

SPECIFICATION SHEET

INTEGRATED INVERTER & BATTERY-ARES SERIES

PRODUCT PRESENTATION

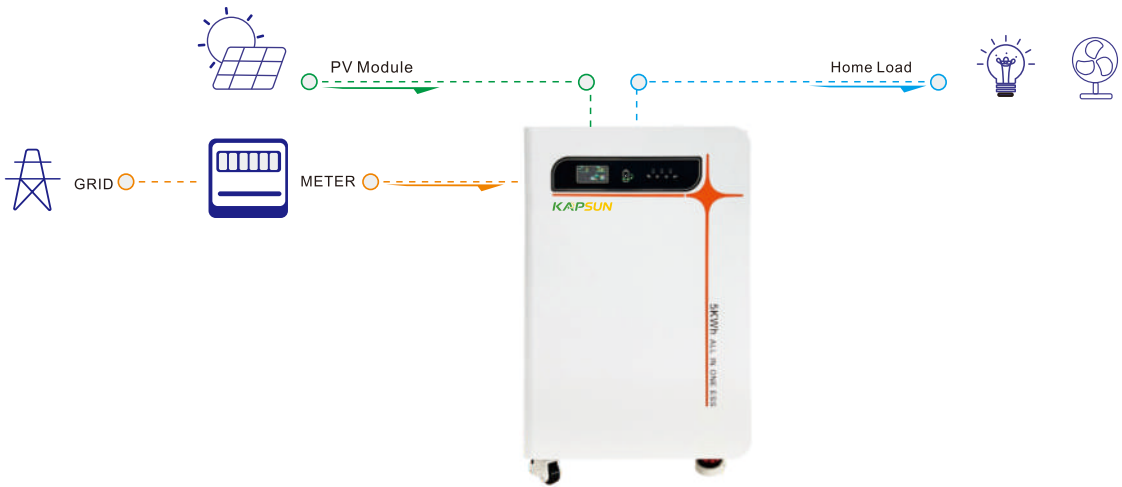
KAPSUN

Home ESS refers to the storage of electricity locally by household energy storage equipment for later use. ESS consists of energy storage batteries, inverters and other components. We use brand new A grade LiFePo4 battery, equipped with an intelligent battery management system for charging and discharging cycles. The inverter converts DC energy to AC energy to meet the requirements for household electricity. Normally this product is installed in combination with PV system to provide green electricity to household users, reduce energy consumption, and reduce negative impacts on the environment, it's widely used in remote areas or areas with unstable power supply, to provide reliable, stable, and cost-effective energy supply.

1

WORKING DIAGRAM

2



ENERGY STORAGE SYSTEM

PRODUCT FEATURES

- Private mold integrated design, battery and inverter highly integrated without additional wiring, universal wheels, flexible movement.
- Brand new A grade LiFePo4, 6000/8000 times cycle life, Lifespan up to 10 years.
- Integrated inverter and controller, Built-in Li-ion battery, Multiple current protection, MPPT max current over 100A/150A.
- Intelligent LCD display, LED indicator light, real-time monitoring of operating data.
- Full power pure sine wave, stable discharge waveform better protection for household appliances.
- Support RS485 and CAN communication ports, support RS232, can be connected to WIF module to check the working status of the inverter.

