

ESS Container 5,016 MWh

Liquid-cooled energy storage system



Liquid-cooled energy storage system based on HiTHIUM prismatic LFP ESS Cells 314 Ah with very high cyclic lifetime.

Improved safety characteristics and specially optimised for the highest requirements on safety, reliability and performance. Suitable e.g. for industrial, utility, and grid serving applications.

- Product certification and compliance:
 IEC 62619, IEC 62477, IEC 63056, IEC 61000, UL 1973,
 UL 9540A, NFPA 855, UN 38.3
- Company certifications:ISO 9001, ISO 14001, ISO 45001, SA 8000
- Environmental Compliance: RoHS, REACH, Cobalt free
- Flexible solution: String or central PCS compliance.

High safety

- High thermal stability thanks to liquid cooling
- Multi-stage, active fire protection system, compliance to NFPA 855
- Use of highly safe prismatic HiTHIUM LFP cells
- Dedicated cell monitoring and protection system

Low LCOS (Levelised Cost of Storage)

- Excellent thermal management improves energy throughput by ensuring optimal operating temperature
- Highly integrated: including thermal management system, fire protection system, BMS, etc.
- Supports back to back and side by side installations

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| GENERAL | |
|----------------------|----------------------|
| Configuration | 6*2P416S |
| Cooling Method | Liquid Cooling |
| BMS Communication | CAN, RS485, Ethernet |
| Gravimetric ED | ≥ 125 Wh/kg |
| Volumetric ED | ≥ 117 Wh/L |
| Application Altitude | ≤ 4.000 m |
| | |

| ELECTRICAL | |
|----------------------------------|--------------------------|
| Nominal Voltage | 1.331,2 V |
| Operating Voltage | 1.040 V 1.500 V |
| Nominal Energy | 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 % ^{1, 2} |

¹ 0,5 P / 0,5 P

| MECHANICAL | |
|------------------------|--------------------------|
| Dimensions (L x W x H) | 6.058 x 2.438 x 2.896 mm |
| Maximum Weight | 40.000 kg |
| Protection Level | IP 55 |

| TEMPERATURE RANGE | |
|-----------------------|---------------------------|
| Operating | -30 °C 55 °C ³ |
| Storing (Recommended) | -20 °C 35 °C ³ |

| PRODUCT CERTIFICATIONS AND COMPLIANCE | | |
|---------------------------------------|--|--|
| Certificates, Report and Compliance | IEC 62619, IEC 62477, IEC 63056, IEC 61000, UL 1973, UL 9540A, NFPA 855 | |
| Safe Transportation | UN 38.3 | |
| | | |

| ENVIRONMENTAL | |
|-------------------------|--------------------------|
| Compliance | RoHS, REACH, Cobalt free |
| Battery Regulation (EU) | 2023/1542 |

| COMPANY CERTIFICATIONS | |
|------------------------|--|
| | ISO 9001, ISO 14001, ISO 45001, SA 8000 |

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² 25 °C +/- 2 °C

³ ambient temperature