

# 5 MWh energy container -SELF-SUFFICIENCY datasheet

## Basic information on energy storage (5MWh)

Type	Specification
Product type	Three-tier architecture
Balanced approach Cell Balancing	Passive equilibrium
Battery cell	Battery type
	Lithium iron phosphate LiFePO4
	Single cell capacity
	314Ah
	Battery pack capacity
	314Ah
Battery box	Cell pole bolt diameter / Cattery pole bolt diameter
	/
	Cycle life
	≥6000 cycles@80%SOH, 25°C, 90%DOD, 0.5C
Battery clusters	Serial parallel structure
	IP104S
	Battery voltage rating
	332,8 V
System parameters	Number of battery boxes
	4 pCS
	Energy per cluster (kWh)
	417.996kWh
	Nominal total voltage (V) for each cluster
	1331.2 V
	Cluster operating voltage range (V)
	1123.2V~1.497.6V
	The number of strings (strings) per cluster
	416S
Battery clusters	Rated charging current (A) per cluster
	157
	Peak charge current per cluster (A)
	180
	Rated discharge current per cluster (A)
	157
System parameters	Peak discharge current per cluster
	180
	Capacity per cluster (AH)
	314Ah
System parameters	System nominal voltage
	1331.2V
System parameters	The maximum current of the system operation
	2160A

Type	Specification
Number of system battery clusters	12 clusters
The total nominal energy of the system	5000kWh
BMS supply voltage	24V
Current sensor type	Shunt or Hall
Operating ambient temperature	-20°C ~ 45°C
Humidity of the working enviroment	≤ 100% RH and no condensation
Storage temperature	-20°C ~ 35°C
Store at relative humidity	≤ 65% RH, no condensation



### Fixed ESS container for shore power charging at the port:

The electric ship requires high power for charging, which poses a challenge to the electrical infrastructure in ports. A battery charging station can supply high current and provide sufficient energy to ships at the port. The battery can be slowly charged overnight.

Integrated with our 10 years of experience in marine design, the container is resistant to the marine environment and suitable for long-term port applications.

### Mobile ESS container for shore power charging at the port:

Electrical infrastructure in ports is currently one of the biggest limitations to port decarbonization.

With our innovative design, we can accommodate up to 5 MWh of energy per 20-foot container and supply power more efficiently and cost-effectively. Our innovative design takes good care of vibration and impact during transport and ensures safe operation.