PRODUCT DIMENSION

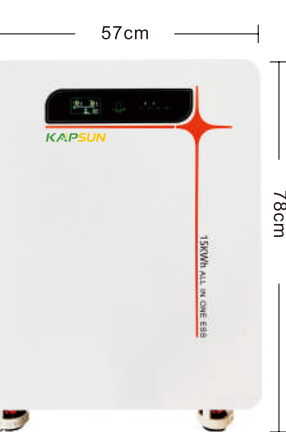
W:27CM



W:30CM

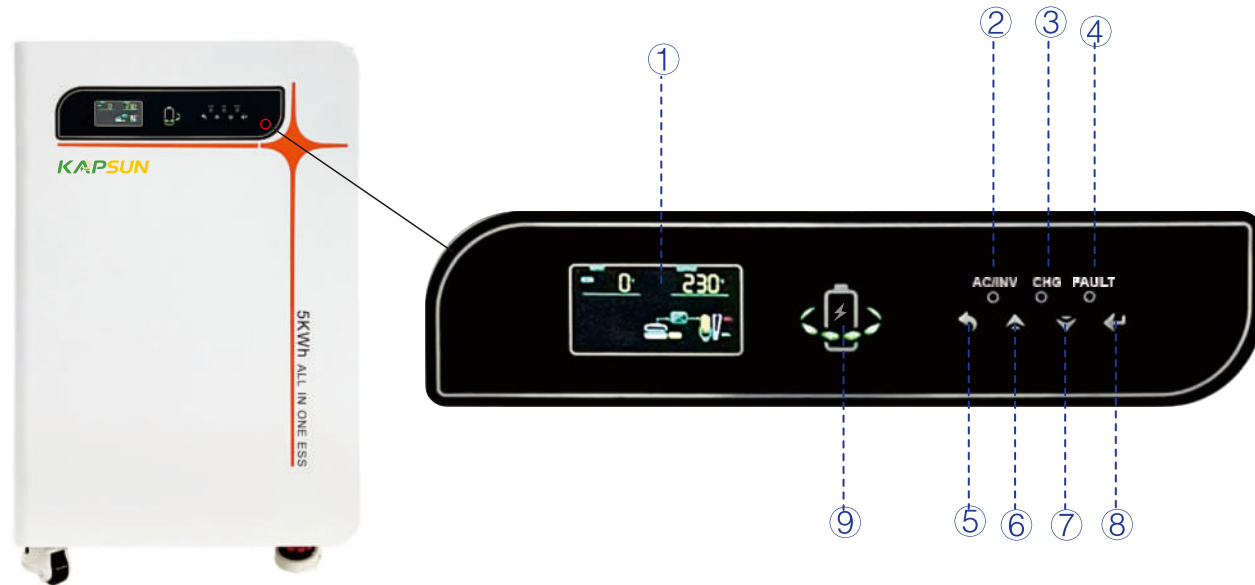


W:40CM



OPERATION FUNCTION (5KWH)

Inverter LCD Screen



NO.	Name	Instruction
①	LCD Screen	Display system operation data
②	Status Indicator	Always on: grid mode,output from AC Flash: battery mode,output from battery or PV
③	Charging Indicator capacity	Always on: battery fully charged Flash: battery charging
④	Fault Indicator	Always on: Inverter failure Flash:Inverter warning
⑤	ESC	ESC Mode
⑥	UP	Back to last option
⑦	Down	Turn to next option
⑧	Confirm	Confirm a selection in setup mode or enter setup mode
⑨	Battery operation status	Battery level indicator

OPERATION FUNCTION

Remark: Inverter Terminal Instruction

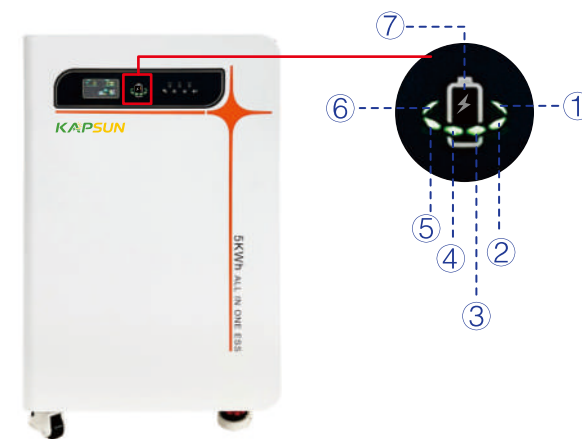


NO. Interface Instruction

- ① PV-
- ② PV+
- ③ AC OUT PE
- ④ AC OUT N
- ⑤ AC OUT L
- ⑥ AC IN PE
- ⑦ AC IN N
- ⑧ AC IN L
- ⑨ AC In Air Switch
- ⑩ Ac Out 1 Air Switch
- ⑪ AC Out 2 Air Switch

NO. Interface Instruction

- ⑫ Battery switch
- ⑬ Inverter Switch
- ⑭ Ductwork cover
- ⑮ Dry contact NO, normally open contact
- ⑯ Dry contact C, common contact
- ⑰ Dry contact NC, normally closed contact
- ⑱ Inverter communication port Rs232
- ⑲ BMS communication port Rs485
- ⑳ AC triangular plug output
- ㉑ AC triangular plug output



