

ESS Module 104 kWh

Liquid-cooled ESS module based on prismatic LFP cells



Liquid-cooled ESS module based on HiTHIUM prismatic LFP ESS Cell 314 Ah with very high cyclic lifetime.

Specially optimised for use in stationary battery storage systems with the highest requirements on safety, reliability and performance. Suitable e.g. for C&I, utility applications.

- Product certifications:IEC 62619 (cell level), UL 1973, UL 9540A, UN 38.3
- Company certifications:ISO 9001, ISO 14001, ISO 45001, SA 8000
- Environmental Compliance: RoHS, REACH, Cobalt free

High safety

- Based on HiTHIUM ESS 314 Ah prismatic LFP cell with high thermal stability
- Optimal operating temperature due to liquid cooling

Low LCOS (Levelised Cost of Storage)

- Very high cyclic lifetime thanks to advanced material and process technologies
- Excellent thermal management improves energy throughput by ensuring optimal operating temperature

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GENERAL	
Configuration	2P52S
Cooling Method	Liquid Cooling
Coolant	Glycol-Water Coolant Solution
Gravimetric ED	≥ 156 Wh/kg (≥70.8 Wh/lbs)
Volumetric ED	≥ 244 Wh/L (≥923.6 Wh/gal)
Application Altitude	≤ 4,000 m (≤13123 ft)

ELECTRICAL	
Nominal Voltage	166.4 V
Operating Voltage	130 V 189.8 V 0 °C < T ≤ 60 °C ¹ (32 °F <t≤140 th="" °f)<=""></t≤140>
	104 V 189.8 V -30 °C < T ≤ 0 °C ¹ (-22 °F <t≤32 th="" °f)<=""></t≤32>
Nominal Energy	104.5 kWh ^{2, 3}
Nominal SOC at delivery	27 % ³
Nominal Charge / Dischage Rate	0.5 P / 0.5 P ³

Operating Voltage	0 °C < T ≤ 60 °C (32 °F < T ≤ 140 °F)
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Nominal SOC at delivery	27 % ³
Nominal Charge / Dischage Rate	0.5 P / 0.5 P ³

¹ cell temperature

MECHANICAL	
Dimensions (L x W x H)	800 x 2,184 x 243 mm (31.5 x 86.0 x 9.6 in)
Weight	667 +/- 10 kg (1448.4 lbs 1492.5 lbs)
Protection Level	IP 67

TEMPERATURE RANGE	
Discharge	-30 °C 60 °C ¹ (-22 °F 140 °F)
Charge	0 °C 60 °C ¹ (32 °F 140 °F)
Storing (recommended)	-20 °C 35 °C ⁴ (-4 °F 95 °F)

PRODUCT CERTIFICATIONS	
Certificates and Reports	IEC 62619 (cell level), UL 1973, UL 9540A
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 0.5 P / 0.5 P

³ 25 °C +/- 2 °C (73.4 °F ... 80.6 °F)

⁴ ambient temperature