

JinkoSolar Energizes Nigerian Mini Grid with 2.03MWh Innovative C&I Energy Storage Solution

Jinkosolar today announced it has delivered its 2.03MWh C&I energy storage system (JKS196-675K-150H) to A4&T Power Solutions for a mini grid project under the REA Performance-based grant program under the REA in the south west region of Nigeria. These ESSs can provide robustness to the micro grid installation by improving resiliency of the electrical supply and creating an ROI for the stakeholders.

Jinkosolar's C&I ESS, a fully integrated, pre-configured battery storage solution uses best-in-class (LFP) battery chemistry to deliver 135 kWh of battery capacity. It includes inverter(s), battery cabinet, battery modules, BMS, local controller, cooling system, fire suppression system, all contained in outdoor rated enclosures. This turnkey solution reduces on-site installation time and can be easily scaled up.

The integrated multi-level Battery Management System (BMS) continuously monitors performance, to allow for system optimization and balancing. Air cooling (base option) or advanced liquid cooling (premium option) helps extend the lifespan of the batteries and ensures optimum performance even in the toughest of climates.

It has a slick compact design with the flexibility to fit into indoor as well as outdoor spaces, thanks to the outdoor-rated enclosure. With IEC62619, UL9540A, CE, UN 38.3 certifications, and built-in fire suppression, this ESS offers safe operation and peace of mind.

In addition to standalone operation in off-grid mode for power backup, Jinkosolar's C&I ESS provides peak shaving for demand charge management, load shifting for time-of-use savings.

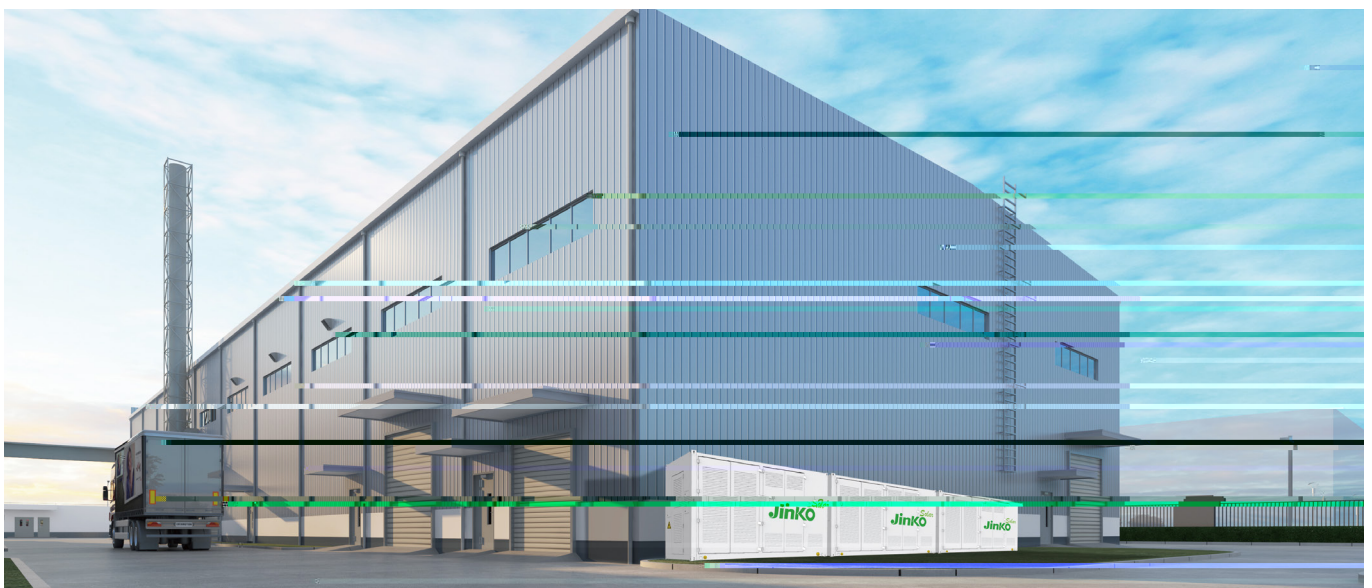
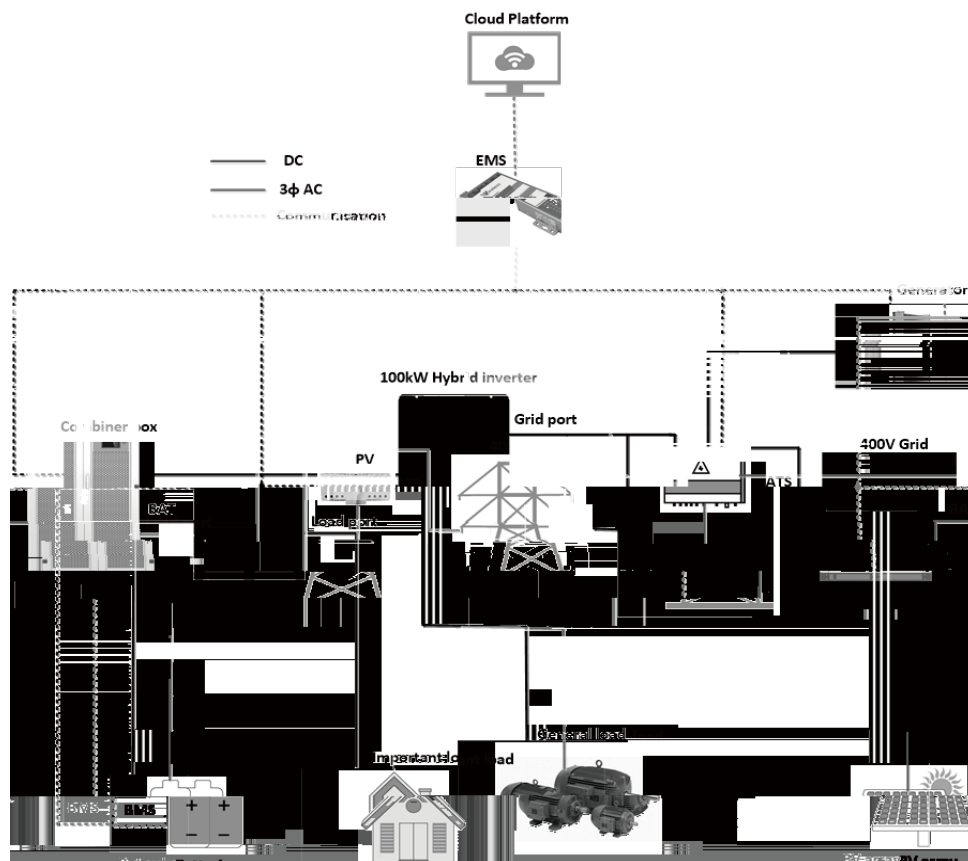