NO. Port Instruction

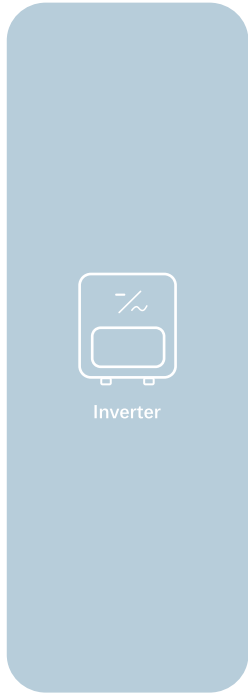
- ① 0%-16.6% capacity
- ② 16.6%-33.2% capacity
- ③ 33.2%-49.8% capacity
- ④ 49.8%-66.4% capacity
- ⑤ 66.4%-83% capacity
- ⑥ 83.0%-100% capacity
- ⑦ Warning Light

PRODUCT PARAMETER

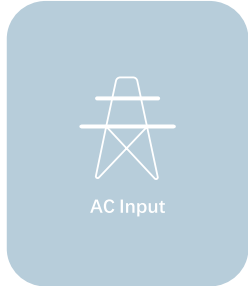
5

Packing List & Transportation
Packing Details

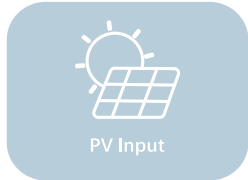
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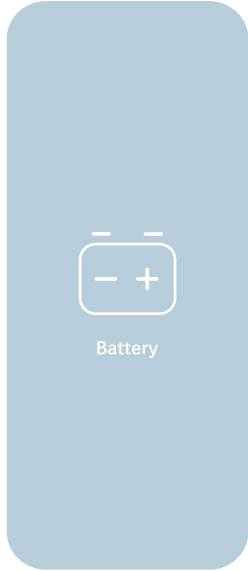
Model	SCAS-5.5KW-5KWH
Rated Power	5.5KW
AC Rated Voltage	230VAC
Rated Frequency	50Hz
Efficiency	>98%
Transfer Time	10ms
Waveform	Pure sinusoidal wave
Battery Overvoltage	58.4V
Battery Undervoltage Alarm	45V
Constant Voltage Charge	58.4V
Float Voltage	56V
Max Charging Current	100A
Communication Interface	RS232 (Inverter)/RS485 (BMS)



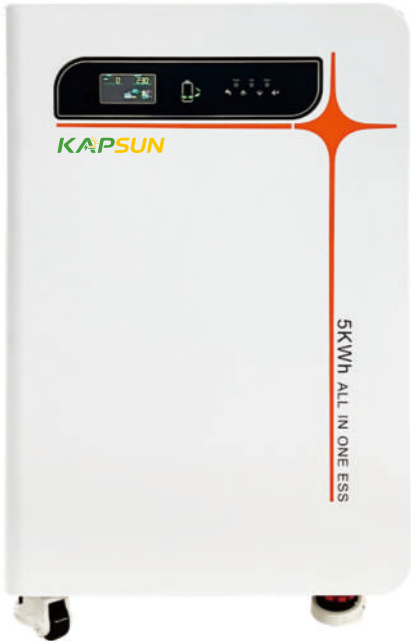
Nominal Voltage	230VAC
Voltage Range	90-280VAC
Rated Frequency	50Hz
Frequency Range	40-70Hz
Rated Current	30A
Max AC Current	60A



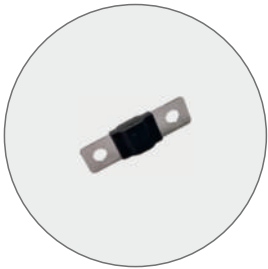
Max Voltage	500V
Optimum Voltage	300-400V
Voltage Range	120V-500VDC
Max Power	8500W



Rated Capacity	5120Wh(100Ah)
Nominal Voltage	51.2V
Discharge Voltage Range	43.2V-58.4V
Standard Charing Current	50A
Max Charging Current	100A
Max Discharging Current	100A
Depth of Discharge	95%
Communication Interface	CAN/RS485
Cycle Life	6000, 25±2℃, ≥0.5C, EOL80%
Working Temperature Range	Charge: 0℃ -50℃; Discharge: -20℃ -60℃
Storage Temperature	-10℃ -60℃
Dimension	45.2*73*27cm



