

ALPHA-ESS 1000W ALL IN ONE



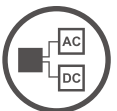
CHEAPER, cheaper, cheaper
more than tubular battery
inverter system



More than 10 years life time,
buy 1 time get 10 years free
electricity



With 12V DC output and
USB charger



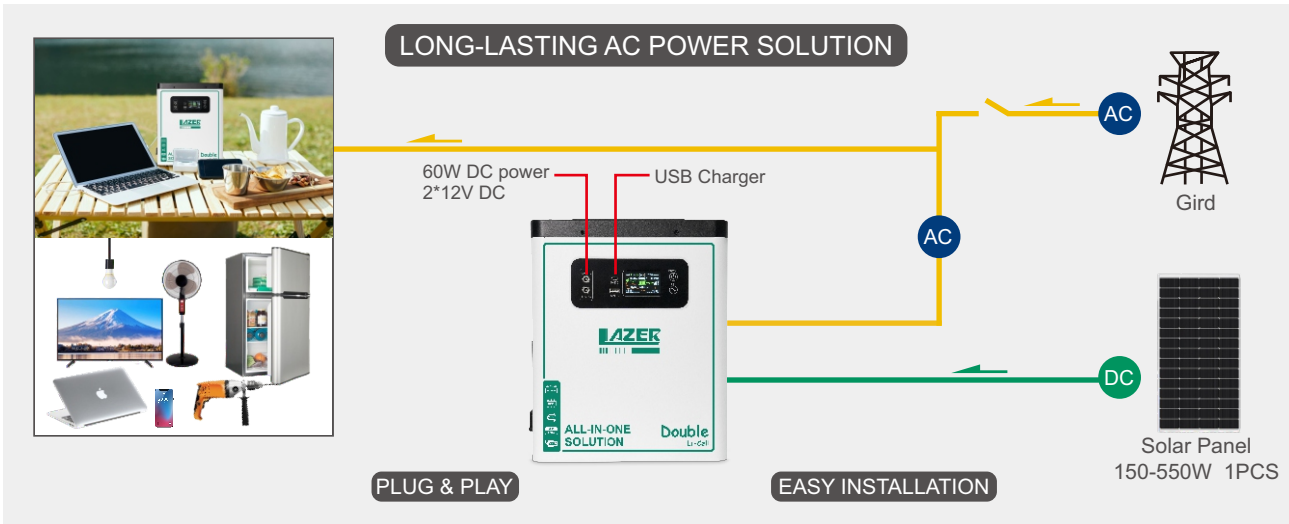
Can power both AC load and
DC load



With 80A AC charger and
80A MPPT Solar charger



All in one, build in
lithium battery



Energy Storage System



TECHNICAL PARAMETER

SPECIFICATION	MODEL	Alpha-ESS-1000W
Inverter / Charger		
Rated AC Output Power		1000W
Output Voltage Waveform		Pure Sine Wave
Output Voltage		185~230Vac 50Hz
Low DC Warning Point		≤19%
Low DC Cut-off Voltage		5.8Vdc
Low DC Warning Return Voltage		>20%
Charging Power(Utility and solar together)		800W Max.
Bulk Charging Voltage		7.2Vdc
Float Charging Voltage		7.0Vdc
AC Input		
Nominal Input Voltage		230Vac
Low Loss Voltage		90Vac ± 7
Low Loss Return Voltage		100Vac ± 7
High Loss Voltage		280Vac ± 7
High Loss Return Voltage		270Vac ± 7
Max. AC Input Voltage		300Vac
Nominal Input Frequency		45~65Hz
AC Charging Power		800W Max.
Solar Input		
Nominal PV Voltage		38Vdc
PV Array MPPT Voltage Range		13Vdc~55Vdc
Max. PV Array Open Circuit Voltage		56Vdc
Solar Charging Power		550W Max.
Lithium Iron Battery		
Capacity		2009.6Wh
Nominal Battery Voltage		6.4Vdc
Typical Capacity		314Ah*2
Max.Charge Current		220A
Max.Discharge Current		220A
Operation Voltage Range		5.8Vdc~7.2Vdc
Operation Temperature		-10°C~+50°C
DC Output		
DC Output Power		DC12V 60W Max.
DC Output Socket		1 pcs 5V1A USB charger, 2 pcs 12V2.5A DC Power JACK 5.5*2.1mm
Display Function		
LED Indicator		4 pcs SOC indicators, 1 pcs working status indicators
Protection		
Protection		Overcharge protection, Overdischarge protection, Overcurrent protection, Shortcircuit protection, Overtemperature protection
Ambient		
Noise(dB)		<40dB (1 meter)
working Temperature		-10°C~+50°C
Humidity		5~95% (no condensation)
Sea Level(m)		≤2000
Dimension		
L×W×H (products size)		278*243*330mm
L×W×H (package size)		345*310*430mm
Weight(NW Kg)		23

Warranty: Inverter 1 year, Battery 5 years.



