SPECIFICATION SHEET

1

INTEGRATED INVERTER & BATTERY-ARES SERIES

PRODUCT PRESENTATION

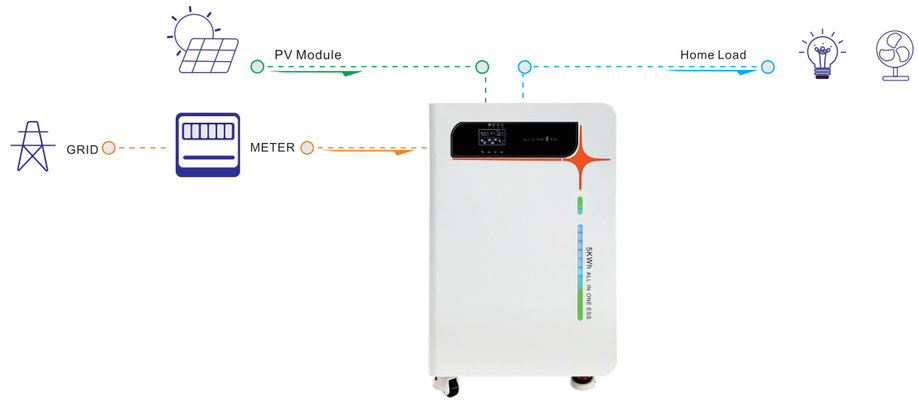
Home ESS refers to the storage of electricity locally by household energy storage equipment for later use. ESS consists of energy storage batteries inverters and other components.

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.



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 120A/160A.
- 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.

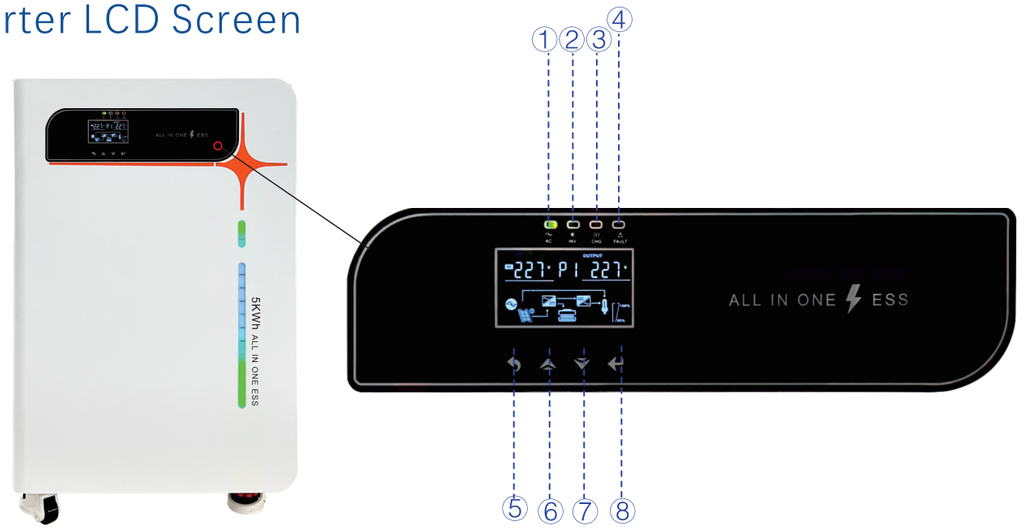
PRODUCT DIMENSION



OPERATION FUNCTION

(5KWH)

Inverter LCD Screen



NO.	Name	Instruction
①	AC	Status indicator (Green)
②	Inverter	Invert indicator (Yellow)
③	Charging	Charging indicator (Yellow)
④	Fault	Fault indicator (Red)
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