+

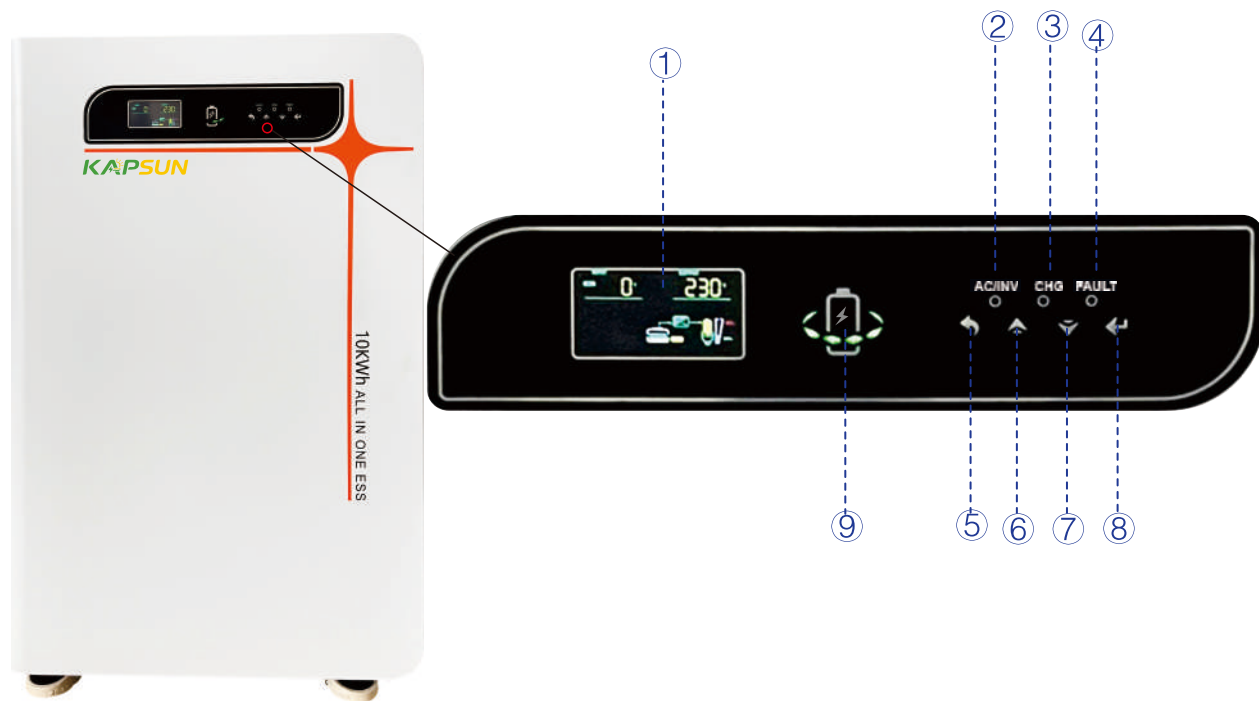


DC Fuse

Name	Item No	Components	CNT	Carton Size	N.W (Kg)	G.W (Kg)	Unit CBM (m³)	Total CBM (m³)
ARES SERIES 5Kwh	SCAS-5.5KW-5KWH	Inverter+Battery	1	80.5*52.8*47.3CM	63.4	76.8	0.201	0.201

OPERATION FUNCTION (10KWH)