Alpha-ESS All-In-One-ESS Off Grid Home Solar System

ALPHA Series

- Portable Power Station, high capacity in compact size.
- Pure sinewave AC output with Lithium-ion battery bank.
- Power 99% of your home appliances.
- Scalable output power from 1K to 3K
- 60A-80A built-in AC and Solar charger.
- Super-fast recharge, 0-90% in one hour.
- 3 AC outlets, 4 DC outputs, terminal block for 1K/3K.
- Dual inputs, grid and solar.
- Built-in battery management system (BMS).

System Diagram

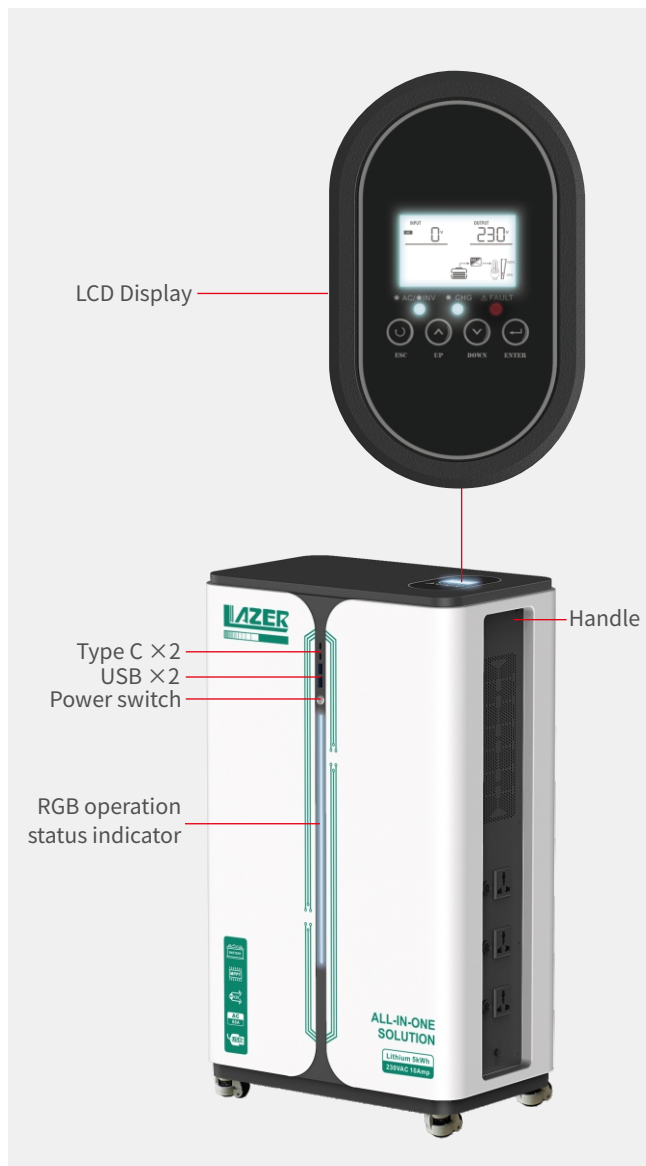
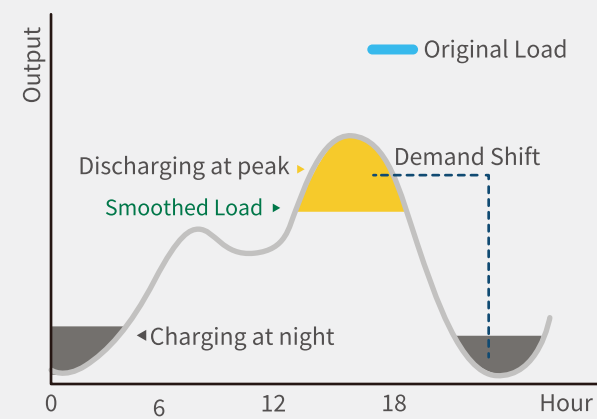
Highly mobility and Plug & Use

If you need to relocate the energy bank, simply unplug it and move it anywhere.

