

SPECIFICATION SHEET

INTEGRATED INVERTER & BATTERY-ARES SERIES

PRODUCT PRESENTATION



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

45.2cm

73cm

W:30CM

48cm

84cm

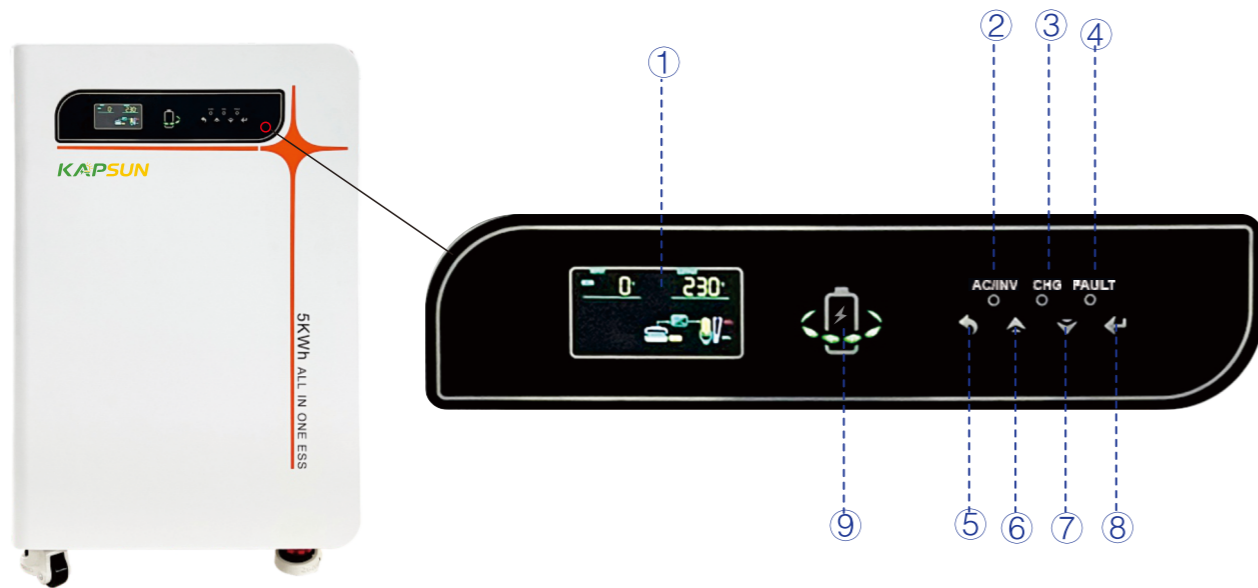
W:40CM

57cm

78cm

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

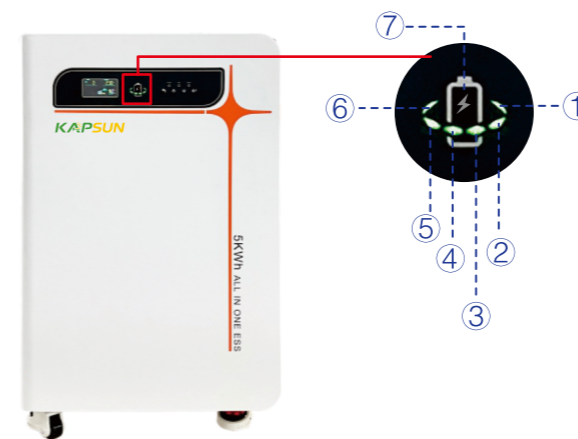


NO. Interface Instruction

- 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,commom 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

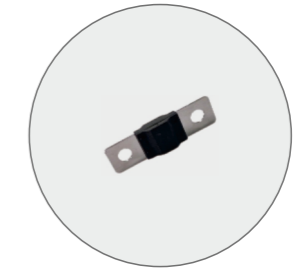
 <p>Inverter</p>	Model	SCAS-5.5KW-5KWH
	Rated Power	5.5KW
	AC Rated Voltage	230VAC
	Rated Frequency	50Hz
	Efficiency	>98%
	Transfer Time	10ms
	Waveform	Pure sinusoidal wave
	Battery Overvoltage	58.4V
	Battery Undervoltage Alarm	45V
	Constant Voltage Charge	58.4V
	Float Voltage	56V
	Max Charging Current	100A
Communication Interface	RS232 (Inverter)/RS485 (BMS)	
 <p>AC Input</p>	Nominal Voltage	230VAC
	Voltage Range	90-280VAC
	Rated Frequency	50Hz
	Frequency Range	40-70Hz
	Rated Current	30A
Max AC Current	60A	
 <p>PV Input</p>	Max Voltage	500V
	Optimum Voltage	300-400V
	Voltage Range	120V-500VDC
	Max Power	8500W
 <p>Battery</p>	Rated Capacity	5120Wh(100Ah)
	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°C, ≥0.5C, EOL80%
	Working Temperature Range	Charge: 0°C -50°C; Discharge: -20°C -60°C
	Storage Temperature	-10°C -60°C
	Dimension	45.2*73*27cm

