

ESS Cell 50 Ah

Cylindric LFP cell optimised for use in stationary ESS



Cylindric LFP cell with high cyclic lifetime and improved safety characteristics.

Specially optimised for use in stationary battery storage systems with high requirements on safety, reliability and performance. Suitable e.g. for residential, commercial, and telecom stations use.

- Product certifications:
IEC 62619, UL 9540A, UL 1973, UN 38.3
- Company certifications:
ISO 9001, ISO 14001, ISO 45001, SA 8000
- Environmental Compliance:
RoHS, REACH, Regulation (EU) 2023/1542, Cobalt free

High safety

- Supports low temperature charging at -20°C
- No fire or explosion during crush test
- Ultra wide operating temperature range

Low LCOS (Levelised Cost of Storage)

- High cyclic lifetime $\geq 8,000$ cycles at 1C/1C 70% SOH

Flexible and versatile use

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GENERAL	
Nominal Capacity	50 Ah ^{1,2}
Nominal Energy	160 Wh ^{1,2}
Cell Chemistry	LiFePO ₄ (LFP)
Nominal Cycles	≥ 8,000 ^{2,3,5}
Gravimetric	≥ 150 Wh/kg
Volumetric	≥ 330 Wh/L
Industry Standard (Type)	LFP64151

ELECTRICAL	
Nominal Voltage	3.2 V ^{1,2}
Operating Voltage	T > 0°C 2.50 ... 3.65 V T ≤ 0°C 2.00 ... 3.65 V
AC Resistance (1 kHz)	≤ 0.7 mΩ ⁴
Max. self discharge rate	3%/month ^{2,4}
Max. continuous charge rate	1 C
Max. continuous discharge rate	2 C

¹ 0.5 C / 0.5 C

² 25°C +/- 2.0

³ 70% SOH

⁴ 27% SOC

⁵ 1 C / 1 C

MECHANICAL	
Dimensions (D x H)	64 x 151 mm
Type	cylindric
Weight	1 kg +/- 0.1
Volume	0.48 L

TEMPERATURE RANGE	
Charging	-20°C ... 60°C
Discharging	-30°C ... 60°C
Storing (recommended)	-20°C ... 35°C

PRODUCT CERTIFICATIONS	
Safety Certificates	IEC 62619, UL 9540A, UL 1973
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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