

JinkoSolar to Provide 20.64 MWh Energy Storage System to Jinan Fenghui Tech Co., Ltd.

JinkoSolar, the global leading solar and ESS company today announced it has signed a contract with Jinan Fenghui Tech Co., Ltd. for a 20.64 MWh, utility-scale and on-grid liquid cooling energy storage system SunTera plus solar PV to be installed in Puritan, Fujian province.

The whole system consists of 6 sets of 3.44MWh JinkoSolar's flagship liquid cooling containerized utility-scale ESS SunTera, which integrates the company's core recirculating liquid cooling technology with other features including intelligent temperature control, cluster-level management, insulation monitoring and five-level safety protection, each enabling data sharing on cloud platform within the individual operating process, enhancing stability and efficiency.

One of the critical reasons that JinkoSolar's Suntera to be selected for this large capacity project is its better energy storage thermal management system that improves the safety of whole project.

Energy storage fire accidents occur frequently around the world, and the safety performance of energy storage needs to be upgraded urgently. Temperature is a key factor in battery safety performance and stability. The main manifestation is that high temperature will cause the internal materials of the battery to decompose, release a large amount of combustible gas and heat, and cause thermal runaway such as battery bulging, rupture, and aluminum foil melting, thus inducing safety accidents.



JKE-3440K-2H-LAA

Liquid cooling energy storage system



SunTera is JinkoSolar's new generation of liquid cooling energy storage product, which is equipped with 280Ah LFP cells and integrated with the industry's advanced design concept. SunTera is a safe, reliable, low-cost and high-performance product that provides customers with highly efficient integrated energy storage solutions. In the context of building a new type of power system, JinkoSolar will continue to uphold the mission of changing the energy structure and taking responsibility for the future to provide more reliable products and better experience to customers worldwide.



Safe and reliable

- Separated battery and electrical compartment design to effectively avoid thermal runaway
- Multi-level fire warning to monitor early thermal runaway



Excellent performance

- Highly efficient liquid cooling technology, the temperature difference of cell is controlled within 2.5 °C, which effectively improve the system life
- Intelligent cluster-level management to improve system discharge level



Flexible configuration

- Modular design to support 1000V /1500V systems
- Compatible with many tier-1 PCS brands,
 providing flexible and customized solutions



Cost reduction and efficiency

- Compact design with side-by-side layout and standard 20ft container design ensures 6.88MWh capacity in 40FT space
- Pre-installed design effectively reduces shipping, installation and O&M costs



ESS in Power Generation

Enhance the stability, continuity and controllability of new energy generation to provide stability support to the grid.



ESS in Grid Side

Participate in grid dispatching to meet the demand of grid peaking and frequency regulation, thus enhancing the flexibility and stability of the power system.



ESS in User Side

Relieving the load on the power grid, meeting the demand for electricity from different customers, improving the security of electricity on the customer's side, and thus enhancing the customer's experience of using electricity



Battery parameter	
Type of cell	Lithium Iron Phosphate(LFP)
Cell parameter	3.2V/280Ah
Max. charge/discharge power	0.5P
Configuration of system	1P384S×10
Rated capacity	3.44 MWh
Rated voltage	1228.8V
Voltage range	1075.2~1382.4V
Cooling method	Liquid Cooling
Operating temperature	-20~50°C
Humidity	≤95%RH, no condensation
Altitude	< 2000m / <4000m (optional, derating)
Noise level	< 80dB(A), @1m
IP grade	IP54
Storage temperature	-20~45°C
Corrosion-proof grade	C3 (EN ISO 12944) / C4 (optional) / C5(optional)
Fire protection	Temperature sensor+Smoke sensor+combustible gas detector+deflagration venting+fire extinguishing gas+water sprinkler
External communication interface	Ethernet/Fiber (optional)
Dimension(L×W×H)	6058×2438×2896mm
Weight	≈35000 kg