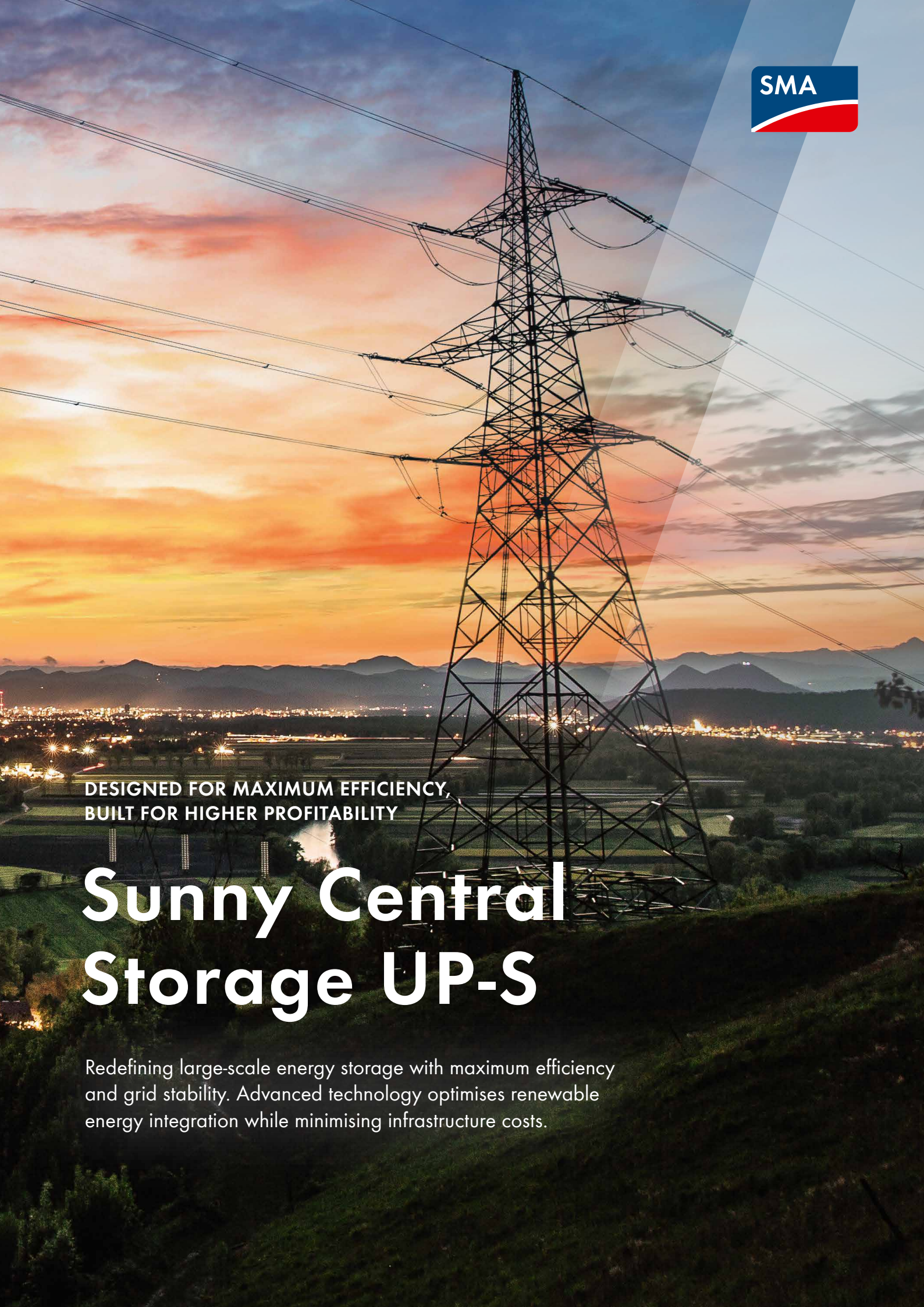


DESIGNED FOR MAXIMUM EFFICIENCY,
BUILT FOR HIGHER PROFITABILITY

Sunny Central Storage UP-S

Redefining large-scale energy storage with maximum efficiency and grid stability. Advanced technology optimises renewable energy integration while minimising infrastructure costs.

Maximum Efficiency, Higher Power and Grid Stability

Building on the success of its predecessor, the new **Sunny Central Storage UP-S** marks a major advancement in inverter technology. It combines higher performance with reduced infrastructure costs and exceptional reliability.

With cutting-edge **SiC MOSFET* technology**, the new battery inverter delivers higher power conversion efficiency, significantly lowers thermal stress, and enables full-capacity operation – even in grid-forming applications.

