All-in-One BESS

Container 4.2M

A high-capacity, containerized BESS for utility-scale and industrial applications, designed to support peak shaving, ensure operational continuity, and optimize energy performance for high-demand facilities

- Powered by Siemens industrial control technology
- Integrated PLC, EMS, and SCADA on a single platform
- Cybersecurity designed in accordance with IEC 62443
- Fully compliant with European grid requirements



High ROI | **Grid-ready** | **Scalable architecture** | **Fast deployment**

Industrial-grade reliability for utility-scale and critical infrastructure applications

Ensuring stable operation and predictable lifecycle performance, enabled by:
- extended battery lifetime
- advanced cell-level monitoring (SOC/SOH)
- liquid cooling system (battery and PCS)
- robust enclosure protection IP54 (PACK IP67, PCS IP66)

High energy efficiency

An optimized system architecture designed to minimize losses across the entire power conversion chain.
- Up to 92.5% system efficiency
- Up to 98.5% PCS efficiency

Ensuring maximum energy utilization and improved project economics (LCOS)

Advanced integration into modern power systems

Industrial communication interfaces (RS-485, Ethernet, CAN, PROFINET) and a Siemens-compatible control architecture ensure:
- seamless integration with existing grid infrastructure
- advanced energy management capabilities
- support for grid services and energy market participation

Multi-layer safety architecture

Designed to ensure safe operation in all conditions, including:
- three-level fire suppression system
- fire suppression based on Siemens Cerberus PRO
- integrated temperature, smoke, and gas detection

DC Data

Cell Specification	LFP
Cell Capacity	314Ah
Battery Configuration	1P104S × 40
Rated Capacity @ BOL	4 180 kWh @ 25°C 0.5P
DC Voltage Range	1123.2 - 1497.6 V
Charge/Discharge Ratio	≤ 0.5P
Cooling/Heating Method (Pack, PCS)	Liquid Cooling
Cycle Life	8000 Cycles

AC Data

Rated AC Power	2.0 MW
AC Connection	3P3W
AC Voltage (PCS)	690 V
AC Frequency	50 Hz
Maximum Efficiency System	92.5%

System Data

Dimensions (W×D×H)	6058 × 2438 × 2896 mm
Weight Approx.	38.5 t
Maximum Working Altitude	2000 m
Operating Temperature	-25°C ~50°C
Humidity	0–95% (non-condensing)
IP Rating	IP54 (Pack IP67, PCS IP66)
Corrosion Resistance	C4
Fire Safety (Pack)	Aerosol
Communication Interface	RS-485, Ethernet, CAN, PROFINET