Packing List & Transportation Packing Details

6



+

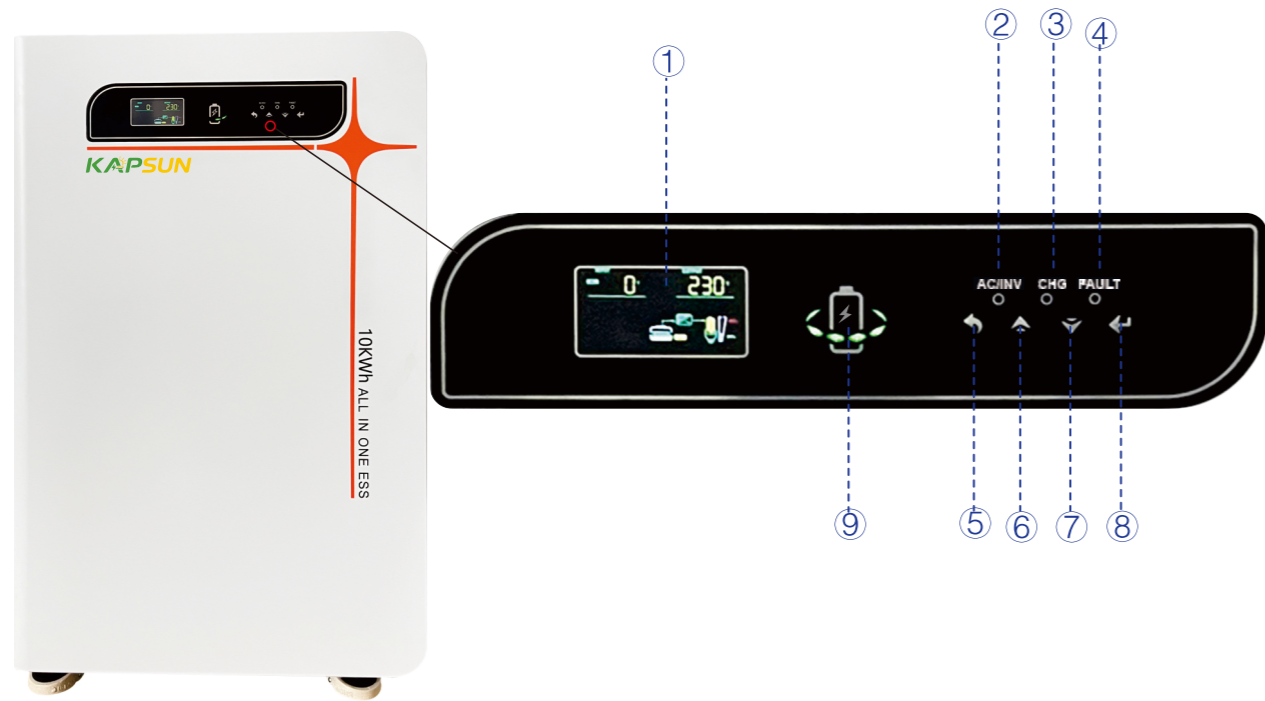


DC Fuse

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)