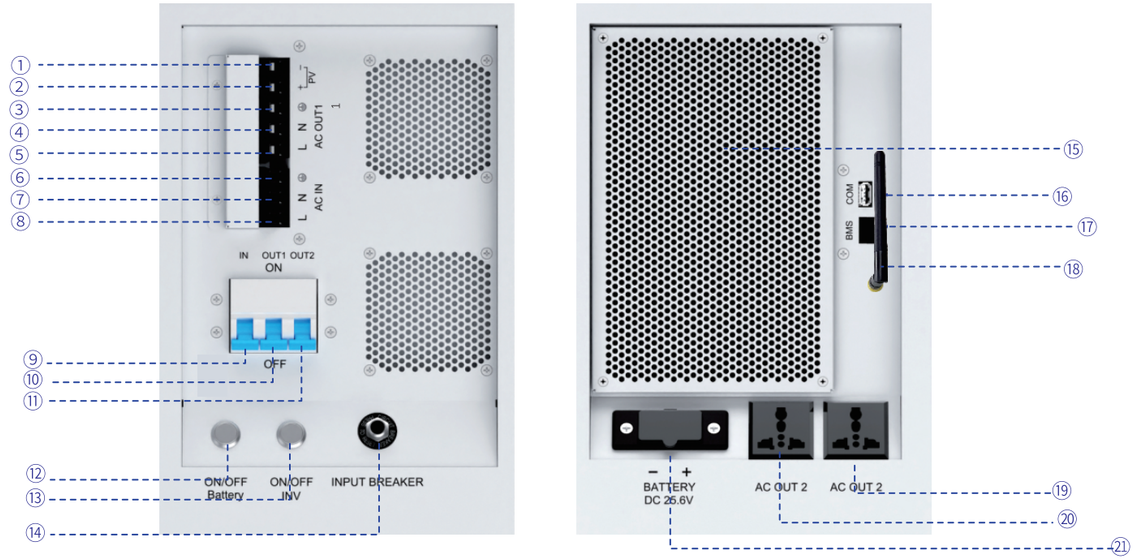
Battery Indicator Light



OPERATION FUNCTION

(5KWH)

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
⑪	AC Out 2 Air Swith

NO.	Interface Instruction
⑫	Battery switch
⑬	Inverter Switch
⑭	Input Thermal Overload Reset Switch
⑮	Air intake
⑯	USB port: Wi-Fi dongle port
⑰	BMS RS-485 Communication Port
⑱	WiFi Antenna
⑲	AC Out 2
⑳	AC Out 2
㉑	External DC battery connector

PRODUCT PARAMETER

Inverter

Model	SCAS-5.5KW-5KWH
Rated Power	5KW
AC Rated Voltage	230VAC
Rated Frequency	50/60Hz
Efficiency	⩾98%
Transfer Time	10ms
Waveform	Pure sinusoidal wave
Battery Overvoltage	29.2V
Battery Undervoltage Alarm	22.5V
Constant Voltage Charge	29.2V
Protection Voltage	21.6V
Float Voltage	28V
Max Charging Current	200A
Communication Interface	USB(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	160A

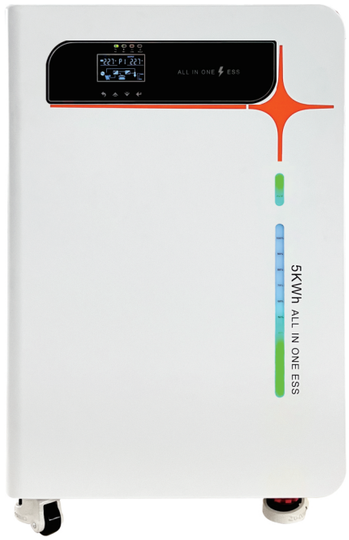
PV Input

Max Voltage	500V
Optimum Voltage	300V-400V
Voltage Range	60-500VDC
Max Power	27A/9000W

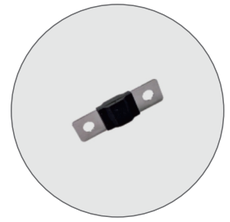
Battery

Rated Capacity	5120Wh(200Ah)
Nominal Voltage	25.6V
Discharge Voltage Range	21.6V-29.2V
Standard Charing Current	100A
Max Charging Current	200A
Max Discharging Current	200A
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	-20℃ -60℃
Dimension	45.2*73*27CM