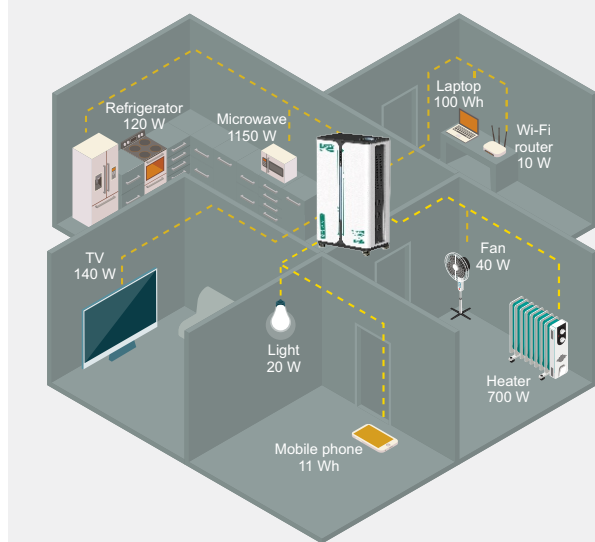


Peak cut

Store the power at night when the utility is generally cheaper and more available and discharge power when needed.



Power 9 devices at the same time for one hour and more



Energy Storage System



TECHNICAL PARAMETER

MODEL	Alpha ESS-3K 5.12KWh
SPECIFICATION	
Inverter / Charger	
Inverter Type	3K/24V
Rated Output Power	2.7KW
Output Voltage Waveform	Pure Sine Wave
Output Voltage	230Vac 50Hz
Low DC Warning Voltage	23.8Vdc
Low DC Cut-off Voltage	23.4Vdc
Low DC Warning Return Voltage	24Vdc
Charging Current(Utility and solar together)	80A Max.
Bulk Charging Voltage	28.8Vdc
Float Charging Voltage	28Vdc
AC Input	
Nominal Input Voltage	230Vac
Low Loss Voltage	170Vac ± 7(UPS),90Vac ± 7(Appliances)
Low Loss Return Voltage	180Vac ± 7(UPS),100Vac ± 7(Appliances)
High Loss Voltage	280Vac ± 7
High Loss Return Voltage	270Vac ± 7
Max. AC Input Voltage	300Vac
Nominal Input Frequency	50HZ / 60HZ(Auto detection)
AC Charging Current	60A Max.
Solar Input	
Nominal PV Voltage	240Vdc
PV Array MPPT Voltage Range	30Vdc~350Vdc
Max. PV Array Open Circuit Voltage	400Vdc
Solar Charging Current	80A Max.
Lithium Iron Battery	
Capacity	5120Wh
Nominal Battery Voltage	25.6Vdc
Typical Capacity	200Ah
Max.Charge Current	50A
Max.Discharge Current	100A
Operation Voltage Range	22.4Vdc~29.2Vdc
Operation Temperature	-10°C ~ +50°C
Protection	
Protection	Overcharge protection, Overdischarge protection, Overcurrent protection, Shortcircuit protection, Overtemperature protection
Ambient	
Noise(dB)	<40dB (1 meter)
Working Temperature	-10°C ~ +50°C
Humidity	0~95% (no condensation)
Sea Level(m)	≤1500
Dimension	
L×W×H (products size)	480*279*872mm
L×W×H (package size)	555*354*941mm
Weight(NW Kg)	58.0Kg
Weight(GW Kg)	63.0Kg

Warranty: Inverter 1 year, Battery 5 years.





ALPHA ESS Energy Solar System

ALPHA ESS 6K/11K Energy Storage System

 Smart WIFI monitor, user friendly.	 Integrated with inverter, MPPT charger, AC charger, LiFePo4 battery inside.	 8000 Cycles LiFePo4 cells, 10+ years life design.
 Smart BMS for communication and all around protection.	 Modular & stacked design for easy expansion and installation.	 Easy installation, configurable of work mode and charge current.

