



aWatt Series 5~20kWh

PhaseGreen aWatt series brings storage solutions to customers with exceptional quality

Approved by California Energy Commission



CEC Approved



Friendly capacity options

Stackable module design based on capacity of 5kWh, expandable to 60kWh with 3 systems of 20kWh in parallel



Conventional

aWatt Series



Easy to install

Easy plug-in and ready to use, light-weighted system with less manpower to install



Excellent low temp. performance (Optional)

No degradation in performance at -10°C

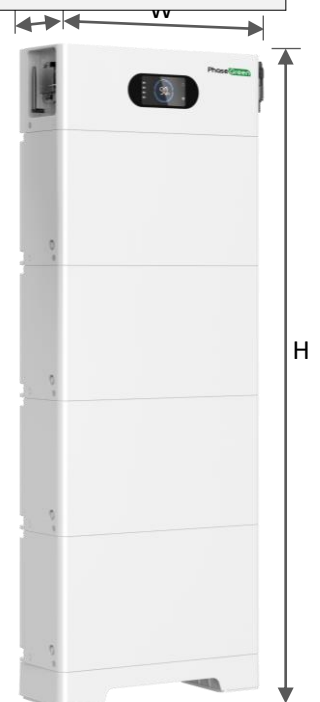


Smart battery EMS

Real-time monitoring in control of safe and reliable operation, no boundary to remotely upgrade system for maintenance

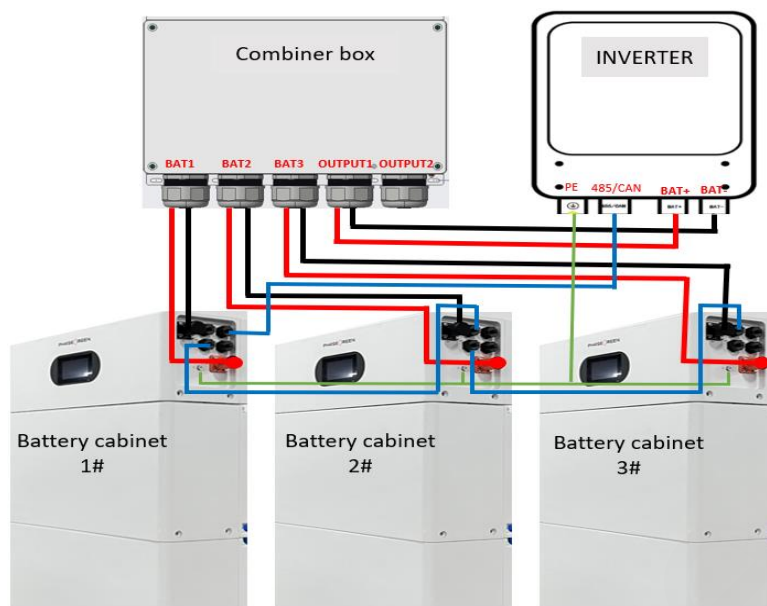


Product Series	aWatt-5	aWatt-10	aWatt-15	aWatt-20
Model	PhG-ESS-5L-S	PhG-ESS-10L-S	PhG-ESS-15L-S	PhG-ESS-20L-S
Electrical characteristics				
Nominal energy (kWh)	5	10	15	20
Usable energy 90%DOD (kWh)	4.5	9.0	13.5	18.0
Rated voltage (V)	51.2	51.2	51.2	51.2
Battery capacity(Ah)	100	200	300	400
Series/Parallel	16S 1P	16S 2P	16S 3P	16S 4P
Normal charger/discharge C rate	0.5C	0.5C	0.5C	0.5C
MAX. charger/discharge C rate	1.0C	0.9C	0.67	0.5
Rated charge/discharge current (A)	50/50	100/100	150/150	200/200
Max. charge/discharge current (A)	100/100	180/180	200/200	200/200
Max. continuous discharge rate(kW)	5	9	10	10
Voltage range (V)	44.8~55.2	44.8~55.2	44.8~55.2	44.8~55.2
Roundtrip efficiency	95%	95%	95%	95%
Dimensions W*H*D	573*597*189mm (22.6*23.5*7.4 in)	573*912*189 mm (22.6*35.9*7.4 in)	573*1227*189 mm (22.6*48.3*7.4 in)	573*1542*189 mm (22.6*60.7*7.4 in)
Weight	65kg (143 lb)	115kg(254 lb)	165kg(364 lb)	215kg (474 lb)
Communication interface	CAN/RS485/Wi-Fi			
DC disconnect	Circuit breaker, 250A, 48V rating			
Connection method	Quick plug and unplug terminals			
User interface	Display battery running status, SOC, alarm information, WIFI status, heater status, etc			
Protection features	Charging over-voltage protection, discharge under-voltage Protection features protection, over current protection, over temperature protection, short circuit protection, etc			
Scalability	Max. 3 x 20kWh systems in parallel, expandable capacity of 60kWh			
Installation location	Outdoor or indoor			
Cycle life	6000 times (25°C, 0.5C/0.5C, 90%DOD, 70% remaining)			
Charging temperature	-10°C~50°C (14°F~122°F)			
Discharging temperature	-20°C~50°C (-4°F~122°F)			
Storage temperature	-30°~60°C (-22°F~140°F)			
Humidity	10% to 95%,non condensation			
Enclosure rating	IP55			
Altitude	2000 m (6562 ft)			
Cooling	Natural convection			
Certification	IEC/EN62619, EN/IEC61000, EN62311, EN300328, EN301489, UL1973, FCC part15B, UL9540, UL1642, UN38.3, MSDS			
Limited warranty	5 years product warranty, 10 years performance warranty			



Battery Parallel:

- Up to 3 parallel connections are supported
- expandable to 60kWh
- expandable to support 30kW inverter



Product Series	aWatt-10	aWatt-15	aWatt-20
Battery Model	PhG-ESS-10L-S	PhG-ESS-15L-S	PhG-ESS-20L-S
2 Batteries Parallel			
Nominal energy (kWh)	20	30	40
Rated charge/discharge current (A)	200/200	300/300	400/400
Max. charge/discharge current (A)	360/360	400/400	400/400
Max. continuous discharge rate(kW)	18	20	20
Rated voltage (V)	51.2	51.2	51.2
Voltage range (V)	44.8~55.2	44.8~55.2	44.8~55.2
3 Batteries Parallel			
Nominal energy (kWh)	30	45	60
Rated charge/discharge current (A)	300/300	450/450	600/600
Max. charge/discharge current (A)	540/540	600/600	600/600
Max. continuous discharge rate(kW)	27	30	30
Rated voltage (V)	51.2	51.2	51.2
Voltage range (V)	44.8~55.2	44.8~55.2	44.8~55.2

*Note: If you need more detail data, please contact us.

Version V1.8