Packing List & Transportation
Packing Details



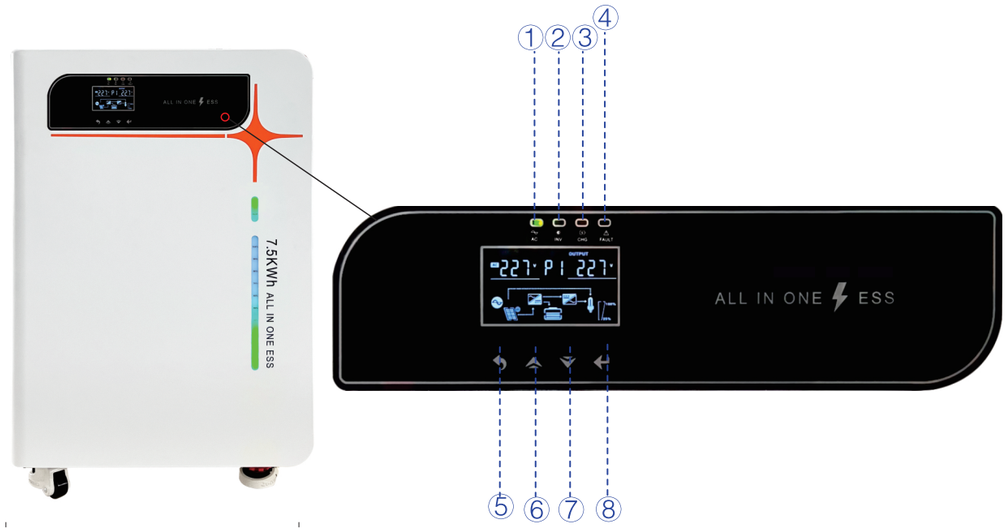
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DC Fuse

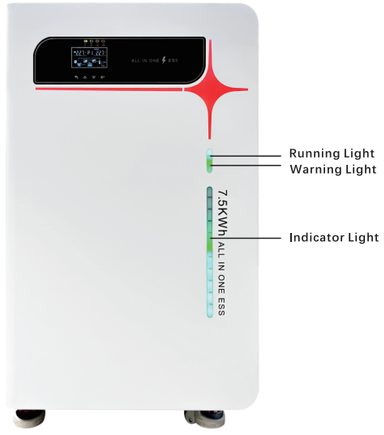
Name	Item No	Components	CNT	Carton Size	N.W (Kg)	G.W (Kg)	Unit CBM (m^3)	Total CBM (m^3)
ARES SERIES 5KWH	SCAS-5.5KW-5KWH	Inverter+Battery	1	79*51.2*43CM	63.4	76.8	0.174	0.174

OPERATION FUNCTION
(7.5KWH/8.5KWH)
Inverter LCD Screen

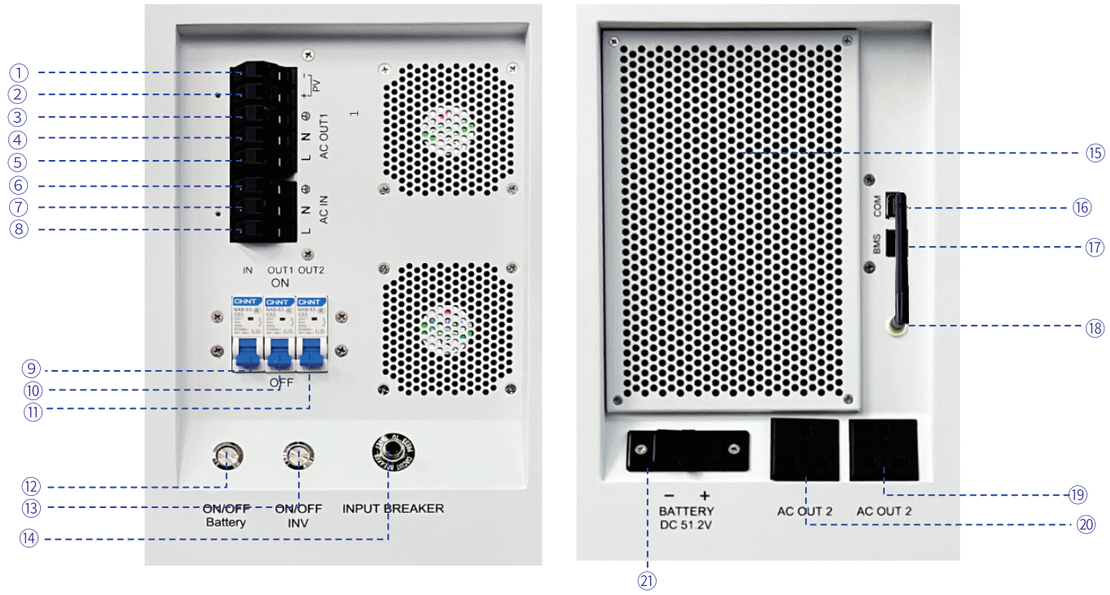


NO.	Name	Instruction
①	LCD Screen	Display system operation data
②	Status Indicator	Always on: grid mode,output from AC Flash: battery mode,output from battery or PV
③	Charging Indicator capacity	Always on: battery fully charged Flash: battery charging
④	Fault Indicator	Always on: Inverter failure Flash:Inverter 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