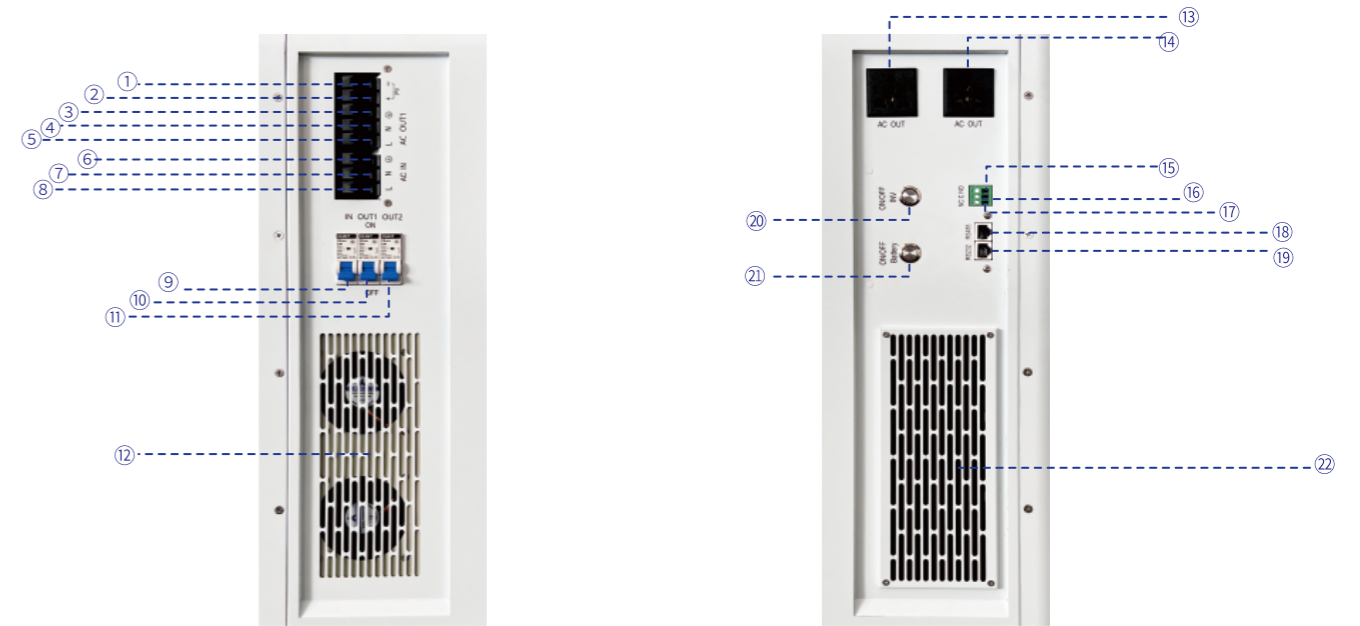
Inverter LCD Screen



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

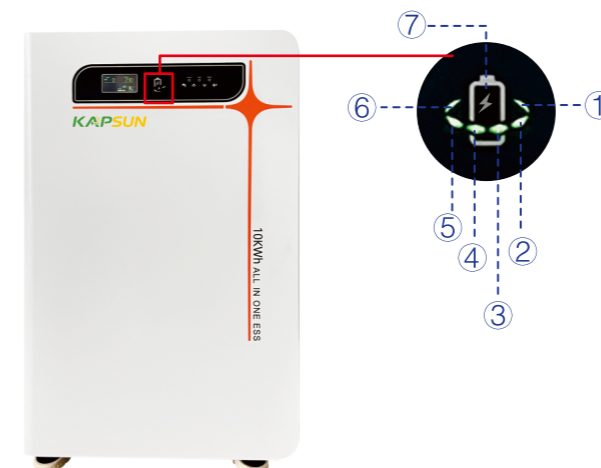


NO. Interface Instruction

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 Swith

NO. Interface Instruction

⑪	AC Out 2 Air Swith
⑫	Cooling vents
⑬	AC triangular plug output
⑭	AC triangular plug output
⑮	Dry contact NO,normally open contact
⑯	Dry contact C,commom contact
⑰	Dry contact NC,normally closed contact
⑱	BMS communication port Rs485
⑲	Inverter communication port Rs232
⑳	Inverter Switch
㉑	Battery switch
㉒	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-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



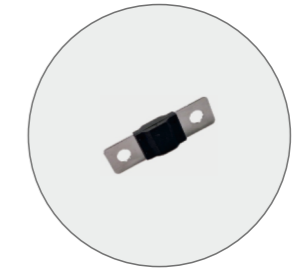
Battery

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°C, 0.5C, EOL80%
Working Temperature Range	Charge: 0°C -50°C; Discharge: -20°C -60°C
Storage Temperature	-10°C -60°C
Dimension	48*84*30cm