Figure 1: Project Photos



- LFP battery ensures longer battery life and higher safety
- Pre-populated transportation enables faster in-site installation
- Integrated and optimized fire protection design, higher security



SYSTEM TECHNICAL SPECIFICATIONS

DC Data		JKS196K-150H	JKS405K-150H	JKS675K-150H
Battery Chemistry		Lithium Iron Phosphate (LFP)		
Cycle Life	5,000 Cycles 1C@25℃ 90%DOD	5,000 Cycles 0.5C@25℃ 90%DOD		
Nominal Voltage		3.2V/96Ah		
Battery Configuration	2P8S	3P11S	5P11S	
DC Energy Storage Capacity	196kWh	405kWh	675kWh	
Max. Discharge Current	512V	704V		
Temperature Range	448V~576V	616V~792V		
Battery Communication Interface	RS485, Ethernet			
Battery Communication Protocol	Modbus RTU, Modbus TCP			
Max. System Voltage	1000V			
Max. Power Output	120/240kW			
Max. Charge Current	250-850V			
Max. Charge Voltage	450-850V			
AC Data				
AC Power Output	150kW			
Max. AC Power Output	165kW			
AC Voltage	400V			
AC Current	216A			
THD	≤3%			
Power Factor	1(leading) ~1(lagging)			
Frequency (Hz)	50/60Hz			
AC Protection	3W+N+PE			
Max. AC Power Output	150kW			
Response Time	≤20ms			
General Data				
Dimensions (W*D*H)	2,991*2,438*2,591mm		6,058*2,438*2,591mm	
Weight	<6T	<10T	<15T	
Protection Level	IP54			
Operating Temperature	-20~40℃			
Humidity	0~95% (non-condensing)			
Max. Altitude	3,000m			
Cooling System	HVAC			
Communication Interface	RS485, Ethernet, GPRS			
Certification	UL9540A, IEC62619, CE, UN38.3			