

1MW/2MWh Liquid Cooling C&I ESS

ESS-1000-2000kWh-L



Advantages and Features



Three-level topology, PCS conversion efficiency up to 99.0%

CATL long-life LFP battery cells, cycle life > 7000 times



Thermal runaway detection & Aerosol & Water spray, three-level fire linkage

Liquid-cooling temperature control design, battery pack temperature difference <math><3^{\circ}\text{C}</math>, auxiliary power consumption reduced by 30%, extending system lifespan by 2 years+



Smart string balancing architecture, compatible with mixed use of new and old battery packs

2MWh Product Specifications

Product Model	ESS-1000-2000kWh-L
DC Side	
Cell Type	LFP/314Ah
Rated Energy	2089.984kWh
Rated Battery Voltage	832Vdc
Operating Voltage Range	650Vdc~949Vdc
Max. DC Current	157A*8
Battery Configuration/Cluster	1P52S*5
Number of Battery Clusters	8
Charge/Discharge C-Rate	≤0.5P
On-grid Side	
Rated Output Power	1000kW
Rated Output Voltage	400Vac
Rated Output Voltage Range	-15%~10% (Adjustable)
Rated Grid Frequency	50Hz/60Hz (± 5Hz)
Output Power Factor	-1~+1
Operating Phase	3L+N+PE
Adaptation to Grid Types	TN
Topology	Transformerless
Efficiency	
Maximum Efficiency	90%
General Data	
Surge Protection	DC Type II / AC Type II
Pollution Level	Class II
Fire Control	Aerosol
Ingress Protection	IP54
Installation Method	Outdoor installation
Battery Cooling Concept	Liquid cooling
Running Temperature	-30°C~+60°C (Derating above 55°C)
Operating Surroundings Humidity	0~95% (No condensation)
Permissible Altitude	≤2000m
Cabinet Size (WxHxD)	6058*2896*2438mm
Weight	<25T
Display	LCD+Web+APP
Interface	RS485, Ethernet, 4G
Safety EMC / Standard	EN 62477-1, EN 61000-6-2, EN 61000-6-4
Grid Connection Standard	EN 50549-1:2019+A1 2023, TOR Erzeuger: 2019-12-12, OVE-Richtlinie R 25:2020-03-01, PPDS

*If there are any changes in product size and parameters, the latest information shall prevail without further notice.