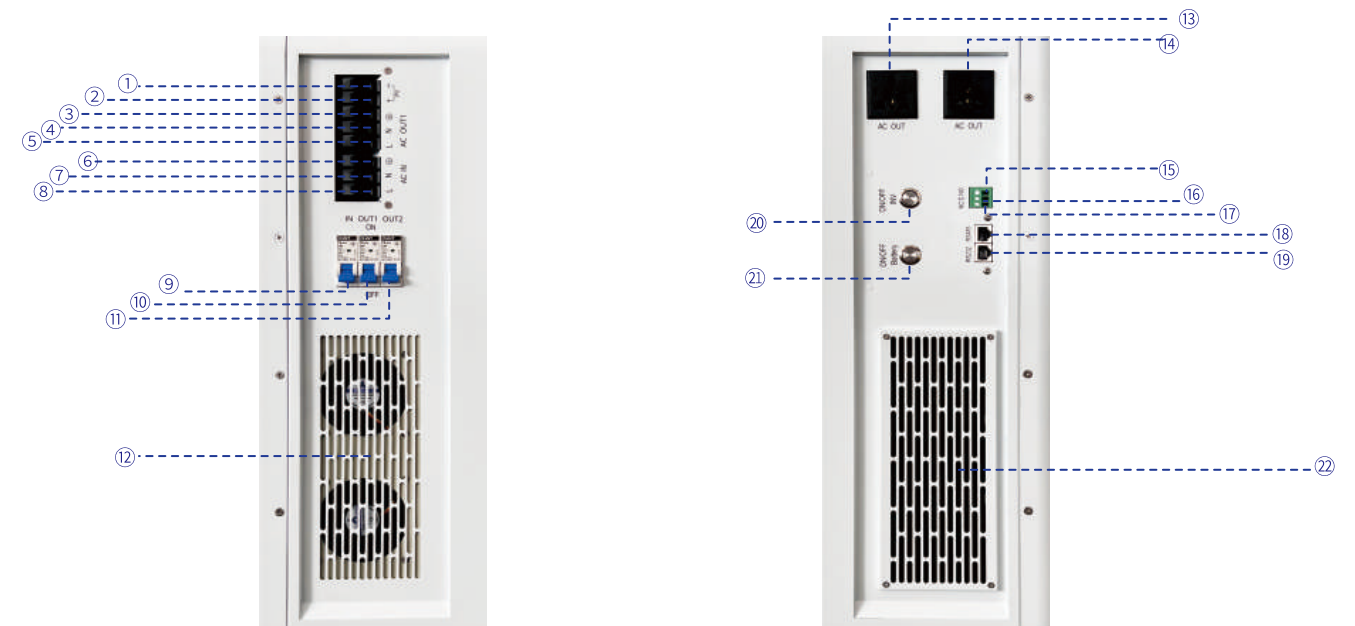
Inverter LCD Screen



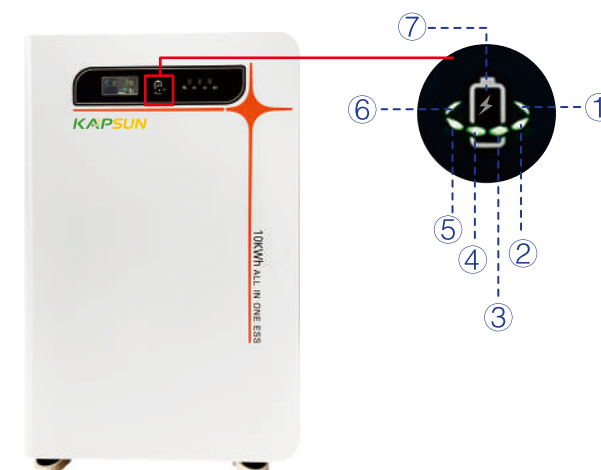
NO.	Name	Instruction
①	LCD Screen	Display system operation data
②	Status Indicator	Always on: grid mode,output from AC Flash: battery mode,output from battery or PV
③	Charging Indicator capacity	Always on: battery fully charged Flash: battery charging
④	Fault Indicator	Always on: Inverter failure Flash:Inverter warning
⑤	ESC	ESC Mode
⑥	UP	Back to last option
⑦	Down	Turn to next option
⑧	Confirm	Confirm a selection in setup mode or enter setup mode
⑨	Battery operation status	Battery level indicator

OPERATION FUNCTION

Remark: Inverter Terminal Instruction



NO.	Interface Instruction	NO.	Interface Instruction
①	PV-	⑪	AC Out 2 Air Swith
②	PV+	⑫	Cooling vents
③	AC OUT PE	⑬	AC triangular plug output
④	AC OUT N	⑭	AC triangular plug output
⑤	AC OUT L	⑮	Dry contact NO,normally open contact
⑥	AC IN PE	⑯	Dry contact C,commom contact
⑦	AC IN N	⑰	Dry contact NC,normally closed contact
⑧	AC IN L	⑱	BMS communication port Rs485
⑨	AC In Air Switch	⑲	Inverter communication port Rs232
⑩	Ac Out 1 Alr Swith	⑳	Inverter Switch
		㉑	Battery switch
		㉒	Dust cover



