

OUTDOOR CONTAINER BATTERY SOLUTION

HT 3.7Mwh energy storage system is composed of 280Ah battery, liquid-cooled battery PACK, sub-control box, main control cabinet, liquid cooling unit, pipeline system, safety protection system, BMS system.

The rated capacity of the system is 3727.36kWh, and each cluster of batteries is equipped with a sub-control box for one-cluster charge and discharge management. Each cluster of batteries is made of 8 1P52S battery packs in series



Features:

- ▶ The use of mature, safe, economic, green, ultra-long life, high reliability of LiFePo4 battery
- ▶ Integrated self-developed BMS products, real-time monitoring and management
- ▶ Adopt a comprehensive battery protection strategy and fault detection and isolation measures to ensure the safety of the energy storage system
- ▶ Key components adopt internationally renowned brands, reliable quality
- ▶ High fire safety, integrated detection, fire extinguishing, combustible gas detection, smoke prevention, explosion relief function in one machine strategy control;
- ▶ Protection class IP55
- ▶ High degree of modularity, simple structure, easy to install and maintain
- ▶ Standard 20-foot container design to meet the needs of land and sea transportation
- ▶ Independent intelligent temperature control system, temperature difference between packs is less than 3℃, the module temperature fluctuates gently, extending the battery life
- ▶ Main control cabinet, which integrates DC confluence, power distribution, communication and control
- ▶ tuates gently, extending the battery life;
- ▶ With Pack-level targeted fire suppression function (optional)

High Power PCS Specifications

MODEL	HT LFP-3.2V-280A
Battery Parameters	
Rated Capacity(kwh)	3727.36 (P2,@25±3℃)
Charging/Discharging Rate	≤0.5CP
Nominal Voltage (V)	1331
Voltage Range(V)	1165~1497.6
Maximum charge/discharge power (kw)	1800
Operating temperature(charging)(℃)	0~50℃
Operating temperature (discharging) (℃)	-20~50℃
Recommended ambient temperature (℃)	25±10℃
Cycle life	≥6000 (25±10℃,P2,90%DOD,80%EOL)
Cooling method	Liquid cooling (Liquid cooling medium: water + glycol)
System Parameters	
BMS	Three-level architecture management system
Dimension(W*H*D)(mm)	6058*2438*2896(20ft)
Weight(T)	35
Auxiliary electrical parameter	36KW-400V/50Hz
Fire Protection	S-type aerosol/ Heptafluoropropane/ Perfluorohexadone (optional for module level fire protection)
Waterproof Degree	IP55
Corrosion Protection Level	C3(C4/C5 optional)
Lightning protection Level	II
Operating Temperature Range	-20+50℃ (derating>45℃)
Storage Temperature Range	-20~+55℃ (SOC@30%~40%,<6months)
Operating Humidity Range	0~95%(no condensation)
Installation	Outdoor
Working Condition	Max charge and discharge twice in a day
Communcation Interface	CAN,Ethernet, RS485
Communcation Protocal	Modbus TCP、Modbus RTU
Certification	UN38.3, IEC62619,CE

- ▶ The overall container adopts non-walk-in external maintenance design, integrated liquid cooling circulation system, internal fire protection design to achieve ESS safety protection, intelligent management application.
- ▶ Combined with the new energy generation side, the power grid side and the user side, the energy storage is applied in different application scenarios, such as peak regulation and frequency regulation, smoothing output, peak cutting and valley filling