

CFE DC System

Utility SMART BESS



EFFICIENT AND FLEXIBLE

- ✓ High-efficiency heat dissipation, increase battery life and system performance.
- ✓ Function test in factory, minimize on-site work accelerate commissioning process.



SAFE AND RELIABLE

- ✓ Electrical safety management, overcurrent fast breaking and arc extinguishing protection.
- ✓ The electrical cabinet and battery cabinet are separated to prevent thermal runaway.



CONVENIENT O&M

- ✓ One-click system upgrade.
- ✓ Automatic coolant refilling design.
- ✓ Online intelligent monitoring.



OPTIMAL COST

- ✓ Intelligent temperature control system to optimize the auxiliary power consumption.
- ✓ Pre-assembled, no battery module handling on site transportation of complete system.

Liquid-cooling PACK

Smart BMS



Model	CFE-52Y314
Series-parallel	1P52S
Capacity	314Ah
Nominal voltage	166.4V
Charge cut-off Voltage	187.2V
Discharge cut-off voltage	145.6V
Standard charge current	157A
Standard discharge current	157A
Weight	345kg
Dimension (mm)	800*1150*254
Energy	52.249kWh

Name	PDU
Voltage level	1500V
Maximum continuous current	140A
Working power supply	24V
Cell voltage sampling accuracy	$\leq \pm 3\text{mV}$
Cell temperature collection accuracy	$\pm 2^{\circ}\text{C}@-40\sim 0^{\circ}\text{C}/56\sim 105^{\circ}\text{C} \pm 1^{\circ}\text{C}@1\sim 55^{\circ}\text{C}$
Total voltage detection accuracy	$< 0.2\%$ FSR (FSR: Full Scale)
Total voltage collection frequency	200mS
Current detection accuracy	$< 0.2\%$ FSR (FSR: Full Scale)
Current acquisition frequency	50mS
SOC estimation accuracy	$< 5\%$
Balanced mode	Passive equilibrium

Model	CFE DC 2 HL	CFE DC 3 HL	CFE DC 4 HL	CFE DC 5 HL
Cell Parameters				
Cell Type	LFP 3.2V / 314Ah			
Cell Voltage Range	2.7V-3.6V			
Cell Cycle Life	8000cycles@0.5c			
PACK				
PACK Configuration	CFE-52Y314			
PACK Capacity	314Ah			
PACK Voltage Range	140.4V-187.2V			
Cooling Method	Liquid-cooling			
Fire Protection System	FK5112			
RACK				
RACK Configuration	1P416S			
RACK Capacity	314Ah			
RACK Voltage Range	561.6V-748.8V	1123.2V-1497.6V	1123.2V-1497.6V	1123.2V-1497.6V
Fire Protection System	FK5112			
System Parameters				
System Configuration	1P208S*10	1P416S*8	P416S*10	1P416S*12
System Energy	2.09MWh	3.34MWh	4.18MWh	5.015MWh
System Voltage Range	561.6V-748.8V	1123.2V-1497.6V	1123.2-1497.6V	1123.2V-1497.6V
Dimensions (L*W*H)	4350*2438*2896	6058*2438*2896	6200*2438*2896	7200*2438*2896
Weight	23T	32T	38T	44T
Ambient Temperature	-20℃~55℃			
Ambient Humidity	0 ~ 95%			
Working Altitude	< 3000m			
Ingress Protection	IP55			
Corrosion Protection Level	C4			
Cooling Method	Liquid-cooling			

Utility ESS DC Cabinet Standard Container Parameter Quick Reference

DC Cabinet Model		CFE DC 2 HL	CFE DC 3 HL	CFE DC 4 HL	CFE DC 5 HL
Battery DC Voltage (V)	High Voltage	1497.6	1497.6	1497.6	1497.6
	Low Voltage	1123.2	1123.2	1123.2	1123.2
Cooling Method		Liquid-cooling	Liquid-cooling	Liquid-cooling	Liquid-cooling
System Series & Parallel Connection	S/PACK	52	52	52	52
	S/RACK	8	8	8	8
	P/BESS	5	8	10	12
Actual capacity MWh (corresponding to cells)	280Ah	1.86	2.98	3.73	4.47
	314Ah	2.09	3.34	4.18	5.02
System Dimensions (mm)	L	4350	6058	6200	7200
	W	2438	2438	2438	2438
	H	2896	2896	2896	2896
Gross Weight (T)	314Ah	23	32	38	44

Note: This table is for a quick comparison of product parameters. For detailed technical data, please refer to the technical manual.



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