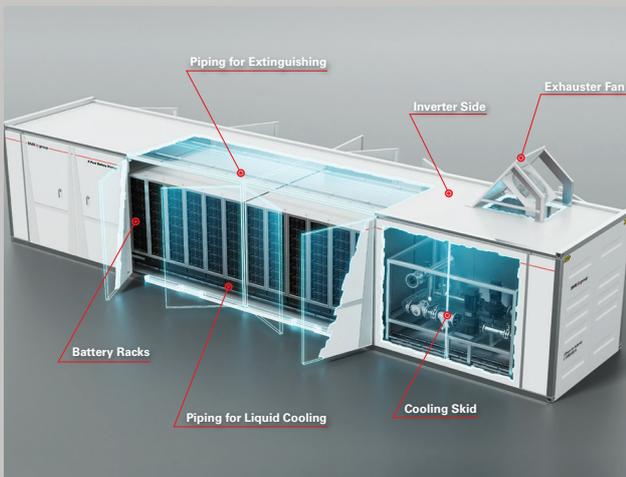


PRODUCT FACT SHEET

X-PACT® BATTERY STORAGE

Battery Energy Storage System (BESS)



X-Pact® Battery Storage is the advanced, reliable, modular and scalable containerized BESS solution for any energy management strategy in any environment.

BESS technology enhances performance at every stage of the power transmission chain. It is an important pillar of green steel technology, as green steel production requires an entirely new energy infrastructure.

CHALLENGES CUSTOMER



- › Strong contribution to decarbonization efforts
- › Smart energy management, balance of supply and demand
- › Cost savings, energy arbitrage
- › Integration with renewable energy sources
- › Ancillary services, improvement of grid stability and quality, active and reactive power management
- › Energy reserve for a variety of purposes: UPS, black start, spinning reserve

ADVANTAGES OF PRODUCT



- › Compact and robust container solution for installation in harsh environment
- › High-level power and energy management controller
- › Remote access for diagnosis and control
- › Highly dynamic performance
- › Battery charge and discharge management for minimal aging degradation and maximum battery lifetime
- › Strong return of investment

Product highlights

MODULARITY AND FLEXIBILITY

The **container solution*** ensures a high level of system modularity, availability and reliability.

The choice of **different brands of power conversion systems** makes it possible to find the optimal configuration in terms of:

- › power sizing (number and size of inverters)
- › voltage level (solutions up to either 1kV or 1.5kV)
- › DC section (compatible with batteries selected either for number or features)

Selecting **different battery brands** results in a product that is able to provide:

- › enhanced performance (by covering both power-intensive and energy-intensive applications)
- › greater stability in market price fluctuations (due to internal competition between brands)
- › increased reliability in delivery times (by comparing the availabilities across brands)

The sizing and overall architecture are studied on a case-by-case basis to meet the required performance while minimizing costs and obtaining a short payback period.

* If needed and where applicable, the X-Pact® Battery Storage can also be offered in a non-containerized solution.

SAFETY AND ENVIRONMENT

X-Pact® Battery Storage implements complementary procedures to limit and overcome failure in battery technology with a focus on safety and environment:

- › **Intrinsic safety** to avoid operating conditions that lead to heat and gas formation
- › **Outward safety** for real-time monitoring and enhanced safety of the container
- › **Thermal management** to prevent hazardous heat accumulation within the batteries
- › **Fire control** to prevent and avoid fire propagation
- › **Mechanical mitigation** to prevent liquid leakages and environment contamination



Contact details

Feel free to use our contact form for questions, inquiries or personal contact:
<https://www.sms-group.com/services/x-pact-battery-storage>