+

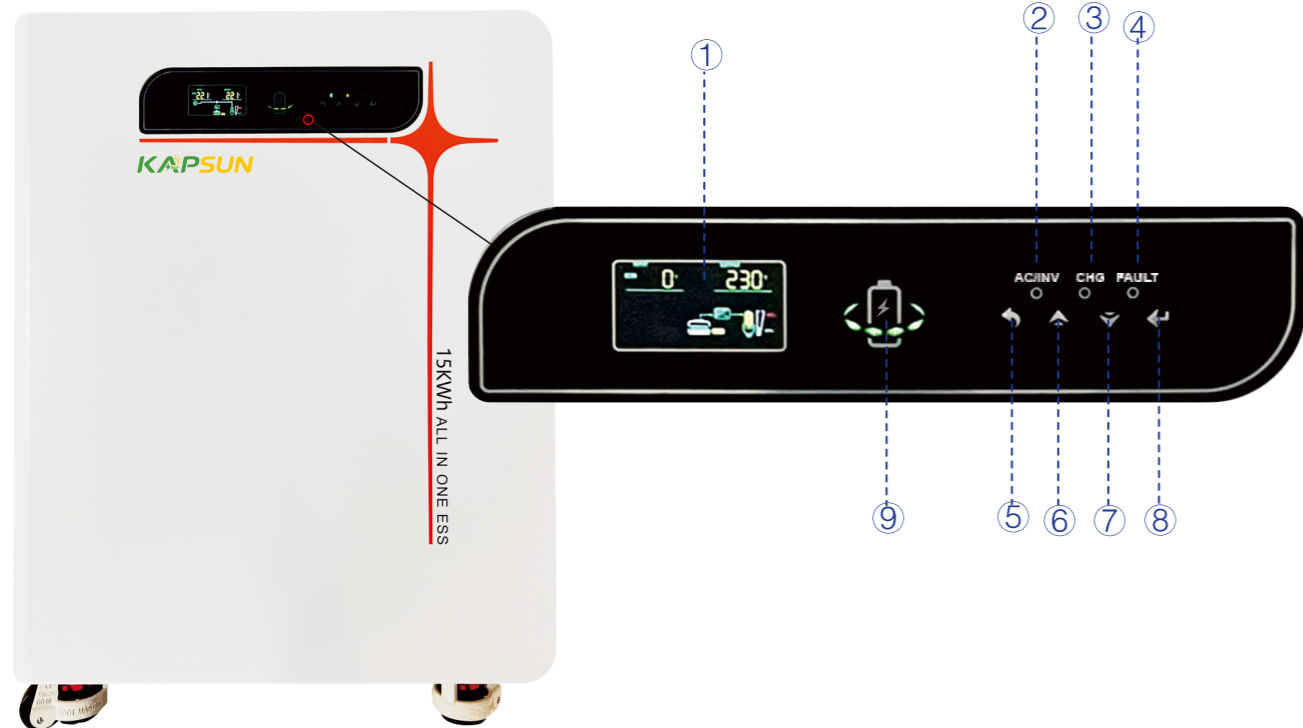


DC Fuse

Name	Item No	Components	CNT	Carton Size	N.W (Kg)	G.W (Kg)	Unit CBM (m ³)	Total CBM (m ³)
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

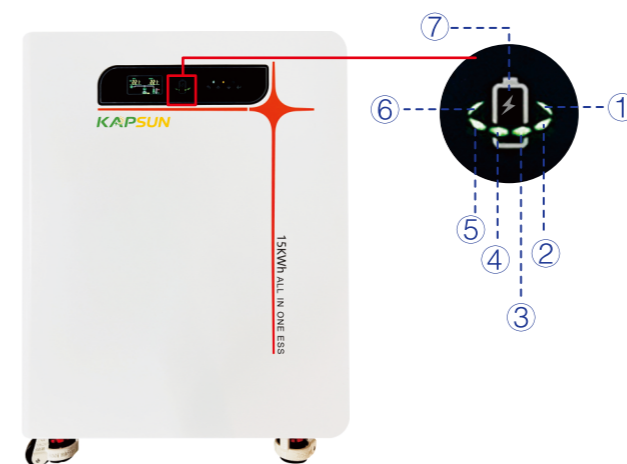


NO. Interface Instruction

①	PV2-
②	PV2+
③	PV1-
④	Pv1+
⑤	AC OUT PE
⑥	AC OUT1 N
⑦	AC OUT1 L
⑧	AC IN PE
⑨	AC IN N
⑩	AC IN L
⑪	Dry contact NO,normally open contact
⑫	Dry contact C,commom contact
⑬	Dry contact NC,normally closed contact

NO. Interface Instruction

⑭	BMS communication port Rs485
⑮	Inverter communication port Rs232
⑯	Cooling vents
⑰	AC Out 2 Air Swith
⑱	Ac Out 1 Alr Swith
⑲	AC In Air Switch
⑳	AC OUT 2
㉑	AC OUT 2
㉒	Inverter Switch
㉓	Battery switch
㉔	INPUT BREAKER
㉕	INPUT BREAKER
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)

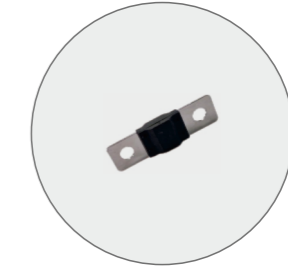
Nominal Voltage	51.2V
Discharge Voltage Range	43.2V-58.4V
Standard Charging Current	100A
Max Charging Current	200A
Max Discharging Current	200A
Depth of Discharge	95%
Communication Interface	CAN/RS485
Cycle Life	≥8000, 25±2°C, 0.5C, EOL80%
Working Temperature Range	Charge: 0°C -50°C; Discharge: -20°C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