



## ESS Home Lithium Battery Storage System

### Main Features

- All in one system, built inside with 48V lithium battery module, 6kw Off grid solar inverter, Solar/AC Charger
- Modular & Stacked Design for easy installation and expansion
- Smart BMS built inside, with communication protocol
- LiFPO4 cells cycle time Up to 6000 times charge/discharge cycles life
- With 120A mppt Solar charging and AC Charging function
- With all around protection
- DOD 80%, warranty 5 years, 10+ years life design

 All in one home energy storage system

SPECIFICATION	ESS PRO 6KW/5KWH	ESS PRO 6KW/10KWH	ESS PRO 6KW/15KWH	ESS PRO 6KW/20KWH
<b>INVERTER / CHARGER</b>				
Inverter Type	6KW/48V Off grid	6KW/48V Off grid	6KW/48V Off grid	6KW/48V Off grid
Rated Output Power	6KW	6KW	6KW	6KW
Output Voltage Waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
Output Voltage	230VAC 50HZ	230VAC 50HZ	230VAC 50HZ	230VAC 50HZ
Low DC Warning Voltage	45.8Vdc	45.8Vdc	45.8Vdc	45.8Vdc
Low DC Cut-off Voltage	44.8Vdc	44.8Vdc	44.8Vdc	44.8Vdc
Low DC Warning Return Voltage	46.8Vdc	46.8Vdc	46.8Vdc	46.8Vdc
Total Charging Current( Grid+ solar)	120A Max.	120A Max.	120A Max.	120A Max.
Bulk Charging Voltage	57.6Vdc	57.6Vdc	57.6Vdc	57.6Vdc
Float Charging Voltage	56.0Vdc	56.0Vdc	56.0Vdc	56.0Vdc
<b>LITHIUM IR ON BATTERY</b>				
NormalBatteryModular	51.2V100Ah*1	51.2V100Ah*2	51.2V100Ah*3	51.2V100Ah*4
NormalCapacity(25C, 0.2C)	5120Wh	10.24KWh	15.36KWh	20.48KWh
NominalBatteryVoltage	51.2Vdc	51.2Vdc	51.2Vdc	51.2Vdc
NominalCapacity	100A	200A	300A	400A
Max.ChargeCurrent	150A 1Sec.	300A 1Sec.	450A 1Sec.	600A 1Sec.
Max.DischargeCurrent	50A	100A	150A	200A
OperationVoltageRange	44.8Vdc ~ 58.4Vdc	44.8Vdc ~ 58.4Vdc	44.8Vdc ~ 58.4Vdc	44.8Vdc ~ 58.4Vdc
OperationTemperature	-10C~ +50C	-10C~ +50C	-10C~ +50C	-10C~ +50C
<b>AC INPUT</b>				
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.		
<b>SOLAR INPUT</b>				
Nominal PV Voltage		360Vdc		
PV Array MPPT Voltage Range		120Vdc~450Vdc		
Max. PV Array Open Circuit Voltage		500Vdc		
Solar Charging Current		120A Max.		
<b>PROTECTION</b>				
Protection		Overcharge protection, Overdischarge protection, Overcurrent protection, Shortcircuit protection, Overtemperature protection		
<b>AMBIENT</b>				
Noise(dB)		< 30°C < 40dB (1 meter)		
Working Temperature		-10C~ +50C		
Humidity		0~95% ( no condensation)		
Sea Level(m)		≤1500		
<b>OTHERS</b>				
Efficiency		92.0%		
Warranty		5 Years		