

## 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.

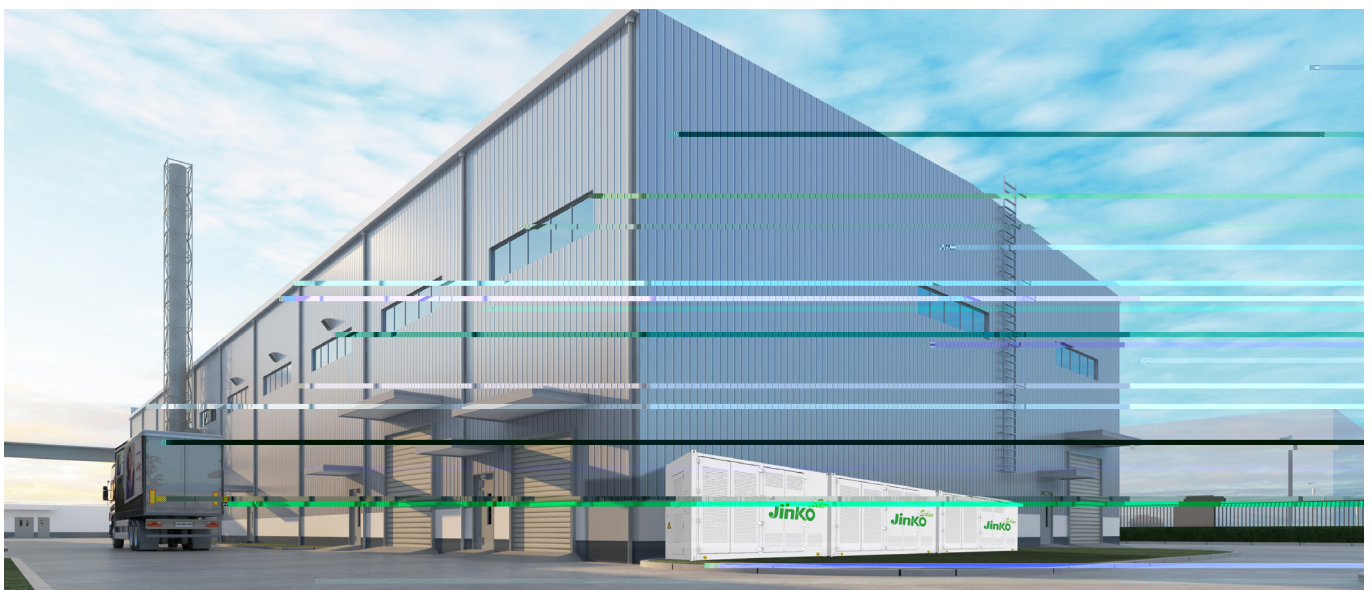
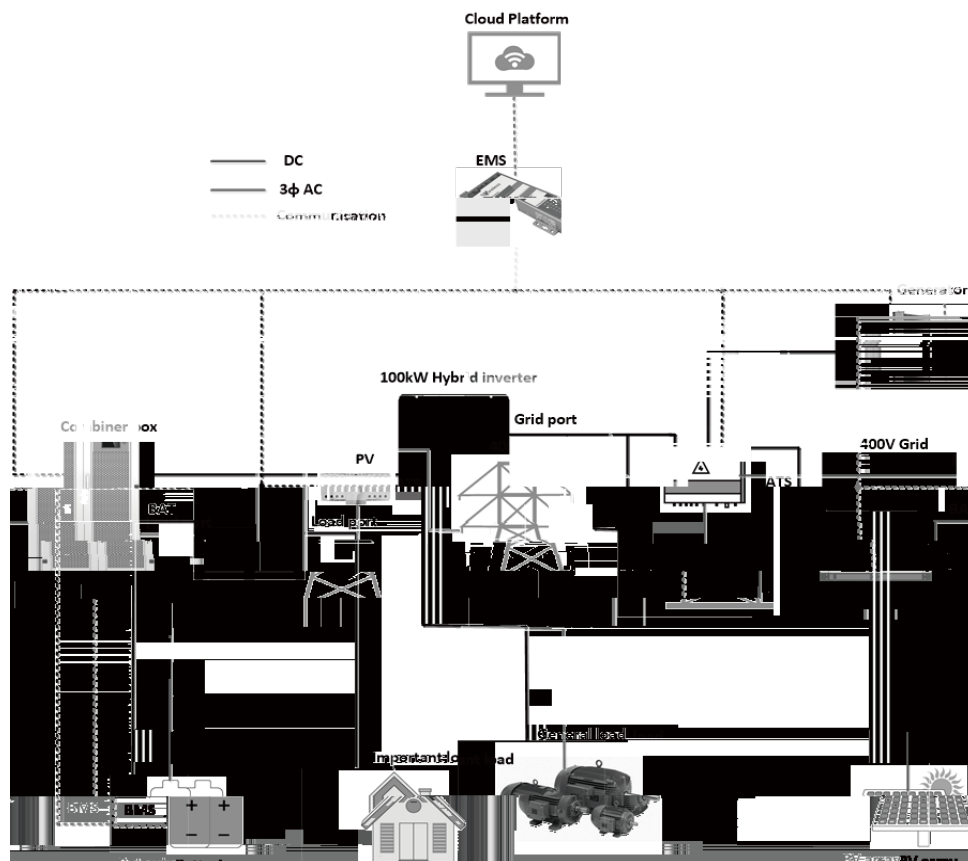


Figure 1: Project Photos



- 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 Current @100%       | 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 Grade                | 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 |                              |                     |              |