Energy Storage System



TECHNICAL PARAMETER

SPECIFICATION	ALPHA ESS 6K/10KWh	ALPHA ESS 11K/15KWh
INVERTER / CHARGER		
Inverter Type	Hybrid MPPT Inverter	
Rated Output Power	6KW	11KW
Output Voltage Waveform	Pure Sine Wave	
Output Voltage	230VAC 50HZ	
Low DC Warning Voltage	45.8Vdc	
Low DC Cut-off Voltage	44.8Vdc	
Low DC Warning Return Voltage	46.8Vdc	
Total Charging Current(Grid+solar)	120A Max.	150A Max.
Bulk Charging Voltage	57.6Vdc	
Float Charging Voltage	56.0Vdc	
LITHIUM IR ON BATTERY		
NormalBatteryModular	51.2V200Ah	51.2V300Ah
NormalCapacity(25°C, 0.2C)	10.24KWh	15.36KWh
NominalBatteryVoltage	51.2Vdc	51.2Vdc
NominalCapacity	200Ah	300Ah
Max.ChargeCurrent	225A 1Sec.	300A 1Sec.
Max.DischargeCurrent	150A	200A
OperationVoltageRange	44.8Vdc ~ 58.4Vdc	
OperationTemperature	-10°C~ +50°C	
AC INPUT		
Nominal Input Voltage	230Vac	
Low Loss Voltage	170Vac ± 7(UPS),90Vac ± 7(Appliances)	
Low Loss Return Voltage	180Vac ± 7(UPS),100Vac ± 7(Appliances)	
High Loss Voltage	280Vac ± 7	
High Loss Return Voltage	270Vac ± 7	
Max. AC Input Voltage	300Vac	
Nominal Input Frequency	50HZ / 60HZ(Auto detection)	
AC Charging Current	120A Max.	150A Max.
SOLAR INPUT		
Nominal PV Voltage	360Vdc	
PV Array MPPT Voltage Range	120Vdc~450Vdc	
Max. PV Array Open Circuit Voltage	500Vdc	
Solar Charging Current	120A Max.	150A Max.
PROTECTION		
Protection	Over charge protection Over discharge,protection、Over current protection、Shortcircuit protection、Over temperature protection	
AMBIENT		
Noise(dB)	< 55dB (1 meter)	
Working Temperature	-10°C~ +50°C	
Humidity	0~95% (no condensation)	
Sea Level(m)	≤1500	
OTHERS		
Efficiency	92.0%	
Warranty	1 Year for Inverter, 5 Years for Lithium Battery	



Li-Sun Wall Stand Lithium Battery Pack 320Ah-640Ah With 6000/8000+ Cycles

51.2V 100Ah/200Ah/300Ah/400Ah/600Ah



Main Features

- Top brand new LiFePO4 cells, super safety
- 5 year warranty, 6000/8000+ cycle times, 10+ years life design
- The machine 5KWh above with wheels
- 100A/150A/200A/300A Smart BMS matches well with solar system
- All around protection and unattended operation
- With multiple communiation protocols for 10+ brands of Inverters
- With Wifi/Bluetooth for easy monitor
- With touch screen (with 7-inch touch screen or 4.3-inch touch screen)
- With battery cable + battery breaker
- Multiple language standard: Chinese, English, Arabic
- Built inside with Fire Protection & Temperature Sensor devices

Leading technology:

- Internal battery temperature reaches 100°C within 10mins, the cover remains at normal temperature.

SAKO | GROWATT | Deye | Victron Energy | SMA | MUST | invt | MEGAREVO | LUPOWERTEK | victtron energy | SOFAR

Lithium Battery Pack



MODEL SPECIFICATION	SK-51.2V 100Ah	SK-51.2V 200Ah	SK-51.2V 300Ah	SK-51.2V 400Ah	SK-51.2V 600Ah
Battery Type	LiFePO4	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Total Energy	5120Wh	10240Wh	15360Wh	20480Wh	30720Wh
Usable Energy (90%DOD)	4608Wh	9216Wh	13824Wh	18432Wh	27648Wh
Voltage window	44.8~58.4V	44.8~58.4V	44.8~58.4V	44.8~58.4V	44.8~58.4V
Fast Charge Voltage	57.6V	57.6V	57.6V	57.6V	57.6V
Folat Charge Voltage	56.0V	56.0V	56.0V	56.0V	56.0V
Low DC Cut-off Voltage	46.8V	46.8V	46.8V	48.0V	48.0V
Max.continue discharge current	100A	150A	200A	300A	300A
Max.pulse discharge current	150A 1Sec.	150A 1Sec.	300A 1Sec.	300A 1Sec.	450A 1Sec.
Max.continue charge current	50A	100A	150A	200A	300A
Scalable	1~15 in parallel				
Communication	CAN,RS485				
Cycle life	>6000 Cycles for 100Ah/200Ah @(+25°C,0.5C,90%DOD,60%EOL)		>8000 Cycles@ (+25°C,0.5C,90%DOD,60%EOL)		
Terminal	double M8				
Storage temperature	0°C~ 30°C				
Storage duration	6 months at 25°C				
Safety standard	UN38.3,MSDS				
IP degree	IP20				
PROTECTION					
Protection	Over charge protection, Over discharge protection, Over current protection, Shortcircuit protection, Over temperature protection				
AMBIENT					
Working Temperature	-10°C~ +50°C				
Humidity	0~95% (no condensation)				
DIMENSION					
L×W×H (products size)MM	640*390*178	850*560*178	900*625*190	850*560*260	970*911*245
L×W×H (package size)MM	684*440*240 (UN carton)	898*685*265 (UN wooden cases)	948*690*350 (UN wooden cases)	898*635*428 (UN wooden cases)	1045*985*425 (UN wooden cases)
Weight(NW)	55.0	105.2	121.0	134.0	233.0
Weight(GW)	60.0	121.5	141.0	153.0	259.0

Smart BMS supports communication with different brand of hybrid inverter

