



SolarEdge Advances Full DC Powertrain for AI Data Centers, Publishes 800 VDC Protection Framework With NVIDIA

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Medium-voltage to 800 VDC conversion stage now operating under load; joint white paper offered as a technology-neutral framework for industry evaluation

Highlights

- The three-phase medium-voltage to 800 VDC conversion stage of SolarEdge's DC powertrain is now operating under load in the company's engineering laboratories, with system-level validation of the full path underway.
- SolarEdge is publishing a protection and grounding framework for 800 VDC systems, developed with NVIDIA and offered for industry evaluation. It is technology-neutral and implementable by any vendor, so operators, suppliers and standards bodies can work to common functions and testable outcomes.
- The white paper, "800 VDC Protection and Grounding for AI Data Centers," is available [here](#)

MILPITAS, Calif.--(BUSINESS WIRE)--Sep. 10, 2026-- [SolarEdge Technologies](#), Inc. (NASDAQ: SEDG) today announced that the medium-voltage to 800 VDC conversion stage of its DC powertrain for AI data centers is now operating under load. Alongside this milestone, the company published a protection and grounding framework for 800 VDC systems, developed with NVIDIA, that sets out the functions, evidence and validation needed for safe, reliable 800 VDC deployment.

As the industry moves toward 800 VDC distribution, many protection practices developed for AC environments do not transfer to converter-fed DC architectures. To set out what is needed, SolarEdge and NVIDIA today published the joint white paper "800 VDC Protection and Grounding for AI Data Centers." Building on [NVIDIA 800 VDC architecture](#) work, the paper separates common protection and grounding requirements from the design choices of any one implementation, evaluates grounding options and the criteria for selecting the grounding impedance, and describes a zone-based protection approach: fault location with continuous operation in the restricted facility zone, and immediate interruption at the rack interface where personnel work.

NVIDIA supports an open, multi-vendor 800 VDC ecosystem and encourages multiple conversion topologies, grounding configuration or protection technology. The SolarEdge architecture presented in the paper is one candidate implementation, offered to advance engineering discussion and validation. High-resistance midpoint grounding, solid-state transformers and solid-state circuit breakers are candidate approaches rather than universal requirements.

"The transition to 800 VDC will ultimately depend on whether these systems can be protected, serviced and trusted at scale," said Shuki Nir, Chief Executive Officer of SolarEdge. "That will require collaboration across the ecosystem. We are building the full DC path from utility to rack, and we worked with NVIDIA on this paper to advance the protection and grounding considerations the whole industry needs."

The functions that underpin 800 VDC protection, including series arc detection, DC disconnection and insulation monitoring, have been running in SolarEdge photovoltaic products for well over a decade. That record is component precedent. It is not data center validation. SolarEdge is developing a data center platform comprising a medium-voltage solid-state transformer, DC distribution with per-branch residual current measurement and solid-state interruption, insulation monitoring, and system-level monitoring. These AI data center products are under development and validation, and are not yet generally available.

SolarEdge welcomes independent technical evaluation and invites operators, vendors and standards bodies to test and challenge the framework. The white paper is available for download [here](#). Further information on SolarEdge's 800 VDC platform is available [here](#).

About SolarEdge

[SolarEdge Technologies](#) is a global leader in smart energy technology that applies engineering and innovation to power management across generation, storage and consumption. The company develops DC-optimized power electronics, energy management and optimization solutions, energy storage and grid services, with technology installed in more than 146 countries. SolarEdge is applying two decades of DC power electronics and DC protection experience to AI data center infrastructure, and is developing an 800 VDC powertrain spanning medium-voltage conversion, distribution, protection and monitoring.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include information, among other things, concerning: the development, validation, performance, cost, reliability, timing of commercial availability and potential adoption of our DC powertrain and other AI data center products; the completion of system-level validation of the full DC path; the publication, evaluation and adoption of, and industry response to, the white paper "800 VDC Protection and Grounding for AI Data Centers"; the anticipated transition of the data center industry to 800 VDC distribution and the pace and extent of that transition; the actions of standards development organizations, testing laboratories and certification bodies; our possible or assumed future results of operations; future demand for our solutions; business strategies; technology developments; financing and investment plans; competitive position; industry and regulatory environment; general economic conditions; potential growth opportunities; and the effects of competition. These forward-looking statements are often characterized by the use of words such as "anticipate," "believe," "could," "seek," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" or similar expressions and the negative or plural of those terms and other like terminology. Forward-looking statements are based on our current expectations and projections about future events. These forward-looking

statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. Given these factors, you should not place undue reliance on these forward-looking statements.

These factors include, but are not limited to, the matters discussed in the section entitled "Risk Factors" of our Annual Report on Form 10-K/A for the year ended December 31, 2025, filed on March 23, 2026, and other reports filed with the SEC. All information is as of the date of this release. This release does not update or reaffirm any previously issued forward-looking statement, and no statement in this release should be read as a preview of, or as limiting, any information to be presented at the company's previously announced analyst day. The Company undertakes no duty or obligation to update any forward-looking statements contained in this release as a result of new information, future events or changes in its expectations.

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