

Battery LFP-51.2V-1440AH Parameters

Item	Parameters	Remarks
Combination LFP 51.2V 1440AH	16S6P (16pcs in series 6 sets in parallel)	CATL LFP-3.2V-240Ah
Nominal Voltage	51.2V	
Charge Voltage	54.6V	
Nominal capacity/Energy	1440Ah/73.73Kwh	
Voltage range	40V-58.4V	
SOC range	5%-100%	
Continuous discharge power	20.48KW (Per 1440AH cabinet)	Total: 9 sets of 1440AH in parallel
Peak discharge power	30.72KW 30S (Per 1440AH cabinet)	Total: 9 sets of 1440AH in parallel
Working environment	Charge: 0°C ~55°C	
	Discharge: -20°C ~60 °C	
	Storage: -30°C ~50°C	
	-10°C Charge and discharge rate: > 85%	
Efficiency	> 96%	
Continuous discharge current	400A	
Peak discharge current	600A(10S)	
Battery cycle life	5000 times	
Communication port	CAN / RS485	
Resistance	50MΩ (25°C 40% RH)	
Weight	500-550kg	Per 1440AH cabinet
Battery cabinet	1000*500*1200mm	Per 1440AH cabinet

Battery LFP-3.2V-240AH Parameters

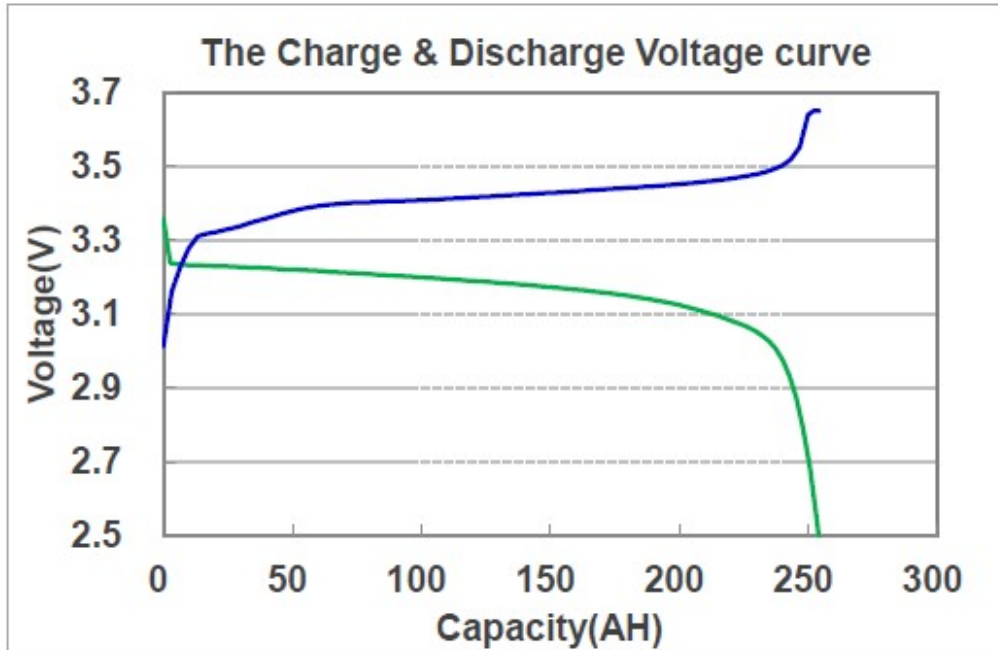
Item	Parameters	Remarks
Nominal capacity	240AH	
Nominal voltage	3.2V	
Standard Charge	1C	Working Temperature: 0-45°C
Max Charge	2C	Working Temperature: 0-45°C
Charging cut-off voltage	3.65V	CC/CV
Standard Discharge	1C	
Max Continuous discharge	3C	
Pulse discharge	4C	
Discharging cut-off voltage	3.0V	
Resistance	≤0.45mΩ	
Weight	5.2Kg	
Dimension	72*174*207mm	

CATL Battery Cell LFP-3.2V-240AH

Cell Specification		Parameters		
Dimension, mm		71.5×173.9×207.3		
Cell capacity @ 25°C, 0.5C, Ah		≥240		
Nominal voltage, V		3.2		
Nominal energy @ 25°C, 0.5C, Wh		768		
Cell weight, g		<5200		
Energy density, Wh/kg		150		
Energy density, Wh/L		307		
DCR (25°C,30s,50%SOC), mΩ		<0.45		
Max Current (Charge),50% SOC,10s, 25°C		480A		
Max Current (Discharge),50% SOC,10s, 25°C		720A		
Operating temperature (case dependent)		-30°C ~ 55°C		
Storage temperature (case dependent)		-40°C ~ 60°C		
			Item	GB/T31485-2015
			Nail	HL4
			Crush	HL2
			Hot box	HL4
			Short	HL2
			Over discharge	HL2
			Overcharge	HL2
			Heating (Heat shock)	HL2

