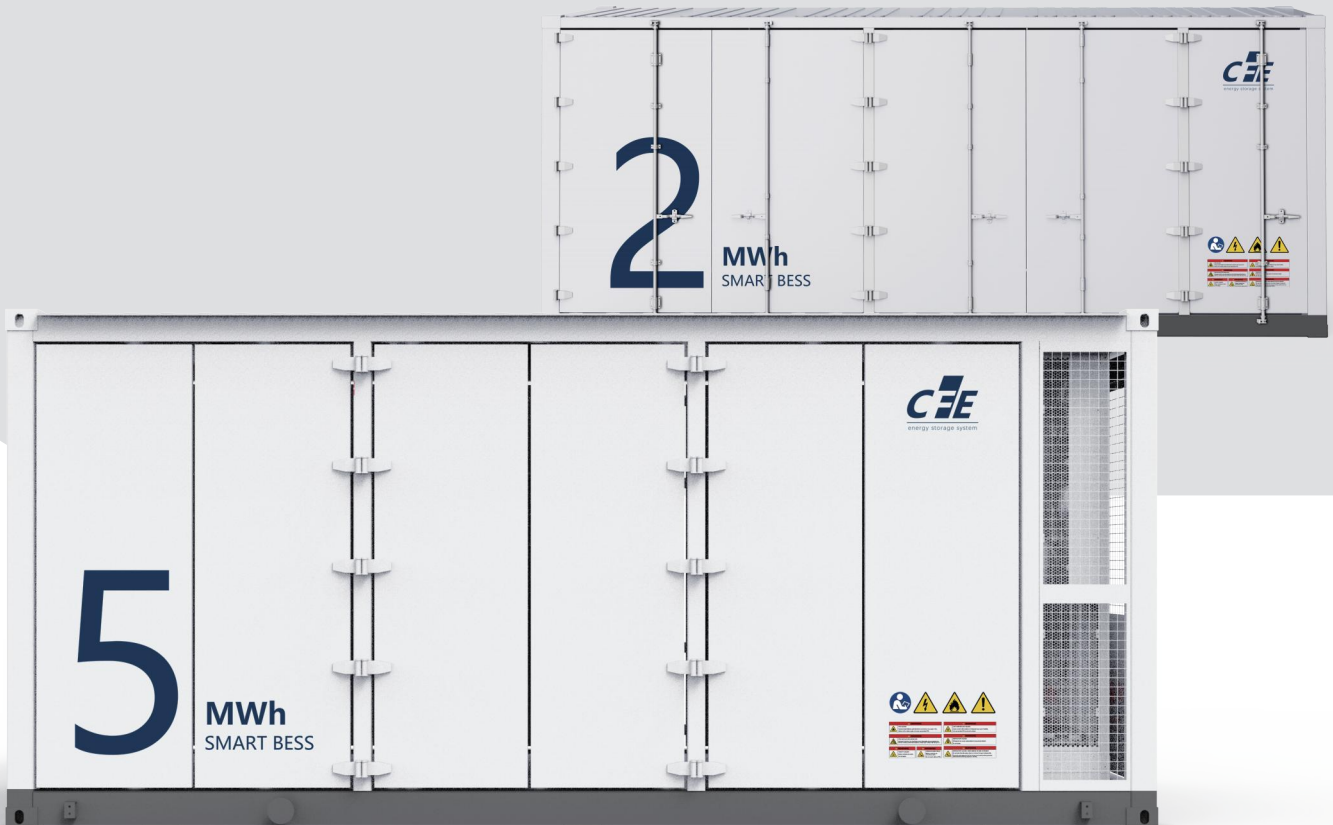


CFE DC System

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.

Air-cooling PACK



Model	CFE-16F280	CFE-16F314
Series-parallel	1P16S	
Capacity	280Ah	314Ah
Nominal voltage	51.2V	
Charge cut-off Voltage	58.4V	
Discharge cut-off voltage	44.8V	
Standard charge current	140A	157A
Standard discharge current	140A	157A
Weight	110kg	115kg
Dimension (mm)	426*750*236	
Energy	14.33kWh	16.077kWh

Liquid-cooling PACK



Model	CFE-52Y280	CFE-52Y314
Series-parallel	1P52S	
Capacity	280Ah	314Ah
Nominal voltage	166.4V	
Charge cut-off Voltage	187.2V	
Discharge cut-off voltage	145.6V	
Standard charge current	140A	157A
Standard discharge current	140A	157A
Weight	330kg	345kg
Dimension (mm)	800*1150*254	
Energy	46.592kWh	52.249kWh

Smart BMS



Name	PDU
Voltage level	1500V
Maximum continuous current	140A
Working power supply	24V
RACK current acquisition accuracy	≤1%
Cell voltage collection accuracy	≤0.005V
Cell temperature collection accuracy	≤1C(-20~65c)
Cell voltage collection cycle	≤2°C(other temperatures within -40~85C)
Cluster current collection cycle	≤100ms
Cell temperature collection cycle	≤50ms
Balance method	≤1s Passive balancing
SOC accuracy	≤2%