Battery Indicator Light



OPERATION FUNCTION
(7.5KWH/8.5KWH)
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
⑪	AC Out 2 Air Swith

NO.	Interface Instruction
⑫	Battery switch
⑬	Inverter Switch
⑭	Input Thermal Overload Reset Switch
⑮	Air intake
⑯	USB port: Wi-Fi dongle port
⑰	BMS RS-485 Communication Port
⑱	WiFi Antenna
⑲	AC Out 2
⑳	AC Out 2
㉑	External DC battery connector

PRODUCT PARAMETER

Inverter

Model	SCAS-5KW-7.5KWH
Rated Power	5KW
AC Rated Voltage	230VAC
Rated Frequency	50/60Hz
Efficiency	⩾98%
Transfer Time	10ms
Waveform	Pure sinusoidal wave
Battery Overvoltage	29.2V
Battery Undervoltage Alarm	22.5V
Constant Voltage Charge	29.2V
Protection Voltage	21.6V
Float Voltage	28V
Max Charging Current	200A
Communication Interface	USB(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	160A

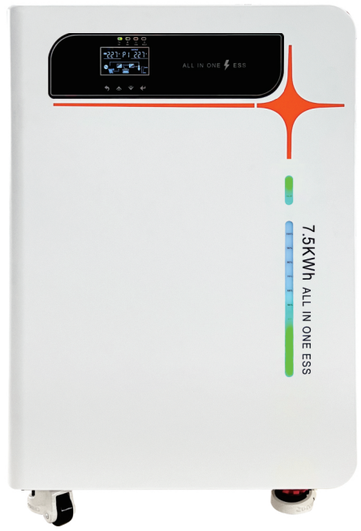
PV Input

Max Voltage	500V
Optimum Voltage	300V-400V
Voltage Range	60-500VDC
Max Power	27A/9000W

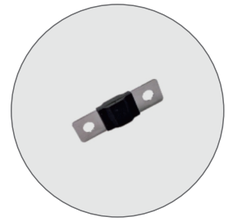
Battery

Rated Capacity	7680Wh(300Ah)
Nominal Voltage	25.6V
Discharge Voltage Range	21.6V-29.2V
Standard Charing Current	100A
Max Charging Current	200A
Max Discharging Current	200A
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	-20℃ -60℃
Dimension	45*77*29CM

Packing List & Transportation
Packing Details



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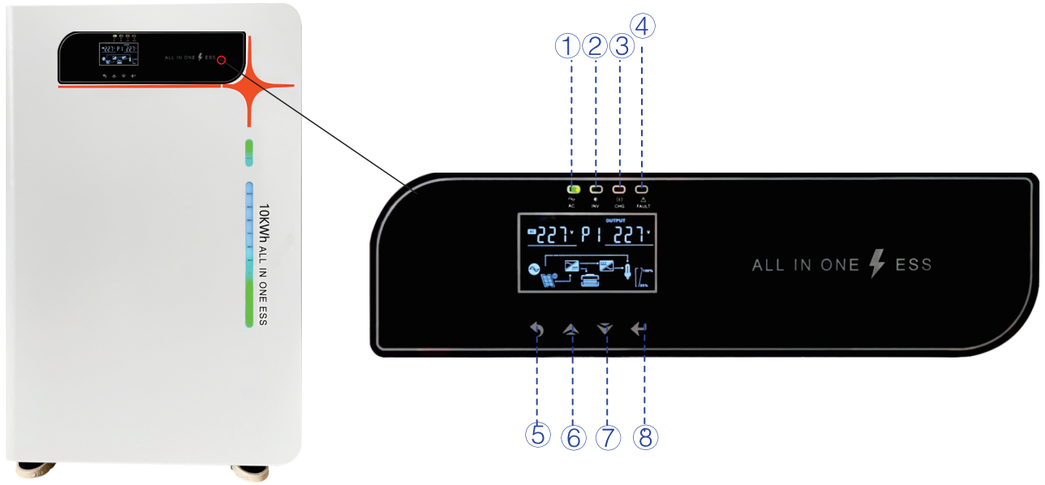


