

JKS540K-500H
JKS810K-500H
JKS945K-500H
JKS1080K-500H
JKS1215K-500H
JKS1350K-500H
JKS1620K-500H

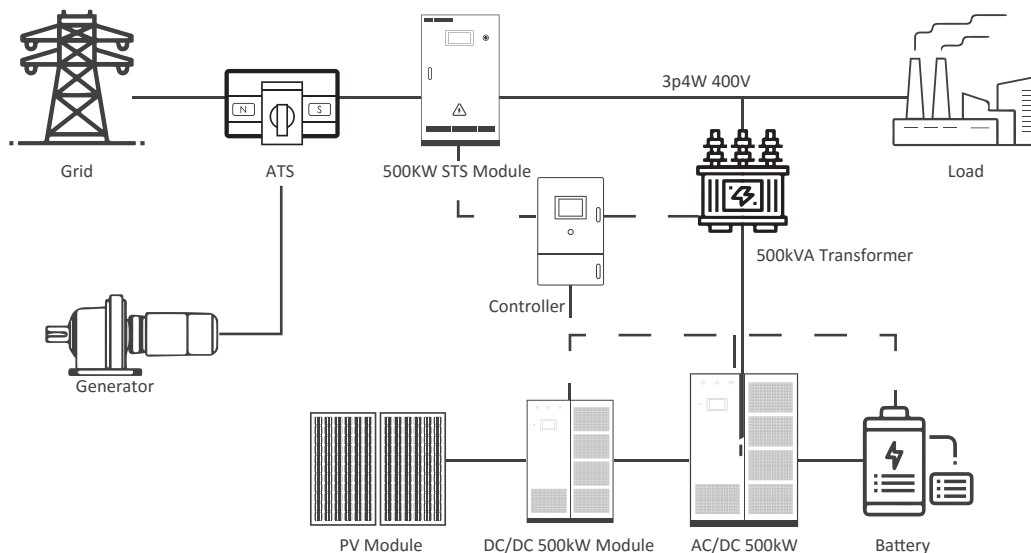


500kW-504/945/1215/1620kWh-solution internal component

Key Features

- The 500kW PCS cabinet contains a PCS with 500-850V DC voltage.
- Power supply will be switch to DG by the ATS and STS seamlessly transferred to PCS, when BESS and PV are short of supply.
- The battery strings are converted to 400V AC through the respective PCS, AC power is transferred to the isolated transformer supporting the load.
- The battery string is charged from corresponding PV string 500kW DC/DC during day time operation.

System Topology



□ Bey Components



Battery String-S135

- 0.5C Charge/Discharge;
- The power supply can be a single battery string or parallel battery strings;
- Easy configuration and maintenance;

Item	Data
Battery module	S135-11P12
Pack QTY	11
Nominal capacity	135kWh(126kWh@1C)
Rated voltage	704V
Voltage range	616V~792V
Pack	64V/96Ah@2P20S
String measuring voltage range	100~1,000V
String voltage detection accuracy	±1%
String voltage sampling period	100ms
String measuring current range	±300A
String current detection accuracy	≤1%
SOC calculation accuracy	≤7%
Input insulation resistance	≥10MΩ, 1,000V DC
Communication	ModbusTCP,ModbusRTU
System cycle life	≥5,000 0.5C@25°C 90%DOD
Dimensions (W*D*H)	890*750*1850mm
Weight	1,350kg
Certifications	UL1973, UL9540A, IEC62619, CE , UN38.3



Power Conversion System

- Single-stage three-level modularization;
- Multi-branch input to reduce battery series and parallels connection;

Item	Data
Battery voltage range	500~850V
DC max current	550A
Rated AC power	500kW
Maximum AC power	550kW
Rated voltage	400V
Grid voltage range	±15%
AC rate of current	722A
Output THDi	≤3%
Adjustable PF	1(leading)~1(lagging)
Grid frequency range	50/60±2.5Hz
Isolation method	3 Phase 4 Line Transformer
STS power	500kW
Dimensions (W*D*H)	1,200*800*2,160mm
Weight	3265kg



DC/DC Inverter

- Bi-direction DC-DC converter;
- Field-replaceable modular design;
- Shared or separated DC bus;

Item	Data
PV input voltage	420~850Vdc
PV input current	2*600A
PV string configuration	10Mppt
Max PV input power	600kWp
Rated DC output Power	2*250kW
DC bus coupled current	10*120A
Max DC output Power	2*270kW
Dimension(W*D*H)	600*720*2,050mm
Weight	2*450kg

SYSTEM TECHNICAL SPECIFICATIONS

Item	JKS540K-500H	JKS945K-500H	JKS1215K-500H	JKS1620K-500H
DC Data				
Battery chemistry	Lithium Iron Phosphate (LFP)			
Cell life cycle	80% Retention with 5,000 Cycles @0.5C 25°C			
Cell spec	3.2V/96Ah			
Battery string model	S135-11P12			
Number of strings	4	7	9	12
DC rated energy capacity	540kWh	945kWh	1215kWh	1620kWh
Rated voltage	704V			
Voltage range	616V~792V			
BMS communication interface	RS485, Ethernet			
BMS communication protocol	Modbus RTU, Modbus TCP			
AC Data				
Rated AC power	500kW			
Maximum AC power	550kW			
Rated voltage	400V			
Grid voltage range	±15%			
AC rate of current	720A			
Output THDi	≤3%			
Adjustable PF	1(leading)~1(lagging)			
Grid frequency range	50/60±2.5Hz			
AC connection	3W+N+PE			
Isolation method	3 Phase 4 Line Transformer			
General Data				
Dimension w/o clearances (W*D*H)	6,058*2,438*2,591mm		12,192*2,438*2,591mm	
Weight of the whole system	<15.5t	<26t	<30t	<30t
Degree of protection	IP54			
Operating temperature range	-20~40°C			
Relative humidity	0~95% (non-condensing)			
Max working altitude	3,000m/9,842ft			
Cooling concept of DC hatch	HVAC			
Communication interfaces	RS485, Ethernet, GPRS			
Certifications	UL1973, UL9540A, IEC62619, CE , UN38.3			

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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