

X-Series

DC Container

5,016 MWh

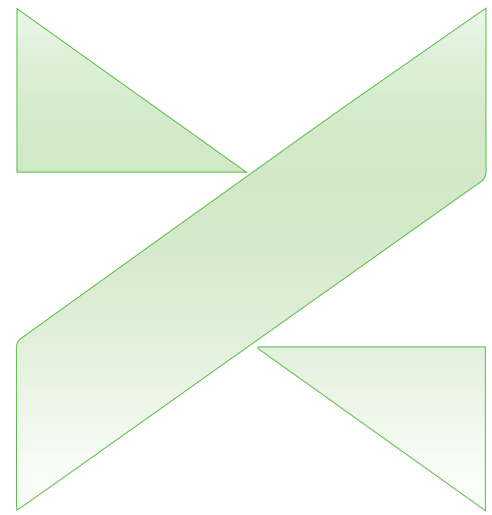
Liquid-cooled battery storage system for utility-scale applications

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. | 12 |
| Battery Pack No. | 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 x 2.438 x 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)