

ESS SOLUTIONS

INDUSTRIAL & RESIDENTIAL



5MWh⁺

Liquid Cooling Energy Storage System

Enerlution



5068kWh
High Energy

12000cycles
Long Life Span

4-Layer
Protection
High Safety

20ft x 4
Standardization

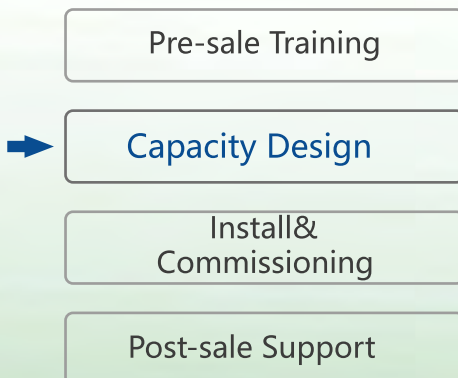
3 °C
Intelligent
Temperature
Control

56%
Occupied Area
Saved



- ✓ High System Energy Density
- ✓ Customization Pack
- ✓ High Space Utilization
- ✓ BMS Integrated Development
- ✓ Low Cost & Less Covering Area

ESS Product Solution



Model		5MWh ⁺	
Electrical			
Cell Model	LFP81175200A-330Ah	LFP81175200A-330Ah	LFP81175200A-316Ah
Pack Configuration	IP44S	IP100S	IP104S
Nominal Capacity (kWh)	5018	5068	5047
Voltage Range (Vdc)	990-1445.4	1000-1460	1040-1497.6
System Specification	1267V	1280V	1331V
Conditions			
Storage Temperature (°C)	-30~60		
Operating Temperature (°C)	-30~60		
Working Relative Humidity(%)	0~95 (non-condensing)		
Altitude(m)	<3000 (≥3000 derating)		
Parameters			
Ingress protection	IP55		
Thermal Management	Liquid-cooled Temperature Control+Air Conditioning (liquid cooler built-in system)		
Communication Interface	CAN,RS485,Ethernet		
Communication Protocol	Modbus-TCP/IP		
Fire Suppression System	Explosion-proof+Smoke extraction+PACK-rated submerged fire extinguishing +Gas estinguishing system+Water sprinkler system		
Standards&Certification* (Ongoing)	GB/T36276,UL1973,UL9540,UN38.3,UN3536,IEC62477,IEC60370 IED61000,IEC62619,NFPA855 Compliant		
Dimensions(W*D*H)mm	6058*2438*2896 (20ft Container)		
Weight(T)	≤43		

Liquid Cooling Energy Storage System II

ESD1267-05P3421



Excellent Security

1st Protection Stage Cell Thermal Runaway

- Real-time monitoring of cell temperature
- Cell thermal runaway is suppressed in the battery module via rapid immersion
- Battery temperature drops below critical temperature (No disintegration of battery diaphragm)

2nd Protection Stage Complete Fire Fighting System

- Battery module immersion fire extinguishing with a protection efficiency of over 90%
- Temperature+Smoke+Gas detection and early warning+Explosion-proof exhaust and ventilation
- Fully submerged Novec1230 extinguishing +fire water sprinkler system

3rd Protection Stage Multiple Anti-leakage Design

- Dry wet separation design: An integrated die-cast structure of the liquid cooling plate and pipeline
- Pipe leakage detection system: Leakage detector+leakage alarm notice
- Intelligent cabinet detector: Battery cabinet leakage detection system →BMS System→O&M Staff

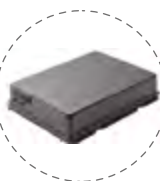
Cell



Module



Pack



Rack



System



- ✓ High Energy Density
- ✓ Large Capacity
- ✓ Intelligent Temperature Control



3421kWh
High Energy

12000
cycles
Long Life Span

4-Layer
Protection
High Safety

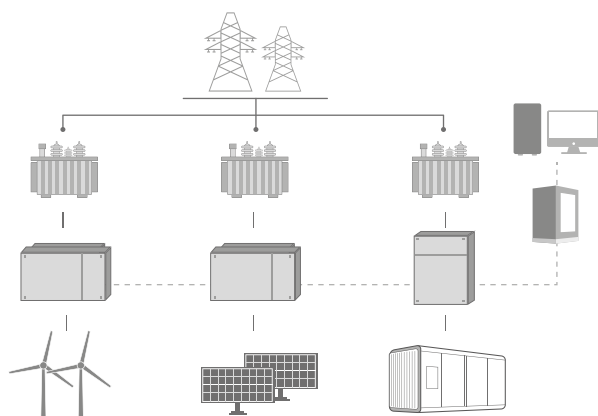
20ft
Standardization

3 °C
Intelligent
Temperature
Control

Low LCOS
Scientific
Design

ESS Product Solution

-  Capacity Design
-  Pre-sales Service
-  Installation&Commissioning
-  After-sale Guarantee



Enerlution Offering



Localized
Factory



Equipment
Supply



Construction/
Commission



Extended
Warranties



After-sales
Service



Financing
Service

Electrical

Cell Type	LFP-300Ah
Max.Temperature Difference	3°C
Configuration	Pack:1P44S Rack:1P396S Container System: 9P396S
Rated Energy (kWh)	Pack: 42.2 Rack:380.2 Container System: 3421.4
Rated Voltage (Vdc)	Pack: 140.8 Rack/Container System: 1267.2
Recommended Voltage(Vdc)	Pack:123.2~158.4 Rack/Container System:1108.8 ~ 1425.6
Max. Charge/ Discharge Rate	0.5P@25°C
Max. Charge Power(kW)	1710.7 (0.5P)

Conditions

Storage Temperature(°C)	-30~60
Operating Temperature(°C)	-30~50
Working Relative Humidity(%)	0~95(non-condensing)
Altitude (m)	<3000(≥3000 derating)

Parameters

Ingress Protection	IP54
Cooling	Liquid Cooling
Communication Interface	CAN, RS485, Ethernet
Communication Protocol	Modbus-TCP/IP
Fire Suppression	Pack level Temperature/Smoke/ Gas Detector + Water FSS/ Novec1230
Standards& Certification	GB/T36276, UL1973, UL9540, UL9540A, UN38.3, UN3536, IEC62477, IEC60730, IEC61000, IEC62619, NFPA855 Compliant
Dimensions (W * D * H)mm	20ft Container 6058 x 2438 x 2896
Weight (T)	<37