DC Fuse

Name	Item No	Components	CNT	Carton Size	N.W (Kg)	G.W (Kg)	Unit CBM (m^3)	Total CBM (m^3)
ARES SERIES 7.5KWH	SCAS-5KW-7.5KWH	Inverter+Battery	1	85.1*53.6*46.6CM	71.7	85.7	0.213	0.213

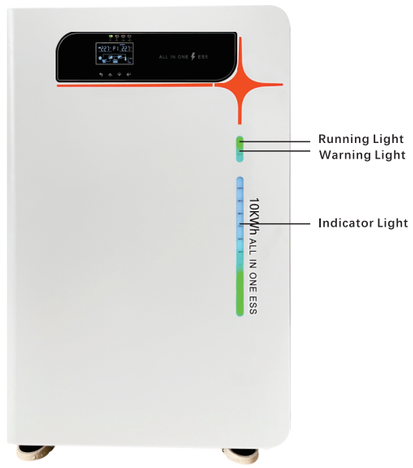
OPERATION FUNCTION (10KWH)

Inverter LCD Screen



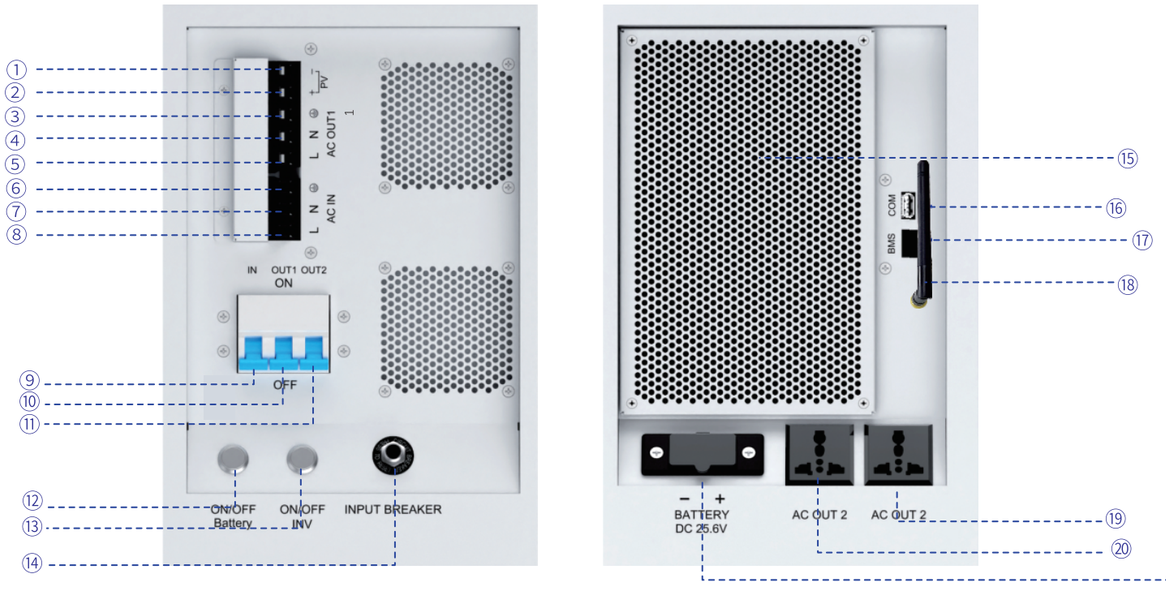
NO.	Name	Instruction
①	LCD Screen	Display system operation data
②	Status Indicator	Always on: grid mode,output from AC Flash: battery mode,output from battery or PV
③	Charging Indicator capacity	Always on: battery fully charged Flash: battery charging
④	Fault Indicator	Always on: Inverter failure Flash:Inverter 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

Battery Indicator Light



OPERATION FUNCTION (10KWH)

