centerwatt

All-In-One Solar ESS

US Standard: 7.2kW+(10.24/16)kWh

Scope

This product is suitable for 51.2V product applications and can be used in conjunction with photovoltaics and inverters to supply power to household televisions, air conditioners, lighting fixtures, etc. This product has voltage, current, and temperature protection functions.



Product Specification

Testing Condition

Unless otherwise specified in the testing project, all tests in this specification shall be conducted under the following conditions:
Environmental temperature: 25 ± 2 ℃;
Relative humidity: 65% ± 20%

Test Instrumentation & Device Characteristics

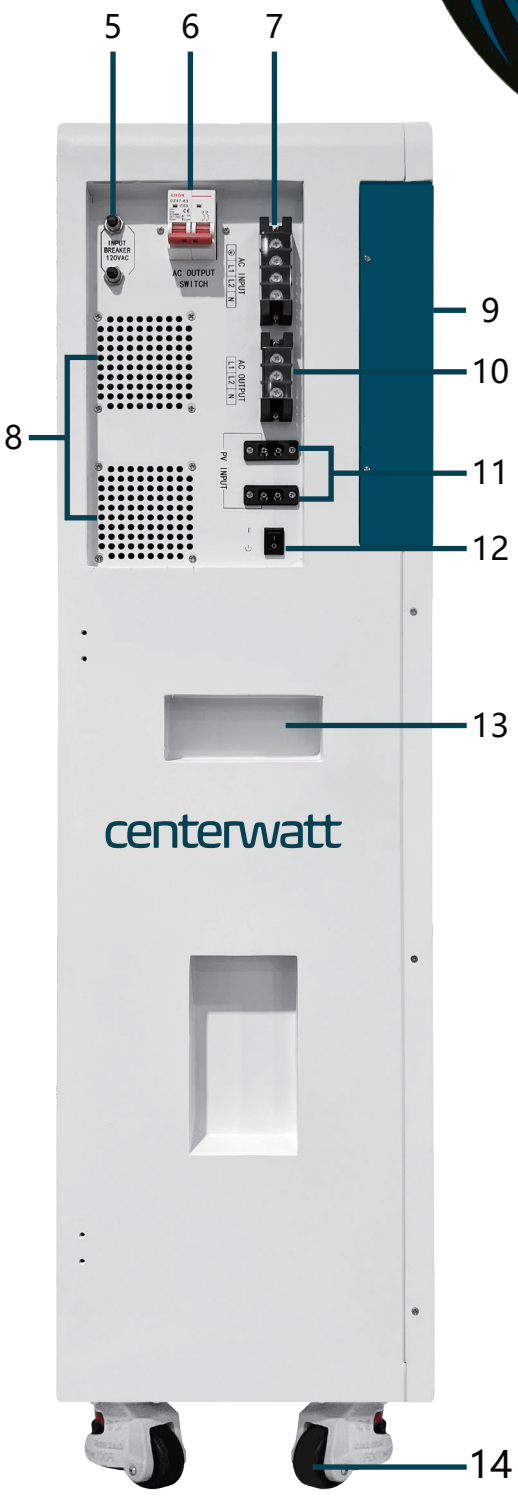
The accuracy of the voltage measuring instrument should not be lower than level 0.5, and the internal resistance should not be less than 10k Ω/V; The accuracy of the current measuring instrument should not be lower than level 0.5; The accuracy of the instrument used for measuring time shall not be less than ± 0.1%; The temperature measuring instrument should not be lower than ± 1 ℃; The voltage output and detection accuracy of the battery charge and discharge tester shall not be less than ± 0.5%; The current output and detection accuracy shall not be less than ± 0.1%;