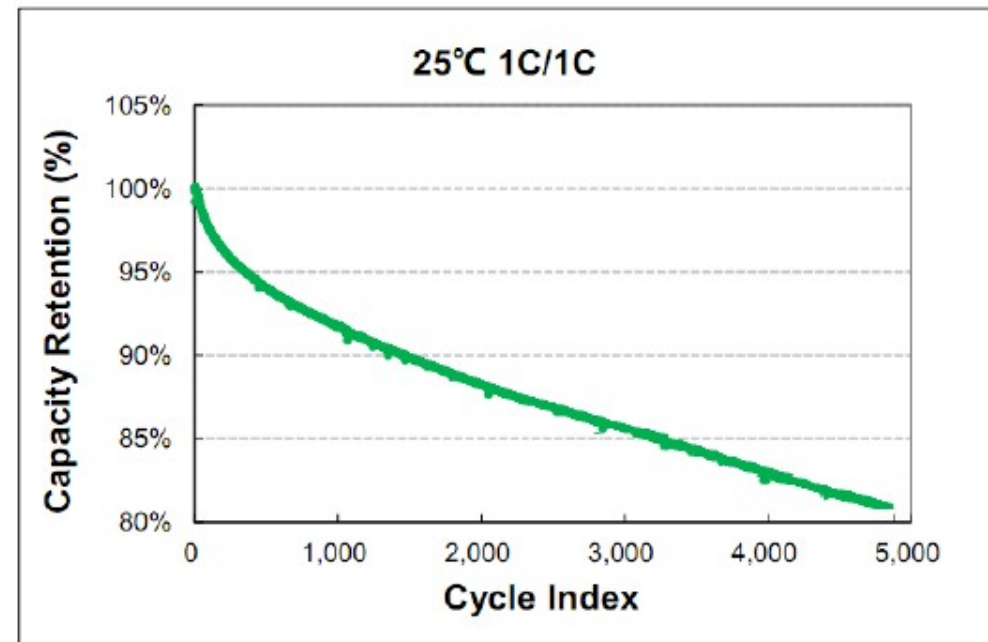


Electrical Performance

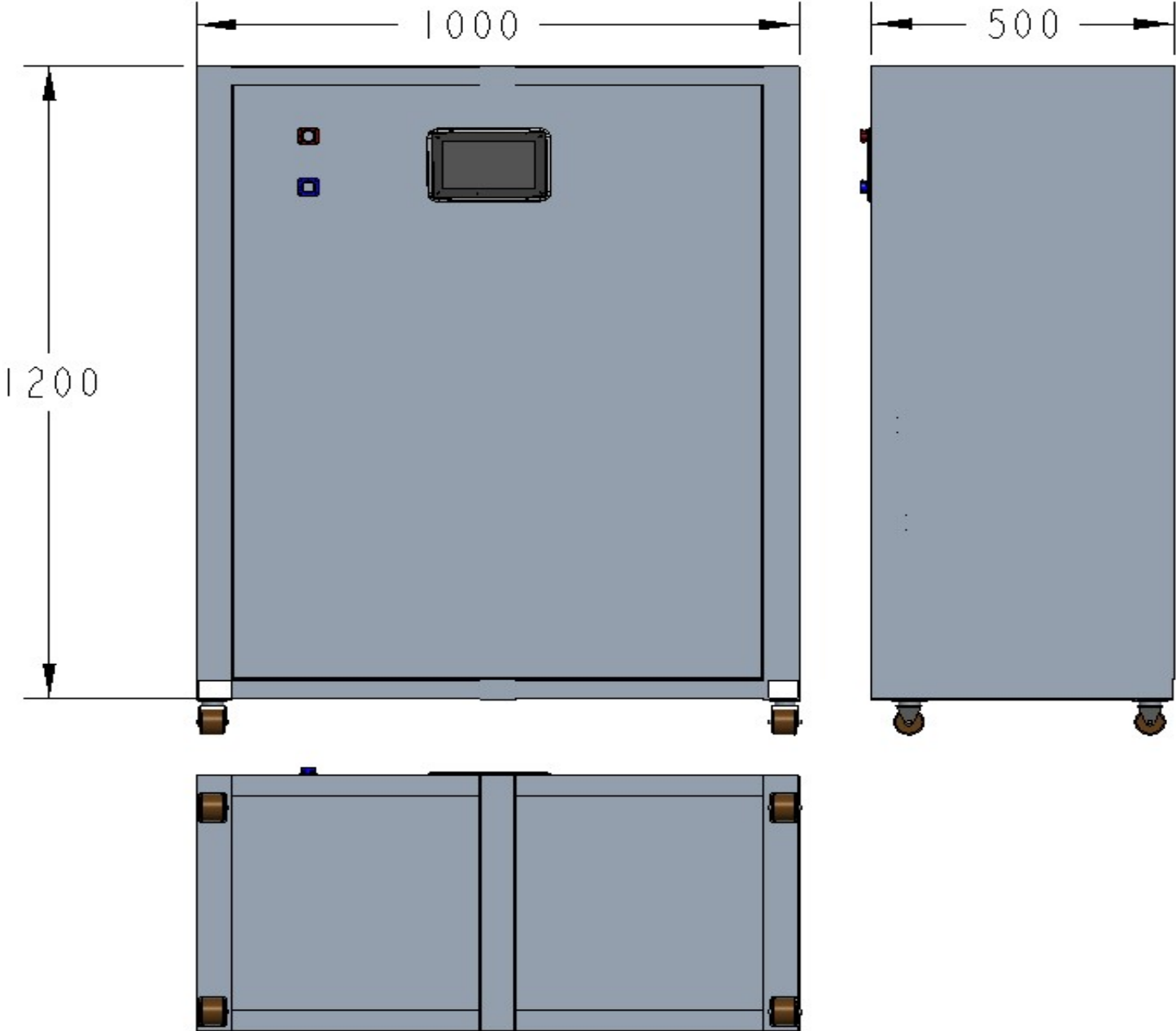