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
⑪	AC Out 2 Air Swith

NO.	Interface Instruction
⑫	Battery switch
⑬	Inverter Switch
⑭	Input Thermal Overload Reset Switch
⑮	Air intake
⑯	USB port: Wi-Fi dongle port
⑰	BMS RS-485 Communication Port
⑱	WiFi Antenna
⑲	AC Out 2
⑳	AC Out 2
㉑	External DC battery connector

Inverter

Model	SCAS-5.5KW-10KWH
Rated Power	5KW
AC Rated Voltage	230VAC
Rated Frequency	50/60Hz
Efficiency	⩾98%
Transfer Time	10ms
Waveform	Pure sinusoidal wave
Battery Overvoltage	58.4V
Battery Undervoltage Alarm	45V
Constant Voltage Charge	58.4V
Protection Voltage	43.2V
Float Voltage	56V
Max Charging Current	100A
Communication Interface	USB(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	300V-400V
Voltage Range	80V-500V
Max Power	27A/ 9000W

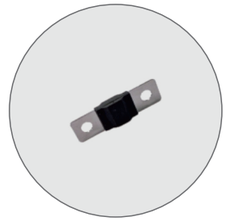
Battery

Rated Capacity	10240Wh(200Ah)
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	-20℃ -60℃
Dimension	48*84*30CM

Packing List & Transportation
Packing Details



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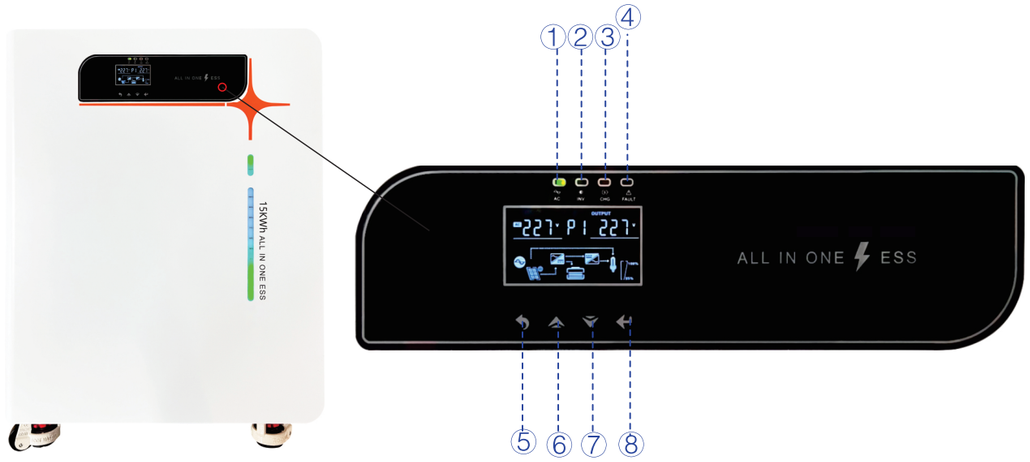


DC Fuse

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-5KW-10KWH	Inverter+Battery	1	90*54*46CM	99.7	114	0.224	0.224

OPERATION FUNCTION (15KWH)