Safety Performance Requirements

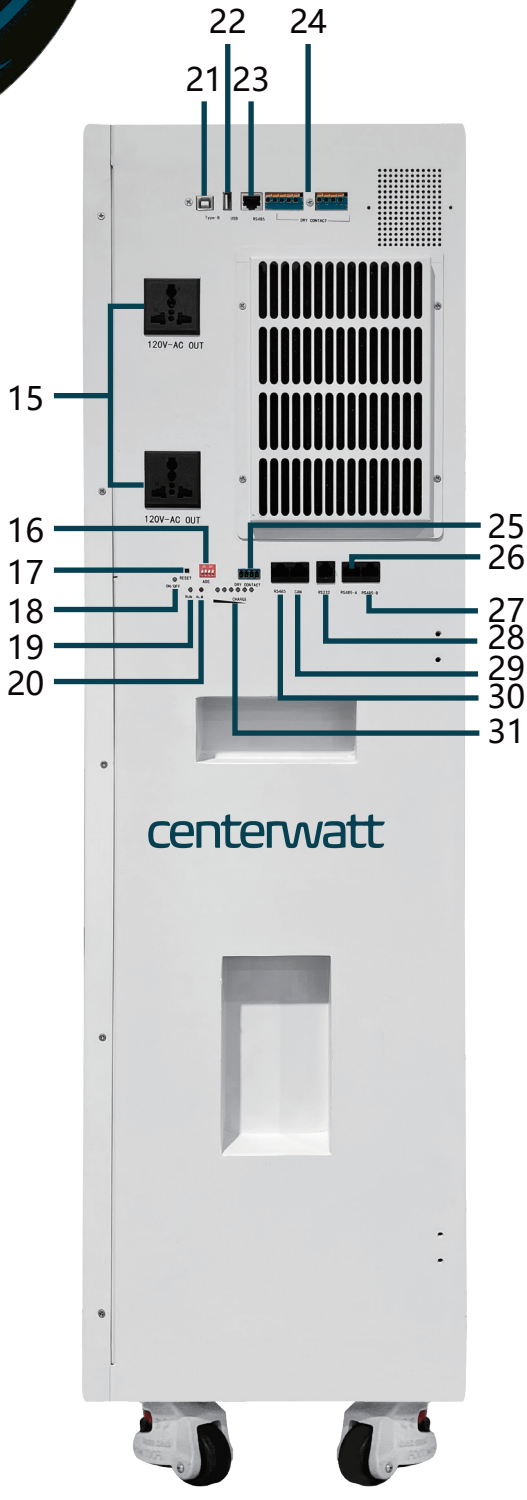
Item	Test Method	Require
Short Circuit	After being fully charged using the standard charging method at 25 ℃, short-circuit the positive and negative terminals of the battery pack's discharge port with wires (wire resistance 80 ± 20m Ω) for 1 hour.	The battery pack should not leak, ignite, or explode.
OverCharge	After charging with the standard charging method at 25 ℃, set the constant current source to 1.25 times the nominal voltage and 0.1I (A),	
Discharge	Discharge the battery pack to the termination voltage or battery pack protection, and then continue discharging for 5 hours at 0.1I (A).	
Constant Damp Heat Test	After charging using the standard charging method at 25 ℃, place it in a constant temperature and humidity chamber at (40 ± 2) ℃ and relative humidity of 90-95% for 48 hours; After 7 hours of storage, visually inspect.	Visually inspect the appearance and ensure that there is no leakage, smoke, fire, or explosion.
High and low temperature impact	After charging using the standard charging method at 25 ℃, place the battery pack in an environment with a temperature of 75 ℃± 2 ℃ for 6 hours, then move it to an environment with a temperature of -40 ℃ for 6 hours. The time interval between moving from the highest temperature to the lowest temperature should not exceed 3 minutes. Repeat the above steps, after 10 cycles, remove and let it sit for 24 hours, and visually inspect.	

Description





1	AC Out(LED)
2	Charge(LED)
3	Fault(LED)
4	LCD Display
5	Input Breaker
6	AC Output Switch
7	AC Input
8	Fan
9	Component
10	AC Output
11	PV Input
12	Switch
13	Handle
14	Universal Wheel
15	Universal AC Output
16	ADS
17	Reset
18	ON/OFF(LED)
19	RUN(LED)
20	Alarm(LED)
21	Type-B
22	USB
23	RS485
24 25	Dry Contact
26	RS485-A
27	RS485-B
28	RS232
29	CAN
30	RS485
31	Indicator Light



