

New Ampt i50 String Optimizer Manages the Power of Each Solar Tracker and Increases Tracker Utilization to Lower the Cost of PV Power Plants

Next generation optimizer expands the capabilities of Ampt's award-winning technology that is powering some of the world's largest PV and DC-coupled energy storage systems

FORT COLLINS, Colo. — September 6, 2023 — Ampt, the world's #1 DC optimizer company for large-scale photovoltaic (PV) systems, today announced the release of the i50 String Optimizer – the next generation of the company's widely deployed power management solution. The i50 is designed to lower costs and improve performance of utility scale PV or PV-plus-storage projects. The i50 String Optimizer helps solar power plant developers, owners and operators increase clean energy generation and project ROI while improving grid resilience and reliability.

The i50 String Optimizer builds on the technology of Ampt's award-winning i32 String Optimizer to deliver higher power and design flexibility while maintaining the highly accredited i32 capabilities that are supporting some of the world's largest PV and DC-coupled systems. Notable recent projects with Ampt optimizers include a 380 MW PV-plus-storage plant in the California Independent System Operator (CAISO) power grid market, and 390 MW of String Optimizers to Chile's largest solar-plus-storage plant. Ampt's innovative technology and project successes have earned industry accolades such as the Cleanie Awards, Energy Tech awards, E+E leader awards, and Solar Power World awards.

Ampt String Optimizers are DC/DC converters that deliver full available power from the PV array at a high and fixed voltage. The higher voltage allows the entire system to operate at a lower current for a given power to reduce the cost and quantity of electrical components such as cables, energy storage systems, inverters and transformers. The i50 optimizer provides further cost savings by enabling fewer solar trackers per MW in the system. Ampt's predictable DC bus voltage also simplifies battery and inverter controls to improve grid responsiveness of the power plant. In addition, the optimizers perform maximum power point tracking (MPPT) on each input to maximize lifetime production and include wireless monitoring to improve O&M.

The i50 optimizer achieves industry leading power density with output power up to 70 kW which allows a single optimizer to be deployed on each solar tracker. By accommodating higher input currents, paralleled strings of PV modules, and flexible string lengths, system designers can maximize the utilization of each solar tracker without the typical string sizing constraints in systems without Ampt.

Well-suited for diverse applications, the i50 features enhanced capabilities for utility scale solar power plants that use high-power PV modules and solar trackers and opens new opportunities for system owners and developers to lower the total cost of PV power plants.



"As renewable energy projects accelerate across the globe, we're committed to continually innovating our offering to ensure project owners and developers make the most out of their investments while increasing access to clean, reliable and resilient energy for all," said Levent Gun, Ampt CEO. "We're proud to present the new i50 String Optimizer to the market, which is designed to improve the economics of today's largest, most advanced PV power plants and solar-plus-storage systems."

Ampt will be exhibiting at RE+ in Las Vegas, Nevada from September 12-14. Visit Ampt at booth #1746 to learn more about how Ampt enables low-cost and high-performance utility scale PV systems as well as large scale DC-coupled energy storage. To set up an appointment, contact Ampt at info@ampt.com.

About Ampt

Ampt delivers innovative power conversion and communication technology that are used to lower the cost and improve performance of new PV systems, repower existing systems, and enable lower-cost DC-coupled storage. With installations and experience serving markets around the world, Ampt is the number one DC optimizer company for large-scale systems. The company is headquartered in Fort Collins, Colorado, and has sales and support locations in North America, Europe, and Japan as well as representation in Asia, Australia, and the Middle East. For more information, visit www.ampt.com and follow Ampt on LinkedIn.

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