By optimising a Battery Energy Storage System (BESS) and providing grid stability, the Sunny Central Storage UP-S unlocks new opportunities for large-scale energy solutions.

KEY BENEFITS

- **High Power Density:** Delivers up to 4,600 kVA with no power derating at 35 °C in charging and discharging direction.
- **Outstanding Efficiency:** Achieving up to 99.2% efficiency using innovative SiC MOSFET* technology, resulting in reduced battery charging costs and battery CAPEX.
- **Reduced Infrastructure Costs:** Fewer inverters are needed (compared with Sunny Central Storage UP), reducing capital expenditure, installation, and maintenance costs.
- **Short-term Overload Capability:** Provides dynamic grid support during peak demand.
- **Optimised Harmonic Output:** Minimises harmonic emissions, ensuring compatibility with even the most challenging grid conditions.
- **All-Climate Performance:** Optimised with the OptiCool™ air cooling system for efficient thermal management in any environment.
- **Modern BESS Container Compatibility:** Designed to economically match modern 5+ MWh BESS containers in 2-, 4- and 8-hour storage configurations.

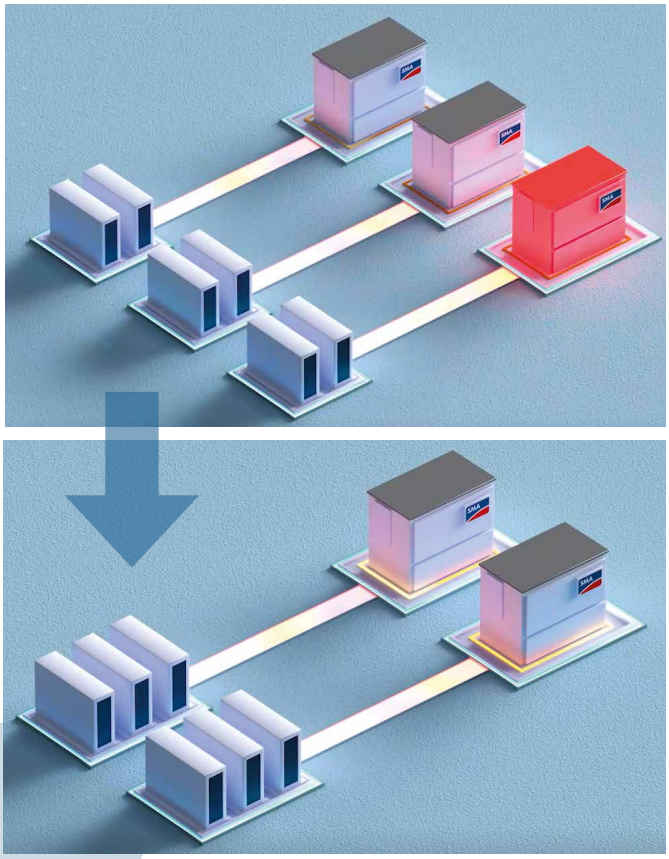
*Silicon Carbide Metal-Oxide-Semiconductor Field-Effect Transistor

Maximise Profitability with Advanced Semiconductor Technology – SiC MOSFET

The Sunny Central Storage UP-S supports seamless operation for both energy arbitrage and grid stability, eliminating the traditional trade-off. Powered by the advanced SiC MOSFET technology, you can now capitalise on both without the risk of thermal overload, maximising efficiency and profitability. The innovative design provides:

- **Higher Efficiency & Reduced Thermal Loading:** No need to limit power output for ancillary services.
- **Symmetrical Charge & Discharge:** Enhanced flexibility in energy trading.
- **Unrivalled Short-term Overload Capacity:** Supports power system stability without reducing nominal power.
- **Extended Inverter Lifespan:** Lower stress on components, maximising ROI.

OPTIMISED SYSTEM DESIGN:



Fewer inverters required, reducing CAPEX & OPEX.

Maximise Revenue with Grid-Forming Technology

The Sunny Central Storage UP-S offers essential grid-forming capabilities, enhancing grid stability and resilience, while maximising revenue potential:

- **Inertia & System Strength:** Supports grid stability with inverter-based inertia and improved short-circuit level, ensuring reliable power during disturbances and stabilising the grid.
- **Black Start Capability:** Provides decentralised system restoration to quickly restore the local grid and delivers dependable energy supply during outages.
- **Grid Booster:** Enhances transmission network flexibility, alleviating system constraints and improving grid reliability.

Medium Voltage Power Station
with Sunny Central Storage UP-S

ENERGY
THAT
CHANGES

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