Minimum discharge capacity is 240Ah
@25°C, 1C

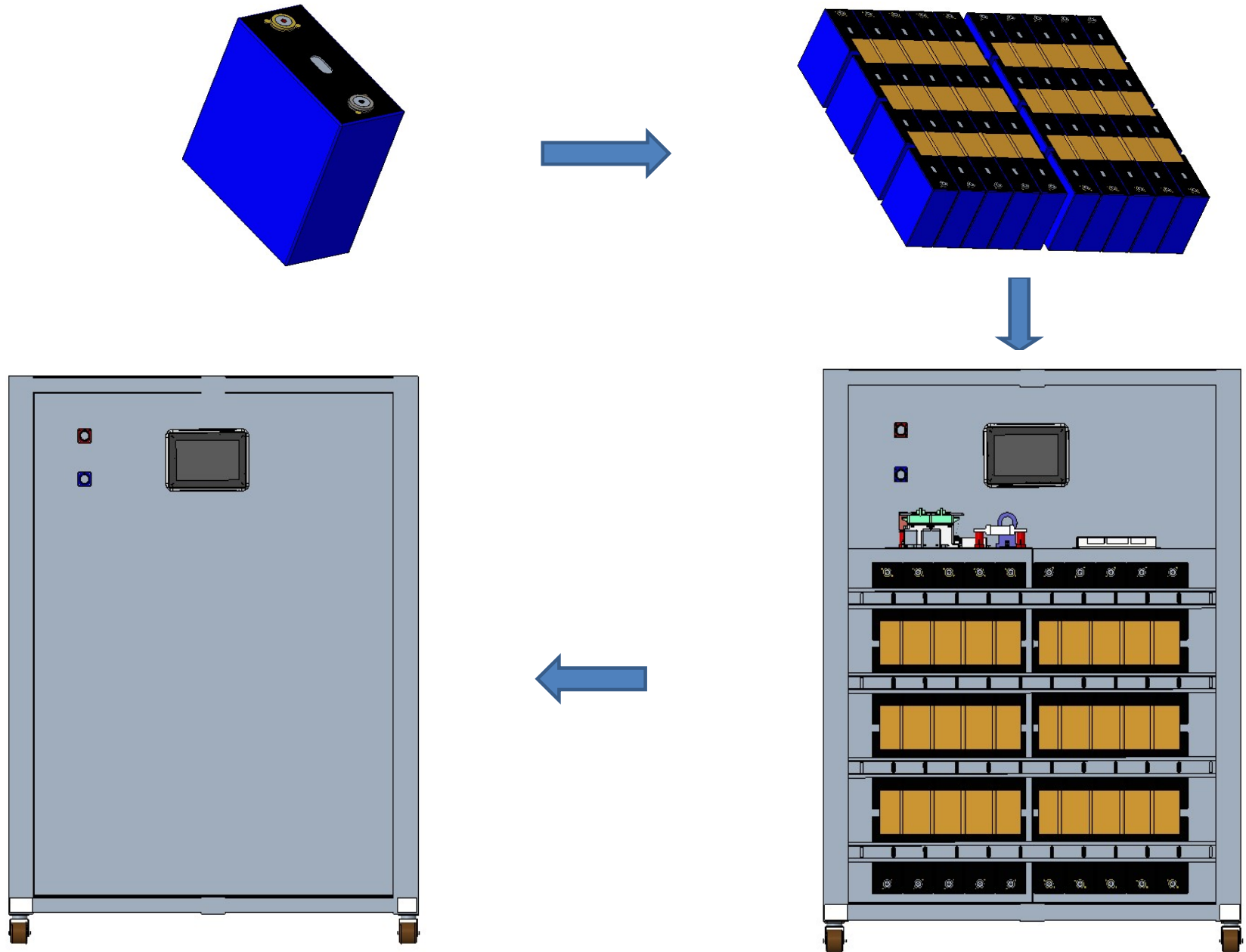
25°C 80% reversible capacity retention,
5000Cycles



