

JinkoSolar to Supply 1.1MWh/500kW PV-plus-Energy Storage for Kenya Refugee Camp

JinkoSolar will supply a 1.1 MWh energy storage system (ESS) integrated with a 500kW PV project to a refugee camp in Kenya that will secure a more stable supply of power.

JinkoSolar' s air cooling energy storage system is featured of 10% higher power density compared to its peers, a pre-assembled design, and an IP65 protection rating. The company also provides liquid cooling ESS called SunGiga with 20% higher power density compared to air cooling, 20% higher lifecycles (up to 15 years), 30% less power consumption, and high-efficiency thermal management. SunGiga is a brand-new solution for applications spanning generation, grid ancillary services, regulation, and peak shaving. The device comes in a 250kWh to 2.5 MWh capacity and supports voltages ranging from 1,000 V to 1,500 V. The company's patented thermal solution can run at high

power efficiency throughout a 24-hour cycle. The system's energy management software will give camp administrators the ability to prioritize and schedule the delivery of power based on residents' most critical needs.

While refugee camps are traditionally powered by diesel generators, diesel is more expensive than renewable energy and is dangerous to transport in a volatile region. Once the system delivers sufficient energy to the camp's households, it can then begin to tackle the clinic and school, for example, which currently rely on diesel generation.

JinkoSolar has developed and delivered a number of off-grid microgrid projects pairing solar, energy storage, and other resources in Asia, Africa.





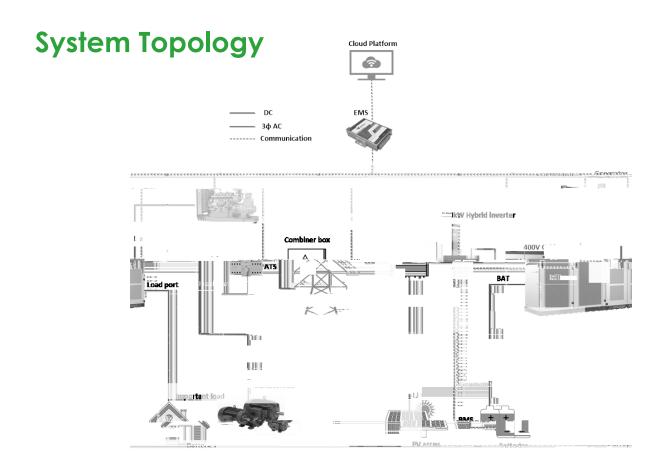
Figure 1: Project Photos

JKS540~1620K-500H



Key

- Highly integrated system with Parious working modes
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- Pre-installed product enables express shipping and faster
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SYSTEM TECHNICAL SPECIFICATIONS

DC Data	JKS540K-500H	JKS1080K-500H	JKS1620K-500H	
Battery Chemistry		Lithium Iron Phosphate (LFP)		
Cell Life Cycle 5,	.000 Cycles 1C@25 90%DOD	5,000 Cycles 0.5C@2	5 90%DOD	
Cell Specification		3.2V/96Ah		
Battery System Configuration	4P11S	8P11S	12P11S	
DC Rated Energy Capacity	540kWh	1080kWh	1620kWh	
Rated Voltage		704V		
Voltage Range		616V~792V		
BMS Communication Interface	RS485, Ethernet, GPRS			
BMS Communication Protoco	Modbus RTU Modbus TCP			
Max.PV Input Voltage		1000V		
Standard/Max PV Power	600/720kW			
MPPT voltage range		250-850V		
PPT voltage range@full load		450-850V		
AC Data				
Rated AC Power		500kW		
Maximum AC Power		550kW		
Rated Voltage		400V		
AC Rate of Current	722A			
THDi		3%		
Power Factor	1(leading) ~1(lagging)			
Rated Frequency (Hz)	50/60Hz			
AC Connection		3W+N+PE		
STS Power	500kW			
STS Switching Time		20ms		
General Data				
Dimension (W*D*H)	6,058*2,438*2,591mm	12,192*2,438*2,591mm		
Weight	<20T	<30T	40T	
Degree of Protection		IP54		
Operating Temperature Range	-20~40°C			
Relative Humidity	0~95% (non-condensing)			
Max. Working Altitude		3,000m		
Cooling Concept of DC hatch	HVAC			
Communication Interfaces	RS485, Ethernet, GPRS			
Certifications		UL9540A, IEC62619, CE, UN38.3		