

JinkoSolar Powers Up Israel with Cutting-Edge 10MWh DC-Side Battery Storage System for Renewable Energy Solutions

JinkoSolar today announced it has delivered a 10MWh of DC-side battery storage system to Israel. With this pre-installed high energy density ESS, which is scalable, controllable, and flexible, a high-resilient renewable generation system, peak shaving, and backup power are ensured.



Figure 1: Project Photos

JinkoSolar's energy storage battery cabinets are an integrated high-energy density, long-lasting, battery energy storage system. Each battery cabinet includes an IP67 battery rack system, battery management system (BMS), fire suppression system (FSS), thermal management system, and auxiliary distribution system. It is manufactured to be an install-ready and cost-effective part of the total on-grid, hybrid, off-grid commercial/industrial, or utility-scale battery energy storage system.

Battery Packs utilize Lithium Iron Phosphate (LiFePO₄) battery cells connected in voltage DC configurations. Liquid cooling (air cooling as optional) is integrated

into each battery cabinet. NOVEC1230 fire suppression is also integrated into each outdoor cabinet allowing for a safer and more controlled energy storage system design for firefighting. The battery pack, string, and cabinets are certified by TUV to align with IEC/UL standards of UL 9540A, UL 1973, IEC 62619, etc.

Tighter control over subcomponent lead times enables a predictable supply chain, which allows the punctual delivery of high-quality products. The batteries and BMS systems are pre-integrated, and the systems are fully tested before being shipped to customers. This gives customers confidence in the product they receive and provides customers with a single entity that is responsible for manufacturing and delivering the solution.

For the global energy storage system (ESS) market, JinkoSolar promotes UL, IEC, and regional-specific certified products such as battery cells, modules, packs, racks, and DC battery blocks. For the DC side market, JinkoSolar's most popular offerings are the fully integrated 20-foot DC battery container block solutions that come in 2 variants – the air-cooled version at 1.5MWh and the liquid-cooled version at 3.4 MWh.



ESS in Power Generation

Support the widescale deployment of renewable energy and provide ancillary services of the grid



ESS in Power Transmission and Distribution

Release existing transmission capacity and relieve network peak load



ESS in Power Consumption

Supplement to the electricity supply, reducing the cost and ensuring the stable power network



| Items | Parameters | Remarks |
|--------------------------------------|------------------|-------------------------|
| Serial number | 300Ah cell | |
| Number of cells | 3564 | |
| Nominal energy | 3.38MWh | |
| Nominal capacity | 1350Ah | |
| Nominal voltage at DC side | 1267V | |
| DC voltage range | 1108.8~1425.6 | 396×(2.8~3.6V) |
| Nominal charge and discharge current | 1350A | |
| Number of cycles | >6000 cycles | 0.5P@ 90%DOD, 25±2°C |
| Charge retention rate at room | ≥95% | 25±2°C, 100%soc, 28day |
| calendar life | >15 years | 25±2°C, 50%SOC, 70% EOL |
| Operating temperature | 15°C~40°C | |
| Operating humidity | 5%~90% | |
| Overall dimension | 6058*2438*2896mm | |
| Total weight | About 36T | |
| insulation resistance | >0.1KΩ / V | |
| Rated charge-discharge ratio | 0.5P | |