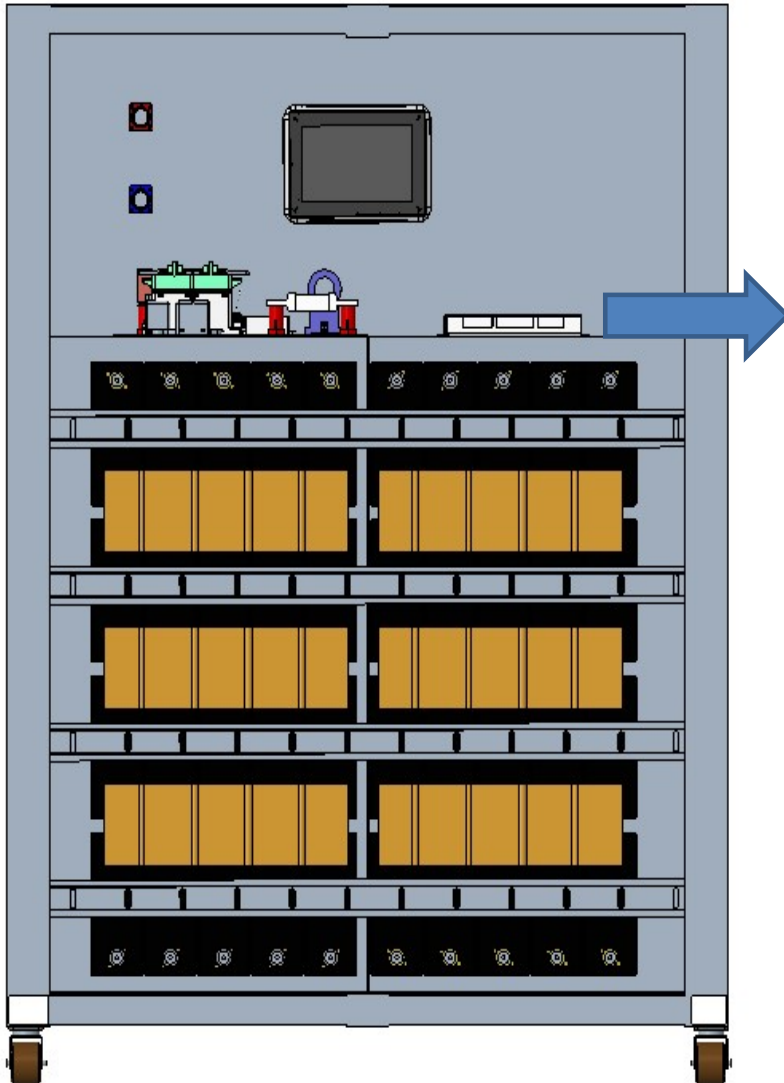
Battery cabinet dimension(LFP-51.2V-1440AH)



Assembling



BMS function



BMS Specification

Relay

Fuse

Shunt

#The BMS is designed for 16 series lithium battery.

#The BMS have all functions which are :

- overcharge detection function
- over discharge detection function
- over current detection function
- short detection function
- Temperature detection function
- balance function
- communicate function
- Alarm function
- Total capacity function
- Storage history function