Parameters

Inverter Parameters	INV 7200
Power	7.2KVA /7.2KW
Maximum photovoltaic input power	4500W+4500W
Two AC outputs	Yes
Single-phase output power	6KW
Phase-separated output power	7.2KW
Maximum AC total output power	7.2KVA / 7.2KW
Parallel machine function	NO
Lithium-ion communication	RS232/RS485/Dry Contact
Lithium battery activation	Yes (photovoltaic or mains)
Input	
Rated voltage	120Vac（L1/N L2/N) 240Vac（L1/L2)
Voltage range	(85Vac~140Vac)±2%
Frequency	60 Hz
Output	
Rated voltage	120Vac（L1/N L2/N) 240Vac（L1/L2)
Instantaneous power	9000VA
Frequency	60 Hz
Output waveform	Pure sine wave
Switching time	10ms (computer application); 20ms (household appliances)
Peak efficiency (PV to INV)	96%
Peak power (Battery to INV)	93%
Overpower protection	5s@＞=140% load; 10s@100%~140% load
Peak coefficient	3:1
Power factor	0.6~1 (capacitive or inductive)
Grid connection mode	Not support
PV Charging & AC Charging	
Charge mode	MPPT
Maximum photovoltaic input power	4500W+4500W
Maximum photovoltaic open circuit voltage	500VDC
MPPT voltage range	90VDC~450VDC
Maximum photovoltaic input current	16A
Maximum photovoltaic charging current	120A
Maximum mains charging current	120A
Mixed charging current	150A

Battery Parameters	BAT 512200	BAT 512314	Remarks
Nominal Capacity	200AH	314AH	0.5 / 0.3C charging, 1C discharging,25℃
Rated Voltage	51.2V		8S / 16S
Discharge Cut-off Voltage	44V		
Charging Cut-off Voltage	58.4V		
Float charging voltage	56V		
Continuous charging maximum current	150A		Can Set
Maximum current for continuous discharge	200A		
Battery Energy	10240Wh	16000Wh	
Rated Output Power	10000W		
Communication Interface	RS232/RS485/Dry Contact		
Discharge working temperature	-15℃ ~ 50℃		
Charging working temperature	0℃ ~ 50℃		

Relative Humidity		5 ~ 90%		
Altitude		≤4000m		
Protection Grade		IP21		
Storage Time		Keep charging at least once every 3 months		
Number of cycles		≥8000 times		80% DOD 25℃
Main Parameters For BMS				
Overcharge Protection	Overcharge detection voltage	Monomer 3.65 ± 0.05V		
	Overcharge protection delay	0.5S		
Over Discharge Protection	Overdischarge detection voltage	Monomer 2.7 ± 0.05V		
	Overdischarge detection delay	0.5S		
Overcurrent Protection	Greater than rated current	1.1%		
Overcurrent Recovery	Disconnect Load	/		
Self Consumption Power	Working Current	≤10mA		
	Sleep Current	≤50uA		
Physical Property				
Product Size, length x width x height (mm)		1000*520*282		
Package Size, length x width x height (mm)		1125*600*470		
Net Weight (Kgs)		117.2	131.5	
Gross Weight (Kgs)		134.4	150.1	
LCD		Yes		
Application Environment				
Operating temperature range		-10°C to 55°C		
Storage temperature range		-15°C~ 60°C		
Humidity		5% to 95% relative humidity (no frost)		

Product Appearance Requirements

The edge sealing tape of the battery pack must be neatly applied and free of bubbles; The position of the anti vibration sponge attached to the outside of the battery pack is regular and neat; Clean appearance of battery pack;



Packing, Shipping & Storage Requirements

Product outer packaging box packaging requirements: Comply with the requirements of the product packaging schematic diagram.
Product transportation requirements:

