

X-Series

DC Container

5,016 MWh

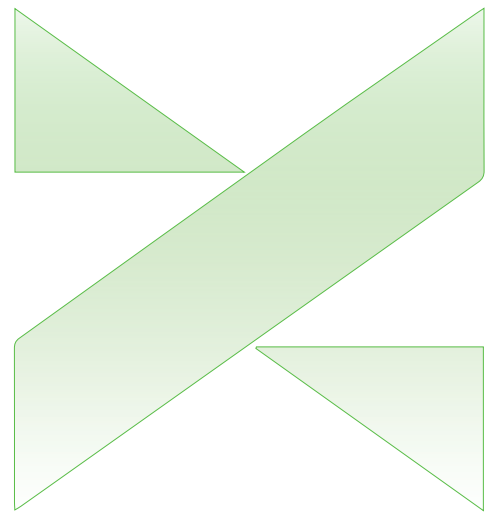
Liquid-cooled battery storage system for utility-scale applications

Improved Safety Characteristics

- Built-in prevention: premium-grade cells, sophisticated battery management system, and comprehensive system-level safeguards
- AI-based fault detection; gas, smoke and heat detection
- Dynamic ventilation, auxiliary water sprinkler setup, and integrated fire suppression system
- Aerogel insulation, heat-resistant enclosures, and deflagration mitigation features
- Ultra-wide operating temperature range

Optimized Solution

- Flexible multi-system topology options, delivering the ideal solution for various application scenarios starting from power generation
- Optimal energy capacity solutions for power plants, enabled by our advanced system sizing tool
- Space saving configuration: compact design with side-by-side and back-to-back layout
- Engineered for durability in extreme and demanding environments
- Grid-forming scenarios



GENERAL

Cell Capacity	LFP ESS 314 Ah
Pack Configuration	2P52S
Rack Configuration	2P416S
Rack No.	6
No. of Battery Pack	48
Cooling Method	Liquid Cooling
BMS Communication	CAN, RS485, Ethernet

ELECTRICAL

Nominal Voltage Container	1.331 V
Operating Voltage Container	1.040 ... 1.498 V
Nominal Energy Container	5.016 kWh ^{1,2}
Nominal SOC at delivery	27 % ²
Nominal Charge/Discharge Rate	0,5 P / 0,5 P
Round Trip Efficiency	> 94 %

MECHANICAL

Dimensions (LxWxH)	6.058 × 2.438 × 2.896 mm
Weight	< 40.000 kg
Protection Level	IP 55

AMBIENT

Application Altitude	≤ 4.000 m
Application Temperature	-30 °C ... 55 °C
Storing Temperature	-20 °C ... 35 °C

CONFIGURATIONS

System Duration	2 Hours 4 Hours
System No.	2 4
AC Power	2,500 kW
AC Unit No.	2

PRODUCT CERTIFICATIONS

IEC 62619, IEC 62477, IEC 63056, IEC 61000, UL 1973, IEC 62933-5-2, UL 9540A, NFPA 855, NFPA 68, NFPA 69, NFPA 70E, NFPA 72, UN 38.3

ENVIRONMENTAL

Compliance	ROHS, REACH, Cobalt Free
Battery Regulation (EU)	2023/1542

COMPANY CERTIFICATIONS

ISO 9001, ISO 14001, ISO 45001

¹ 0,5 P / 0,5 P
² 25°C (+/- 2.0)