

# JKS69K-50H JKS135K-50H JKS196K-50H

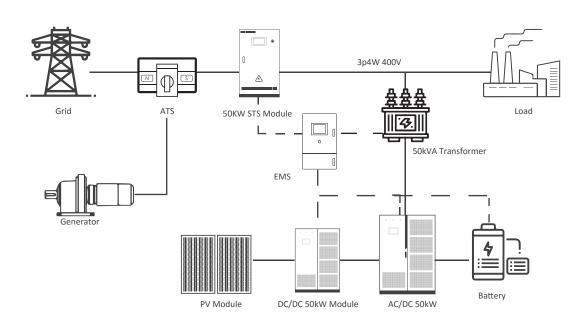


50kW-69/135/196kWh-solution internal component (69kWh as reference)

## **Key Features**

- The 50kW PCS cabinet contains a Hybrid 50kW PCS with 320V~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 are converted to 400V AC through the 50kW Hybrid PCS, AC power is transferred to the isolated transformer supporting the load.
- The battery string is charged from corresponding PV string 50kW DC/DC during day time operation.

### **System Topology**



# **□ Key Components**



### Battery String-S69/98/135

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

Item	Data	
Pack QTY	6/8/11	
Nominal capacity	69/98/135kWh	
Rated voltage	384/512/704V	
Voltage range	336V~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	ModubusTCP,ModubusRTU	
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	



### **Power Conversion System**

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

Item	Data	
PV input voltage	250~850Vdc(MPPT 450V~850V)	
Number of MPPT	MPPT=1	
PV string configuration	Voc<850Vdc	
Max PV input power	60kWp	
DC input voltage	320~850Vdc	
DC input current	0~187A	
Max DC input power	50kW	
Rated output power	50kW	
Rated grid voltage	400V	
Grid voltage range	±15%	
The frequency range of the power grid	50/60±2.5Hz	
AC rated current	72A	
Adjustable PF	1(leading)~1(lagging)	
Off-grid voltage	400V	
Off-grid voltage range	±10%	
STS Capacity	50KW	
Weight	720kg	

### **SYSTEM TECHNICAL SPECIFICATIONS**

Item	JKS69K-50H	JKS135K-50H	JKS196K-50H	
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/96h			
Battery string model	S69-6P11/S135-11P12/S98-8P12			
Number of strings	1	1	2	
DC rated energy capacity	69kWh	135kWh	196kWh	
Rated voltage	384/704/512V			
Voltage range	336V~432V/616V~792V/448V~576V			
BMS communication interface	RS485, Ethernet			
BMS communication protocol	Modbus RTU, Modbus TCP			
AC Data				
Rated AC power	50kW			
Maximum AC power	55kW			
Rated grid voltage	400V			
Grid voltage range	±15%			
AC rate of current	72A			
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			
Weight of the whole system	< 2.97t	< 3.8t	< 5.5t	
Degree of protection	IP54			
Operating temperature range	-20~40℃			
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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