NO. Port Instruction

NO.	Port Instruction
①	0%-16.6% capacity
②	16.6%-33.2% capacity
③	33.2%-49.8% capacity
④	49.8%-66.4% capacity
⑤	66.4%-83% capacity
⑥	83.0%-100% capacity
⑦	Warning Light



Inverter

Model**SCAS-5.5KW-10KWH**

Rated Power	5.5KW
AC Rated Voltage	230VAC
Rated Frequency	50Hz
Efficiency	≥98%
Transfer Time	10ms
Waveform	Pure sinusoidal wave
Battery Overvoltage	58.4V
Battery Undervoltage Alarm	45V
Constant Voltage Charge	58.4V
Float Voltage	56V
Max Charging Current	100A
Communication Interface	RS232 (Inverter)/RS485 (BMS)



AC Input

Nominal Voltage

230VAC

Voltage Range 90–280VAC

Rated Frequency 50Hz

Frequency Range 40–70Hz

Rated Current 30A

Max AC Current 60A



PV Input

Max Voltage 500V

Optimum Voltage 300–400V

Voltage Range 120V–500VDC

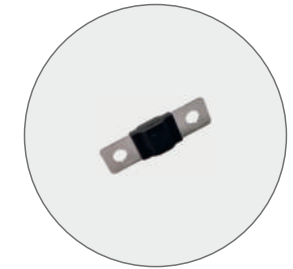
Max Power 8500W

Rated Capacity**10240Wh(200Ah)**

Nominal Voltage	51.2V
Discharge Voltage Range	43.2V–58.4V
Standard Charging Current	50A
Max Charging Current	100A
Max Discharging Current	100A
Depth of Discharge	95%
Communication Interface	CAN/RS485
Cycle Life	≥6000, 25±2℃, 0.5C, EOL80%
Working Temperature Range	Charge: 0℃ –50℃; Discharge: –20℃ –60℃
Storage Temperature	–10℃ –60℃
Dimension	48*84*30cm



