Building Your Trust in Solar

Jinkosolar Deliver 6.8MWh Liquid Cooling Utility Scale ESS to Mideast

Jinkosolar will deliver two 20ft containerized Sun-Tara with capacity of 6.8MWh, its Utility scale liquid cooling energy storage systems to Abaad Contracting Company in Mideast.

SunTera, Jinkosolar' s liquid cooling ESS features the highest energy density, ultra-safety, easier installation, smart O&M, and is compatible with all global energy standards, used by hundreds of energy storage projects around the globe.

SunTera employs advanced liquid cooling systems to regulate the temperature and control the temperature difference within 2.5 Celsius degrees during the operation of Utility scale energy storage systems. As a result, it improves heat dissipation, can handle higher heat loads while maintaining lower operating temperatures. Liquid cooling systems provide a more uniform cooling distribution between battery units. In addition, compared to traditional air-cooled containers, liquid cooling systems can increase energy density by 50%, saving over 40% of the floor space, and can save approximately 20% more auxiliary energy. Simultaneously, they maintain suitable cell temperatures and better temperature uniformity, effectively extending battery life, reducing economic input, and shortening the payback period.

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 ℃, 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℃
Humidity	≤95%RH, no condensation
Altitude	< 2000m / <4000m (optional, derating)
Noise level	< 80dB(A), @1m
IP grade	IP54
Storage temperature	-20~45℃
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