SMA America Releases New Large-Scale Battery Inverter Sunny Central Storage UP-S

ROCKLIN, Calif., March 20, 2025 – SMA America is expanding its large-scale storage portfolio with the Sunny Central Storage UP-S battery inverter, now available in the U.S. Designed for large-scale energy storage projects, it features advanced silicon carbide SiC MOSFET (silicon carbide metal-oxide-semiconductor field-effect transistor) technology for superior power conversion efficiency and grid-forming capabilities. Following a successful launch in Australia, this cutting-edge solution is set to support grid stability and energy transition efforts in the American market.

"As large-scale energy storage becomes an increasingly critical piece of grid modernization, utilities and developers need solutions that maximize efficiency, reduce costs and enhance grid stability," said Jay Arghestani, managing director of large-scale sales, technology and marketing for SMA America. "The new Sunny Central Storage UP-S delivers on all fronts, combining cutting-edge SiC MOSFET technology with advanced grid-forming capabilities to support high-performance, scalable storage projects."

By bringing this proven technology to the U.S., SMA is reinforcing its commitment to driving the energy transition with smarter, more resilient storage solutions."

SiC MOSFET technology reduces energy loss, enhances power conversion efficiency and enables full-capacity operation in grid-forming applications. These innovations maximize power output, boost profitability for developers and operators, and reduce infrastructure and maintenance costs.

Key features of the Sunny Central Storage UP-S include:

- Up to 4,600 kVA with no power derating at 35C / 95F providing maximum energy yield
- Over 99.2% efficiency, with innovative SiC MOSFET technology
- Higher efficiency reduces battery capacity requirements or increases energy yield with the same capacity, lowering CAPEX on both inverters and batteries. Fewer inverters and batteries mean lower overall system costs.
- Provides dynamic grid support even during peak demand
    - Robust power stack topology enables excellent fault ride through capability
- Optimized thermal management in any environment with the OptiCool™ air cooling system.
- Inverter-based inertia and improved short-circuit ratios, delivering reliable power during disturbances and stabilizing grids
    - Overload capability for Grid Forming applications available

- Minimized harmonic emissions, enabling compatibility with even the most challenging grid conditions
- Enables rapid, decentralized grid restoration, safeguarding the energy supply during outages.

For more information on large-scale solutions visit SMA Large Scale Energy Solution | SMA America

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About SMA

As a leading global specialist in photovoltaic and storage system technology, the SMA Group is setting the standards today for the decentralized and renewable energy supply of tomorrow. SMA's portfolio contains a wide range of efficient PV and battery inverters, holistic system solutions for PV and battery-storage systems of all power classes, intelligent energy management systems and charging solutions for electric vehicles and power-to-gas applications. Digital energy services as well as further comprehensive services round off SMA's range. SMA solar inverters installed worldwide in the last 20 years, with a total output of around 132 GW, help avoid over 70 million tons of CO2 emissions annually. SMA's multi-award-winning technology is protected by more than 1,600 patents and utility models. Since 2008, the Group's parent company, SMA Solar Technology AG, has been listed on the Prime Standard of the Frankfurt Stock Exchange (S92) and is listed in the SDAX index.