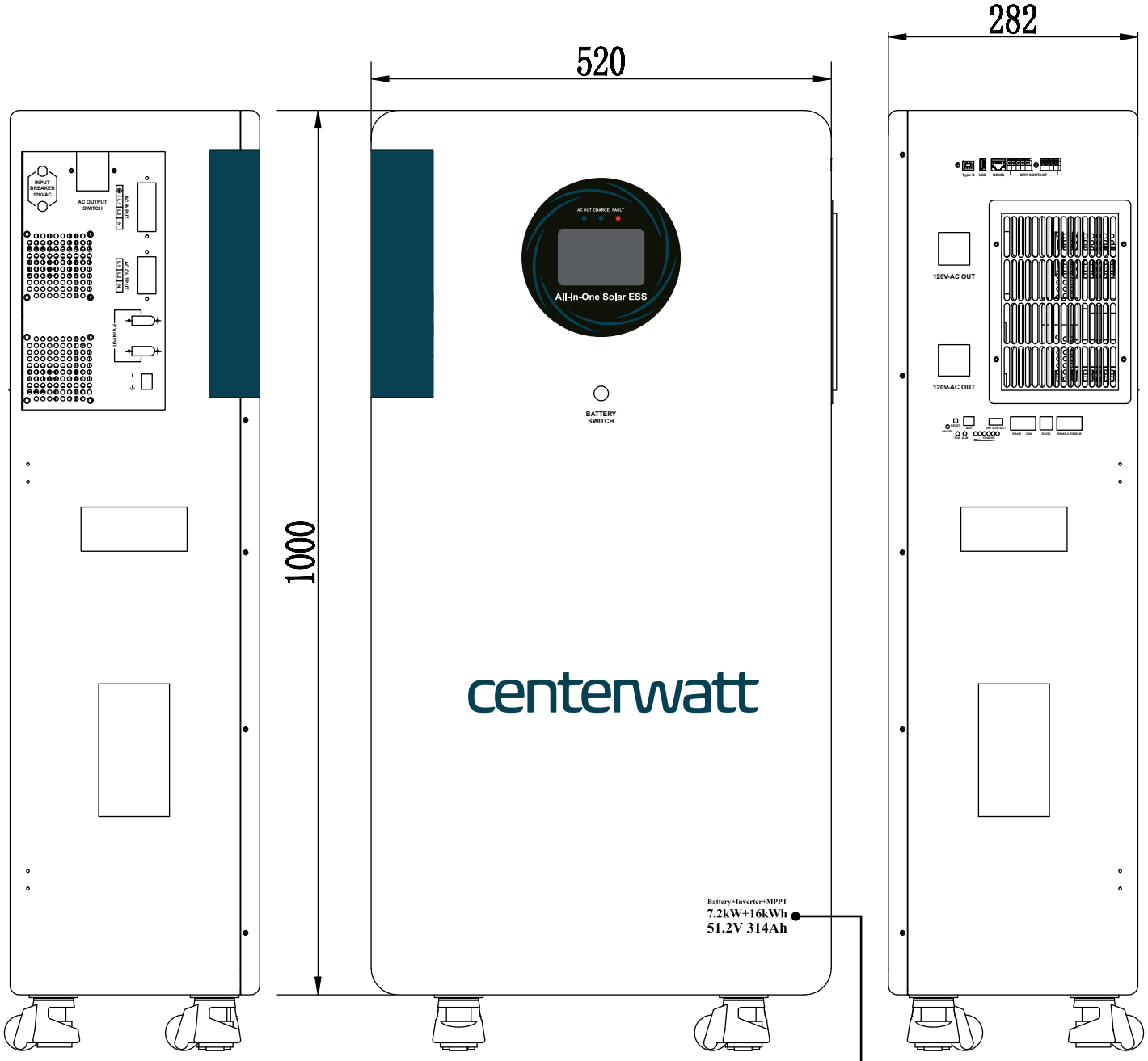
1.During transportation, batteries should be protected from severe vibration, impact, or compression, as well as exposure to sunlight and rain. They can be transported by vehicles such as cars, trains, ships, and airplanes;
2.During the loading and unloading process, batteries should be placed gently to prevent falling, rolling, and heavy pressure.

Product storage requirements:

1.The battery should be stored indoors in a clean, dry, and ventilated environment with an ambient temperature of -10 ℃ to 35 ℃ and a relative humidity of no more than 85%;
2. The battery should be kept away from corrosive substances and kept away from sources of fire and heat;
3. Battery storage SOC: 40% to 60%.

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Dimensions



Optional: Battery+Inverter+MPPT
7.2kW+10.24kWh
51.2V 200Ah

