

MK LITHIUM ENERGY (SHENZHEN) CO., LTD.

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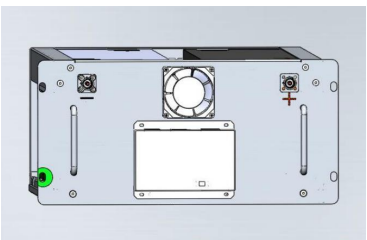
5MWH Energy Storage System Specification

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1. Cell

Item	Technical parameter	Remark
Cell Model	LFP71173207/280Ah	
Rated Voltage (V)	3.2 V	
Rated Capacity (Ah)	280 Ah	
Rated Energy (WH)	896 WH	
Standard charging current (A)	140A (0.5C)	
Max. charging current (A)	280A (1C)	
Standard discharging current (A)	140A (0.5C)	
Max. discharging current (A)	280A (1C)	
Rated charging voltage (V)	3.65V	
Rated discharging cut-off voltage (V)	2.5V (Temp. > 0°C) ; 2.0V (Temp. ≤ 0°C)	
IR (mΩ)	0.18±0.05mΩ	
Weight (kg)	5.43±0.2kg	
Cycle life	6000 times (Capacity ≥ 70%)	
Dimension	Thickness 71.55±0.5mm; Width 174.7±0.5mm; Height 207.2±0.5mm (with pillar)	
Storage humidity (RH)	≤85%RH	

2. 16S battery group

	Item	Technical Parameter
	Structure	Battery case, Battery group, Copper, BMU
	Connection	1P16S
	Voltage (V)	51.2
	Capacity (Ah)	280
	Energy (kwh)	14.336

3. Battery Array

Item	Technical Parameter
Structure	15pcs 1P16S battery group, 1pcs High voltage case(BCMU)
Rated voltage (V)	768
Rated capacity (Ah)	280
Energy (kwh)	215.04
Operation temperature	10°C~40°C



4. System

24pcs 768V280AH Battery Array connect to be 5MWH energy storage system.



5. ESS equipment list

No.	Item	Specifications	Unit	QTY	Remark
1	40'containerbattery system	(L*W*H) 12192mm*2438mm*2896mm	set	2	Include Ventilation system ,Emergence lighting, Smoke sensing;IP54
2	Battery array	768V280AH (215.04 kWh)	set	24	Include 15pcs battery group, 1set high voltage case
3	Battery group	51.2V280Ah (14.336kWh)	set	360	3.2V280AH(16S1P), instrument control BMU
4	Battery rack	IP20, 8 tier 2 row	set	24	
5	High voltage case	DC1000V200A switch,DC fuse, splitter,power, etc.	pcs	24	With BCMU
6	BMU- instrument control	16 S×3.2V lithium battery,	pcs	360	
7	BCMU- master control		set	24	
8	BAMS- general control		set	2	
9	LCD	10.1 寸 LCD	pcs	2	
10	Power Control System(PCS)	630KW	pcs	4	
11	Industrial air conditioning	220VAC 5000W	pcs	2	RS485
12	Fire warning equipment	Smoke sensing	set	2	
13	Fire extinguishing system	Smoke sensing , temperature sense, Fire alarm control system, GQQ , alarm bell , Gas release indicator , etc.	set	2	
14	UPS	1KVA	pcs	2	
15	Energy Management System (EMS)	EMS system,LCD 、 interchanger , monitoring software.	set	2	
16	Lighting	General lighting and emergency lighting	set	2	