Battery

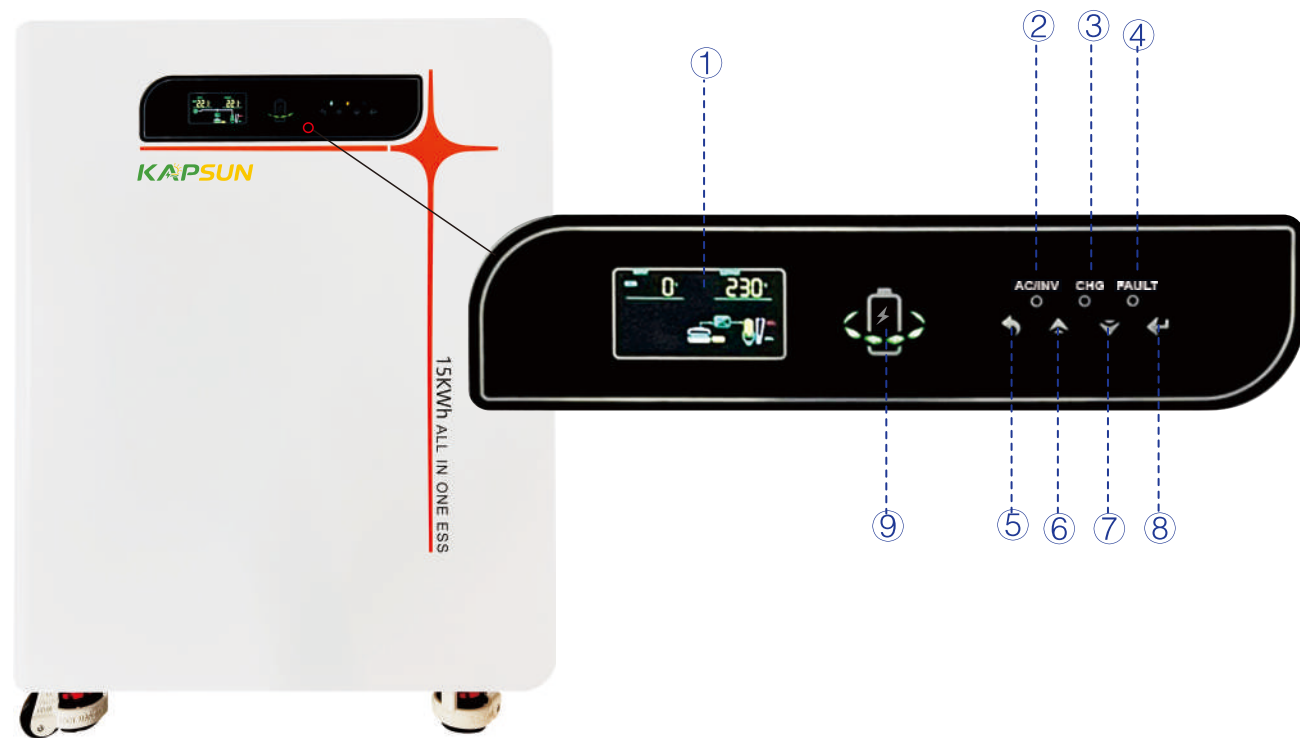


DC Fuse

Name	Item No	Components	CNT	Carton Size	N.W (Kg)	G.W (Kg)	Unit CBM (m³)	Total CBM (m³)
ARES SERIES 10kwh	SCAS-5.5KW-10KWH	Inverter+Battery	1	90*53*46.7CM	99.7	114	0.228	0.228

OPERATION FUNCTION (15KWH)