Model	CFE DC 1 MA	CFE DC 2 ML	CFE DC 2 HL	CFE DC 2 HA	CFE DC 3 HA
Cell Parameters					
Cell Type	LFP 3.2V / 280Ah	LFP 3.2V / 314Ah			
Cell Voltage Range	2.7V-3.6V				
Cell Cycle Life	8000cycles@0.5c				
PACK					
PACK Configuration	CFE-16F280	CFE-52Y314		CFE-16F314	
PACK Capacity	280Ah	314Ah			
PACK Voltage Range	43.2V-57.6V	140.4V-187.2V		43.2V-57.6V	
Cooling Method	Air-cooling	Liquid-cooling		Air-cooling	
Fire Protection System	FK5112				
RACK					
RACK Configuration	1P224S	1P208S	1P416S	1P400S	1P384S
RACK Capacity	280Ah	314Ah			
RACK Voltage Range	604.8V-806.4V	561.6V-748.8V	1123.2V-1497.6V	1080V-1440V	1036.8V-1382.4V
Fire Protection System	FK5112				
System Parameters					
System Configuration	1P224S*5	1P208S*10	1P416S*5	1P400S*5	1P384S*8
System Energy	1MWh	2.09MWh	2.09MWh	2.01MWh	3.09MWh
System Voltage Range	604.8V-806.4V	561.6V-748.8V	1123.2V-1497.6V	1080V-1440V	1036.8V-1382.4V
Dimensions (L*W*H)	3500*2438*2896	4058*2438*2896	4058*2438*2896	7716*2438*2896	10716*2438*2896
Weight	9.5T	25T	25T	21.2T	28.9T
Ambient Temperature	-20°C~55°C				
Ambient Humidity	0 ~ 95%				
Working Altitude	< 3000m				
Ingress Protection	IP55				
Corrosion Protection Level	C4				
Cooling Method	Air-cooling	Liquid-cooling		Air-cooling	

Model	CFE DC 3 HL	CFE DC 4 HA	CFE DC 4 HL	CFE DC 5 HA	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	CFE-16F314	CFE-52Y314	CFE-16F314	CFE-52Y314
PACK Capacity	314Ah				
PACK Voltage Range	140.4V-187.2V	43.2V-57.6V	140.4V-187.2V	43.2V-57.6V	140.4V-187.2V
Cooling Method	Liquid-cooling	Air-cooling	Liquid-cooling	Air-cooling	Liquid-cooling
Fire Protection System	FK5112				
RACK					
RACK Configuration	1P416S	1P400S	1P416S		
RACK Capacity	314Ah				
RACK Voltage Range	1123.2V-1497.6V	1080V-1440V	1123.2V-1497.6V		
Fire Protection System	FK5112				
System Parameters					
System Configuration	1P416S*8	1P400S*10	1P416S*10	1P416S*12	
System Energy	3.34MWh	4.02MWh	4.18MWh	5.015MWh	
System Voltage Range	1123.2V-1497.6V	1080V-1440V	1123.2-1497.6V	1123.2V-1497.6V	
Dimensions (L*W*H)	5058*2438*2896	12216*2438*2896	6058*2438*2896	13716*2438*2896	7058*2438*2896
Weight	40T	42T	50.1T	52.8T	60.3T
Ambient Temperature	-20°C~55°C				
Ambient Humidity	0 ~ 95%				
Working Altitude	< 3000m				
Ingress Protection	IP55				
Corrosion Protection Level	C4				
Cooling Method	Liquid-cooling	Air-cooling	Liquid-cooling	Air-cooling	Liquid-cooling

Utility ESS DC Cabinet Standard Container Parameter Quick Reference

DC Cabinet Model	Battery DC Voltage (V)		Cooling Method	System Series & Parallel Connection			Actual capacity MWh (corresponding to cells)		System Dimensions (mm)			Gross Weight (T)	
	High Voltage	Low Voltage		S/PACK	S/RACK	P/BESS	280Ah	314Ah	L	W	H	280Ah	314Ah
CFE DC 1 MA	806.4	604.8	Air-cooling	16	14	5	1.00	1.13	3500	2438	2896	9.5	12.1
CFE DC 2 ML	748.8	561.6	Liquid-cooling	52	4	10	1.86	2.09	4058	2438	2896	19.5	2.5
CFE DC 2 HL	1497.6	1123.2	Liquid-cooling	52	8	5	1.86	2.09	4058	2438	2896	19.5	2.5
CFE DC 2 HA	1440	1080	Air-cooling	16	25	5	1.79	2.01	7716	2438	2896	19.1	21.2
CFE DC 3 HA	1382.4	1036.8	Air-cooling	16	24	8	2.75	3.09	10716	2438	2896	26.2	28.9
CFE DC 3 HL	1497.6	1123.2	Liquid-cooling	52	8	8	2.98	3.34	5058	2438	2896	31.3	40
CFE DC 4 HA	1440	1080	Air-cooling	16	25	10	3.58	4.02	12216	2438	2896	34.1	42
CFE DC 4 HL	1497.6	1123.2	Liquid-cooling	52	8	10	3.73	4.18	6058	2438	2896	39.2	50.1
CFE DC 5 HA	1497.6	1123.2	Air-cooling	16	26	12	4.47	5.02	13716	2438	2896	42.5	52.8
CFE DC 5 HL	1497.6	1123.2	Liquid-cooling	52	8	12	4.47	5.02	7058	2438	2896	47	60.3

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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