs.

By integrating Medium Voltage Powertrains, DC Sources and Power Quality, DC Power Distribution, DC Power Protection and Cooling Optimization in one portfolio, ABB helps reduce the complexity and integration risk associated with multi-vendor solutions. This system-level approach can simplify deployment and support optimized performance, giving customers the breadth of technology and expertise needed to address their evolving power requirements.

For more information:

- [Infinitus Portfolio page](#)
- [MNS 4.0](#)
- [SMISLINE TP HP](#)
- [Robotic Inspection Technology](#)
- [Synchronous Condenser Package](#)
- [Modus LTO Battery](#)

For media inquiries and product information from DCW Asia, contact ABB Media Relations.

About ABB

ABB is a global technology leader in electrification and automation, enabling a more sustainable and resource-efficient future. By connecting its engineering and digitalization expertise, ABB helps industries run at high performance, while becoming more efficient, productive and sustainable so they outperform. At ABB, we call this 'Engineered to Outrun'. The company has over 140 years of history and more than 110,000 employees worldwide. ABB's shares are listed on the SIX Swiss Exchange (ABBN) and Nasdaq Stockholm (ABB). www.abb.com

—

For more information please contact:

Media Relations

Phone: +41 43 317 71 11

Email:

media.relations@ch.abb.com

Investor Relations

Phone: +41 43 317 71 11

Email:

investor.relations@ch.abb.com

ABB Ltd

Affolternstrasse 44

8050 Zurich

Switzerland