

## JinkoSolar Ships 8 Units SunGiga ESS to Mideast

JinkoSolar will provide 8 units of its popular ESS product, SunGiga, with a rated capacity of 1.72MWh to Tadiran Energy Solution Ltd. in Mideast for peak shaving and various benefits.

The current major challenge in the development of battery storage systems lies in effectively managing the heat generated during the charging and discharging processes. Particularly in C&I scenarios, if the batteries are not operated at the appropriate temperature, it can lead to not only a decline in battery performance, a significant reduction in lifespan, and damage to battery components and system shutdown, but in severe cases, overheating of the batteries can cause them to reach a point where they cannot withstand the temperature, resulting in explosions and fires, leading to unimaginable losses. Therefore, the safety of the system remains a critical concern and even a first priority consideration.

Since JinkoSolar introduced the SunGiga with an incredible boast of performance and safety, it competes against its rivals by addressing many of the shortcomings of its predecessors in terms of charging and discharging efficiency and thermal runaways.

The advanced liquid cooling system developed by JinkoSolar for its SunGiga has made an already well-accomplished energy storage system even better, and the SunGiga deserves its popularity in the C&I market.



Figure 1: Project Photos

# SUNGIGA

## JKS-215KLAA-100PLAA

### Liquid cooling outdoor all-in-one cabinet

Jinko 215 KWh liquid cooling all-in-one product integrates packs, BMS, PCS and fire fighting equipments to provide customer with 1000V ESS solution. The system has a battery capacity of 215kWh and the rated power is up to 100 KW. It is characterized by flexible expansion, safety and reliability, intelligent liquid cooling and convenience. The modular design meets the needs of various application scenarios.



#### Flexible expansion

- All-in-one design with integrated PCS, reducing shipping and installation costs
- Flexible multi-cabinet expansion: Modular design, support multi-cabinet parallel connection

#### Reliable and safe

- Intelligent monitoring and linkage to ensure system security
- Temperature, smoke, and combustible gas sensors to apply rapid suppression of thermal runaway

#### Intelligent liquid cooling

- Non-uniform flow channel design to control cell temperature difference  $\leq 2^{\circ}\text{C}$
- Multiple liquid cooling control modes to reduce system power consumption

#### Smart and convenience

- Multiple operating modes to choose from and remote upgrade support
- Cloud-based monitoring and operating platform supporting multiple device access

### Application Scenarios



**Peak shaving**  
Peak & valley arbitrage



**Energy backup**  
Supply power to facilities when the grid is down, or apply in areas without power.



**Improve the stability of the electricity system**  
Enhance the stability, continuity and controllability of new energy generation



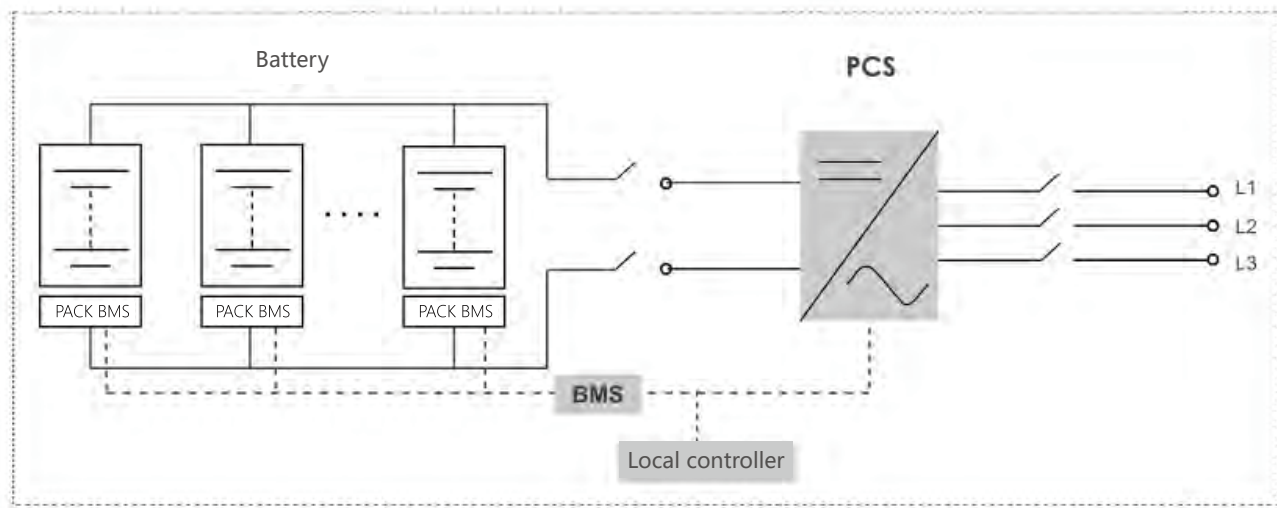
**Optimizing the use of renewable energy**  
Maximizing the use of PV to store spare power and discharge the power at night



**Arbitrage**  
Arbitrage by using peak and valley tariffs for different time periods.



**Cost reduction**  
Discharge during peak electricity demand to reduce expensive electricity bills



### Battery Parameter

Cell type	LFP 3.2V/280Ah
Max. charging/discharging rate	0.5P
Cell combination method	1P240S
PACK number	5 pcs
Rated power	215 kWh
Rated voltage	768V
Voltage range	672V~864V
Cooling method	Liquid cooling

### AC parameter

Rated AC power	100 kW
Rated voltage	400 Vac
AC side wiring method	Three-phase, three-wire
Rated frequency	50 Hz
Total current waveform distortion rate	< 3%
Cooling method	Intelligent forced air cooling

### System parameter

Ambient temperature	-20°C~50°C, reduce frequency over 45°C
Humidity	≤95%RH, no condensation
Altitude	≤2000m
Protection level	IP54
Firefighting method	Aerosol/Perfluorohexanone
Anti-corrosion grade	C3
Communication	RS485/CAN/Ethernet
Dimension(WidthxDepthxHeight)	1300x1300x2300 mm
Weight	~2200 kg