

EnerCon 2.5M

A utility-scale, containerized all-in-one BESS with integrated PCS and MV transformer, designed for projects requiring high efficiency, grid stability, and fast system integration

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 through:

- 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 minimizing losses across the entire power conversion chain.

- Up to 92% system efficiency
 - Up to 98.5% PCS efficiency
 - Up to 99.0% transformer 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 system
- integrated temperature, smoke, and gas detection
- cybersecurity designed in accordance with IEC 62443 principles

DC Data

Cell Specification	LFP
Cell Capacity	314Ah
Battery Configuration	1P104S × 24
Rated Capacity @ BOL	2 508 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	1.25 MW
AC Connection	3P3W
AC Voltage (PCS / Transformer)	690 V / 0,4 / 10 kV
AC Frequency	50 Hz
Maximum Efficiency PCS	98.5%
Maximum Efficiency Transformer	99.0%
Maximum Efficiency System	92.0%

System Data

Dimensions (W×D×H)	6058 × 2438 × 2896 mm
Weight Approx.	27 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