

X-Series

DC Container

3,441 MWh

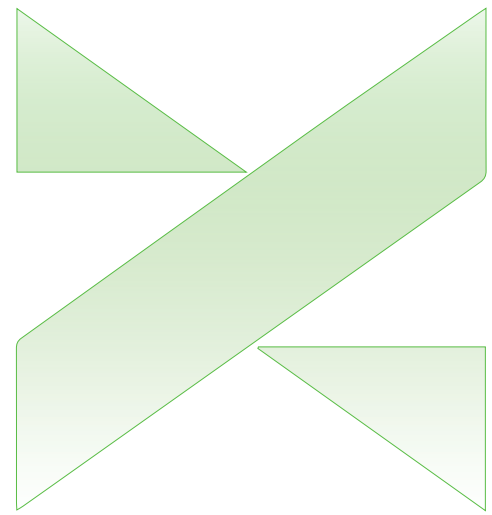
Liquid-cooled battery storage system
for utility-scale applications

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
- Engineered for durability in extreme and demanding environments
- Grid-forming scenarios



GENERAL

Cell Capacity	LFP ESS 280 Ah
Pack Configuration	1P48S
Rack Configuration	1P384S
Rack No.	10
Battery Pack No.	80
Cooling Method	Liquid Cooling
BMS Communication	CAN, RS485, Ethernet

ELECTRICAL

Nominal Voltage Container	1.229 V
Operating Voltage Container	1.075 V ... 1.382 V
Nominal Energy Container	3.441 kWh ^{1,2}
Nominal SOC at Delivery	27 % ²
Nominal Charge/Discharge Rate	1 P / 1 P
Round Trip Efficiency	> 94 %

MECHANICAL

Dimensions (LxWxH)	6.058 × 2.438 × 2.896 mm
Weight	< 34.000 kg
Protection Level	IP 55

AMBIENT

Application Altitude	≤ 2.000 m
Application Temperature	-30 °C ... 55 °C
Storing Temperature	-20 °C ... 35 °C

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 1 P / 1 P
² 25°C (+/- 2.0)