



2.5MW / 5MWh BESS Specification



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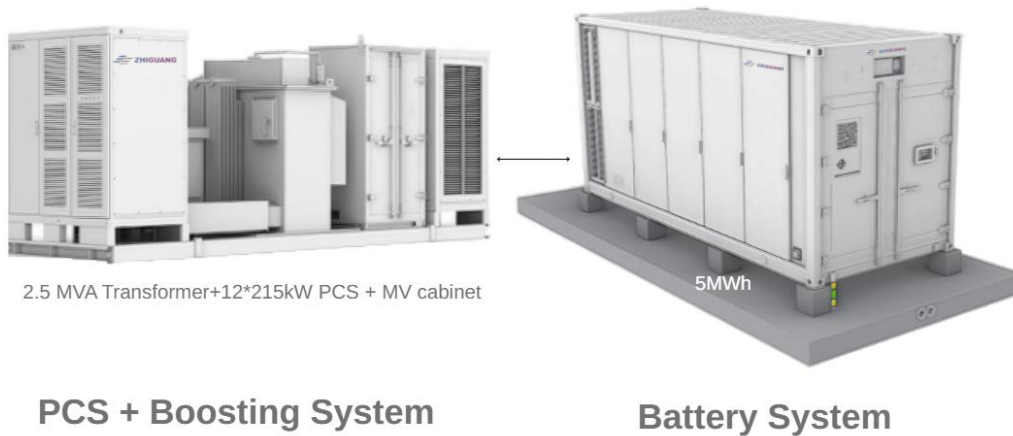
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➤ 2.5MW/5MWh BESS



2.5MW/5MWh BESS Diagram

➤ 5MWh Battery System



5MWh Battery system

5MWh liquid-cooled energy storage container	
General	
Battery Type	LFP cell, 314Ah
configuration	12*(8*1P52S)
Cooling Method	Liquid Cooling
Coolant	50% Ethylene glycol aqueous solution
Operating Ambient Temperature	-25 °C ~ +55 °C
Storage Temperature	-30°C ~ +60 °C

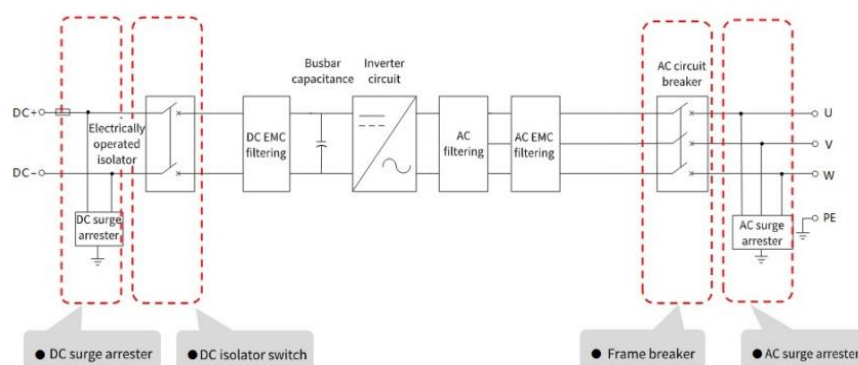
Application altitude	≤2000m
Protection Level	IP54
Weight	~44t
Size	6058mm(W)*2438mm(D)*2896mm(H)
Color	RAL7042
Fire protection	Aerosol + water firefighting + explosion-proof fan (combustible gas)
Electrical	
Rated Energy	5015.9616kWh
Rated Voltage	1331.2VDC
Voltage Range	1164.8~1476.8VDC
Communication method	CAN, RS485, TCP/IP
Communication port	RS485, Fiber ST
Fulfill standard	
Cell	UN38.3, IEC 62620 , IEC62619
Container	UN3536 , IEC62619 , EN61000 , EN62477, IEC63056 , IEC 62933-5-2

➤ Converter - Boost System



2.5MVA Transformer + 12*215kW PCS + MV cabinet

Energy storage converter circuit block diagram



Parameters of 215kW PCS

General	
Temperature	-20°C ~ 60°C(De-rating over 50°C)
Protection class	Class I
Cooling Method	Air Cooling
Degree of protection	IP66
Altitude	≤4000m (> 3000m derating)
Humidity	0% ~ 95% (Non condensing)
Battery side	
Maximum battery voltage	1500 Vd.c.
Operating voltage range	1100~1500 Vd.c.
Rated voltage	1331.2Vd.c.
Max continuous discharge/charging current	199Ad.c.
Grid side	
Rated voltage	3~PE 750 Va.c.
Rated frequency	50Hz / 60Hz
Rated power	215kVA
Power factor (at rated power)	>0.99
Power factor adjustable range	-1 ~ 1
Total current waveform distortion rate	<3 % (Under rated power conditions)

Certification

CE certification in accordance of IEC standards and, Grid Compliance

Parameters of 2.5MVA Transformer

Rated frequency	50Hz/60Hz
Rated power	2500kVA
Rated voltage	Grid/0.75KV
ambient temperature	-25°C ~ 40°C

➤ 2.5MW/5MWh BESS Single -line Diagram

