

JKS135K-100H JKS196K-100H JKS270K-100H JKS405K-100H

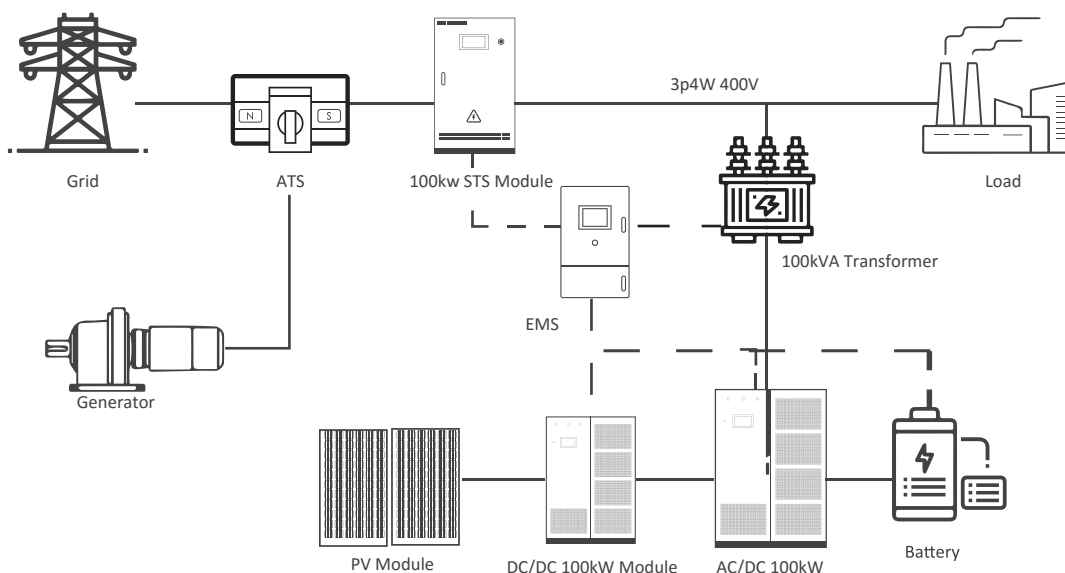


100kW-135/196/270/405kWh-solution internal component (405kWh as reference)

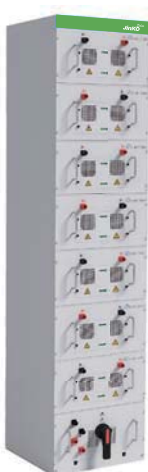
Key Features

- The 100kW PCS cabinet contains a Hybrid 100kW PCS with 420V~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 string is converted to 400V AC through the Hybrid PCS, AC power will be transferred to 400V AC by the isolated transformer to support the load.
- The battery string is charged from corresponding PV string 2*50kW DC/DC during day time operation.

System Topology



□ Key Components



Battery String-S98/135

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



Power Conversion System

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

Item	Data
Pack QTY	8/11
Nominal capacity	98/135(126kWh@1C)
Rated voltage	512/704
Voltage range	448V~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%
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
Dimension (W*D*H)	890*750*1850mm
Weight	700kg
Certifications	UL9540A, IEC62619, CE, UN38.3

Item	Data
PV input voltage	450~850Vdc(MPPT 250V~850V)
Number of MPPT	MPPT=2
PV string configuration	Voc<850Vdc
Max PV input power	120kWp
DC input voltage	420~850Vdc
DC input current	0~238A
Max DC input power	100kW
Rated output power	100kW
Rated grid voltage	400V
Grid voltage range	±15%
The frequency range of the power grid	50/60±2.5Hz
AC rated current	144A
Adjustable PF	1(leading)~1(lagging)
Off-grid voltage	400V
Off-grid voltage range	±10%
Off-grid frequency	50/60Hz
Weight	1120kg

SYSTEM TECHNICAL SPECIFICATIONS

Item	JKS135K-100H	JKS196K-100H	JKS270K-100H	JKS405K-100H
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/280Ah			
Battery string model	S98-8P12/S135-11P12			
Number of strings	1	2	2	3
DC rated energy capacity	135kWh	196kWh	270kWh	405kWh
Rated voltage	512/704			
Voltage range	448V~792V			
BMS communication interface	RS485, Ethernet			
BMS communication protocol	Modbus RTU, Modbus TCP			
AC Data				
Rated AC power	100kW			
Maximum AC power	110kW			
Rated grid voltage	400V			
Grid voltage range	±15%			
AC rate of current	144A			
Output THDi	≤3%			
Adjustable PF	1(leading)~1(lagging)			
Grid frequency range	50/60±2.5Hz			
Isolation method	3 Phase 4 Line Transformer			
General Data				
Dimension w/o clearances (W*D*H)	2,200*1,800*2,550mm		2,991*2,438*2,591mm	
Weight of the whole system	< 4.1t	< 5.7t	< 6.6t	< 7.5t
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	UL9540A, IEC62619, CE , UN38.3			

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