Inverter LCD Screen



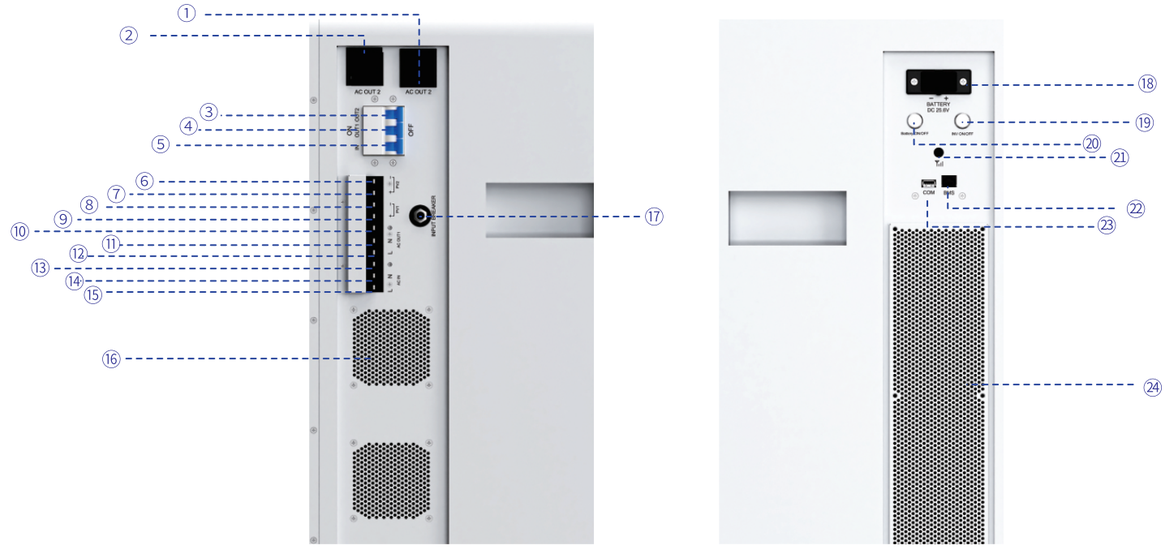
NO.	Name	Instruction
①	LCD Screen	Display system operation data
②	Status Indicator	Always on: grid mode,output from AC Flash: battery mode,output from battery or PV
③	Charging Indicator capacity	Always on: battery fully charged Flash: battery charging
④	Fault Indicator	Always on: Inverter failure Flash:Inverter 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

Battery Indicator Light



OPERATION FUNCTION

Remark: Inverter Terminal Instruction



NO.	Interface Instruction
①	AC OUT 2
②	AC OUT 2
③	AC Out 2 Air Swith
④	AC Out 1 Air Swith
⑤	AC In Air Swith
⑥	PV2-
⑦	PV2+
⑧	PV1-
⑨	Pv1+
⑩	AC OUT PE
⑪	AC OUT1 N
⑫	AC OUT1 L
⑬	AC IN PE
⑭	AC IN N

NO.	Interface Instruction
⑮	AC IN L
⑯	Cooling vents
⑰	Input Thermal Overload Reset Switch
⑱	External DC battery connector
⑲	Inverter Switch
⑳	Battery switch
㉑	WiFi Antenna
㉒	BMS RS-485 Communication Port
㉓	USB port: Wi-Fi dongle port
㉔	Dust cover

Inverter

Model	SCAS-11KW-15KWH
Rated Power	11KW
AC Rated Voltage	230VAC
Rated Frequency	50/60Hz
Efficiency	⩾98%
Transfer Time	10ms
Waveform	Pure sinusoidal wave
Battery Overvoltage	58.4V
Battery Undervoltage Alarm	45V
Constant Voltage Charge	58.4V
Protection Voltage	43.2V
Float Voltage	56V
Max Charging Current	100A
Communication Interface	USB(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	160A

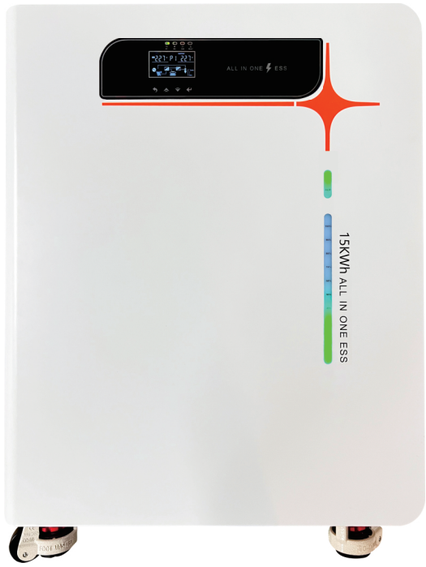
PV Input

Max Voltage	500V
Optimum Voltage	300V-400V
Voltage Range	80V-500V
Max Power	27A+27A / 15000W

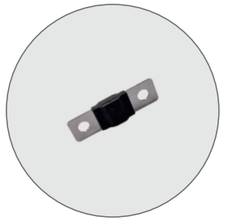
Battery

Rated Capacity	15360Wh(300Ah)
Nominal Voltage	51.2V
Discharge Voltage Range	43.2V-58.4V
Standard Charing 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	-20℃-60℃
Dimension	57*78*40CM

Packing List & Transportation
Packing Details



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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 15KWH	SCAS-11KW -15KWH	Inverter+Battery	1	84*63*56CM	145	164	0.296	0.296