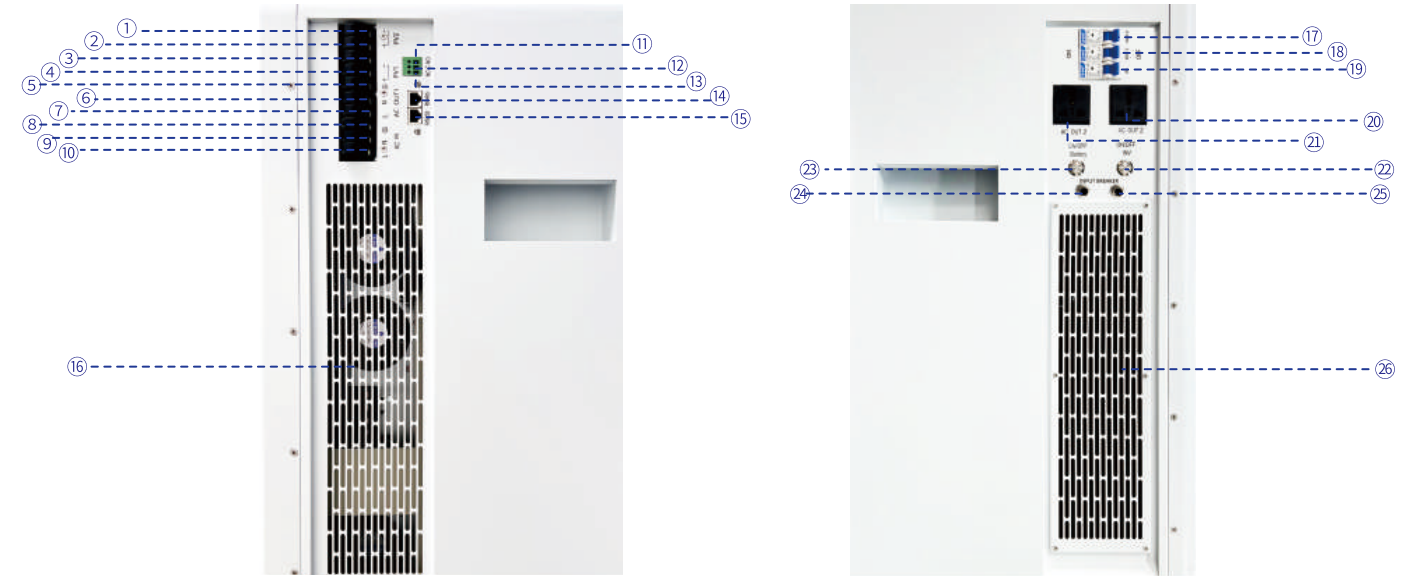
Inverter LCD Screen



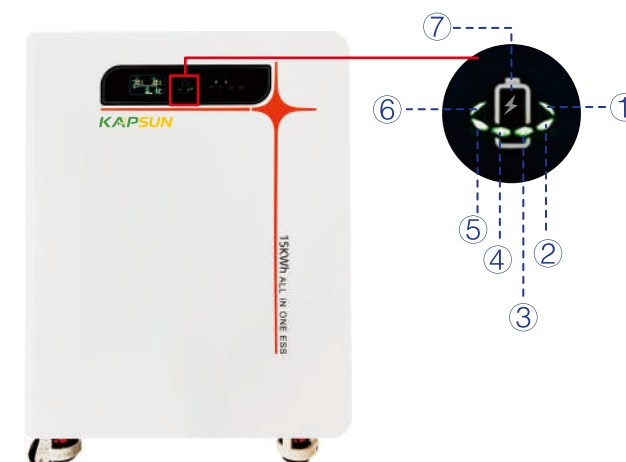
NO.	Name	Instruction
①	LCD Screen	Display system operation data
②	Status Indicator	Always on: grid mode,output from AC Flash: battery mode,output from battery or PV
③	Charging Indicator capacity	Always on: battery fully charged Flash: battery charging
④	Fault Indicator	Always on: Inverter failure Flash:Inverter warning
⑤	ESC	ESC Mode
⑥	UP	Back to last option
⑦	Down	Turn to next option
⑧	Confirm	Confirm a selection in setup mode or enter setup mode
⑨	Battery operation status	Battery level indicator

OPERATION FUNCTION

Remark: Inverter Terminal Instruction



NO.	Interface Instruction	NO.	Interface Instruction
①	PV2-	⑭	BMS communication port Rs485
②	PV2+	⑮	Inverter communication port Rs232
③	PV1-	⑯	Cooling vents
④	Pv1+	⑰	AC Out 2 Air Swith
⑤	AC OUT PE	⑱	Ac Out 1 Alr Swith
⑥	AC OUT1 N	⑲	AC In Air Switch
⑦	AC OUT1 L	⑳	AC OUT 2
⑧	AC IN PE	㉑	AC OUT 2
⑨	AC IN N	㉒	Inverter Switch
⑩	AC IN L	㉓	Battery switch
⑪	Dry contact NO,normally open contact	㉔	INPUT BREAKER
⑫	Dry contact C,commom contact	㉕	INPUT BREAKER
⑬	Dry contact NC,normally closed contact	㉖	Dust cover



NO.	Port Instruction
①	0%-16.6% capacity
②	16.6%-33.2% capacity
③	33.2%-49.8% capacity
④	49.8%-66.4% capacity
⑤	66.4%-83% capacity
⑥	83.0%-100% capacity
⑦	Warning Light



Inverter

Model**SCAS-11KW-15KWH**

Rated Power	11KW
AC Rated Voltage	230VAC
Rated Frequency	50Hz
Efficiency	≥98%
Transfer Time	10ms
Waveform	Pure sinusoidal wave
Battery Overvoltage	58.4V
Battery Undervoltage Alarm	45V
Constant Voltage Charge	58.4V
Float Voltage	56V
Max Charging Current	160A
Communication Interface	RS232 (Inverter)/RS485 (BMS)



AC Input

Nominal Voltage	230VAC
Voltage Range	90–280VAC
Rated Frequency	50Hz
Frequency Range	40–70Hz
Rated Current	60A
Max AC Current	120A



PV Input

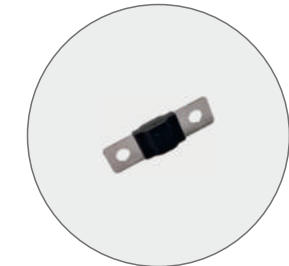
Max Voltage	500V
Optimum Voltage	300–400V
Voltage Range	120V–500V
Max Power	5500W*2

Rated Capacity**15360Wh(300Ah)**

Nominal Voltage	51.2V
Discharge Voltage Range	43.2V–58.4V
Standard Charging Current	100A
Max Charging Current	200A
Max Discharging Current	200A
Depth of Discharge	95%
Communication Interface	CAN/RS485
Cycle Life	≥8000, 25±2℃, 0.5C, EOL80%
Working Temperature Range	Charge: 0℃ –50℃; Discharge: –20℃ –60℃
Storage Temperature	–10℃ –60℃
Dimension	57*78*40cm



Battery



DC Fuse

Name	Item No	Components	CNT	Carton Size	N.W (Kg)	G.W (Kg)	Unit CBM (m³)	Total CBM (m³)
ARES SERIES 15kwh	SCAS-11KW-15KWH	Inverter+Battery	1	84.3*54.3*57.6CM	145	164	0.308	0.308