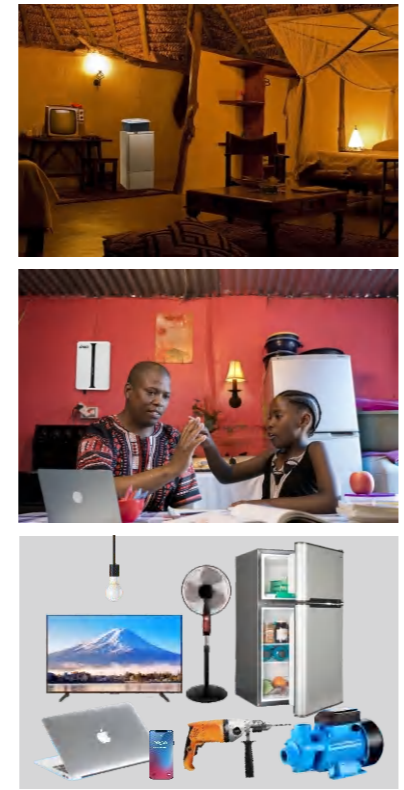
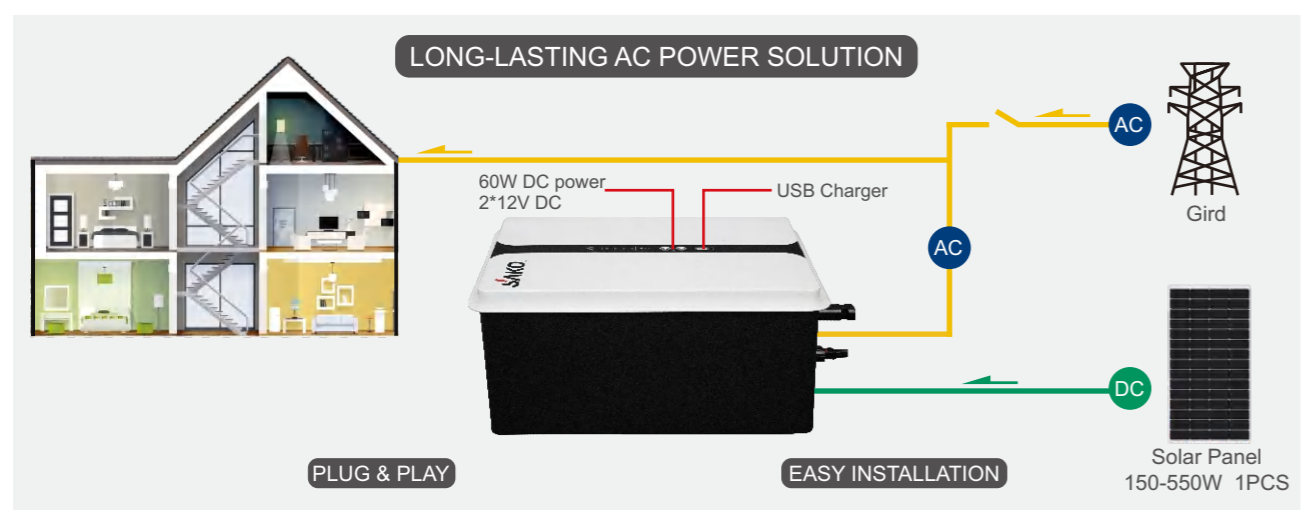


# ALPHA ESS 300W/500W/1000W ALL IN ONE



- CHEAPER, cheaper, cheaper more than tubular battery inverter system
- More than 10 years life time, buy 1 time get 10 years free electricity
- With 12V DC output and USB charger
- Can power both AC load and DC load
- With 80A AC charger and 60A MPPT Solar charger
- All in one, build in lithium battery



# Energy Storage System



## TECHNICAL PARAMETER

SPECIFICATION	MODEL	Alpha ESS-300W	Alpha ESS-500W	Alpha ESS-1000W
<b>Inverter / Charger</b>				
Rated AC Output Power		300W	500W	1000W
Output Voltage Waveform		Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
Output Voltage		185~230VAC 50Hz	185~230VAC 50Hz	185~230VAC 50Hz
Low DC Warning Voltage		3.0Vdc	3.0Vdc	6.0Vdc
Low DC Cut-off Voltage		2.8Vdc	2.8Vdc	5.6Vdc
Low DC Warning Return Voltage		3.1Vdc	3.1Vdc	6.2Vdc
Charging Current(Utility and solar together)		400W Max.	600W Max.	1100W Max.
Bulk Charging Voltage		3.6Vdc	3.6Vdc	7.2Vdc
Float Charging Voltage		3.5Vdc	3.5Vdc	7.0Vdc
<b>AC Input</b>				
Nominal Input Voltage		230Vac	230Vac	230Vac
Low Loss Voltage		90Vac ± 7	90Vac ± 7	90Vac ± 7
Low Loss Return Voltage		100Vac ± 7	100Vac ± 7	100Vac ± 7
High Loss Voltage		280Vac ± 7	280Vac ± 7	280Vac ± 7
High Loss Return Voltage		270Vac ± 7	270Vac ± 7	270Vac ± 7
Max. AC Input Voltage		300Vac	300Vac	300Vac
Nominal Input Frequency		45~65Hz	45~65Hz	45~65Hz
AC Charging Power		300W Max.	500W Max.	1000W Max.
<b>Solar Input</b>				
Nominal PV Voltage		30Vdc	30Vdc	38Vdc
PV Array MPPT Voltage Range		10Vdc~50Vdc	10Vdc~50Vdc	10Vdc~50Vdc
Max. PV Array Open Circuit Voltage		60Vdc	60Vdc	60Vdc
Solar Charging Power		300W Max.	300W Max.	600W Max.
<b>Lithium Iron Battery</b>				
Capacity		1004.8Wh	1004.8Wh	2009.6Wh
Nominal Battery Voltage		3.2Vdc	3.2Vdc	6.4Vdc
Typical Capacity		314Ah	314Ah	314Ah
Max.Charge Current		130A	220A	220A
Max.Discharge Current		130A	220A	220A
Operation Voltage Range		2.8Vdc~3.6Vdc	2.8Vdc~3.6Vdc	5.6Vdc~7.2Vdc
Operation Temperature		-10°C~+50°C		
<b>DC Output</b>				
DC Output Power		DC12V 60W Max.		
DC Output Socket		1 pcs 5V2A USB charger, 2 pcs 12V2A DC Power JACK 5.5*2.1mm		
<b>Display Function</b>				
LED Indicator		4 pcs SOC indicators, 1 pcs working status indicators		
<b>Protection</b>				
Protection		Overcharge protection, Overdischarge protection, Overcurrent protection, Shortcircuit protection, Overtemperature protection		
<b>Ambient</b>				
Noise(dB)		<40dB (1 meter)		
working Temperature		-10°C~+50°C		
Humidity		0~95% ( no condensation)		
Sea Level(m)		≤2000		
<b>Dimension</b>				
L×W×H (products size)		291*215*143mm	316*243*143mm	422*295*143mm
L×W×H (package size)		395*257*202mm	421*286*202mm	526*350*212mm

