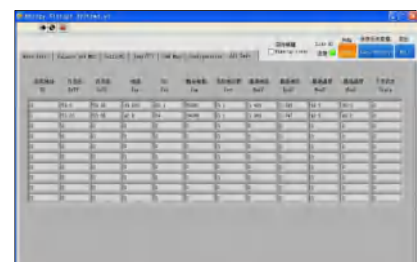


# 51.2KWH Battery Energy Storage System

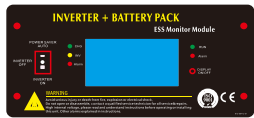
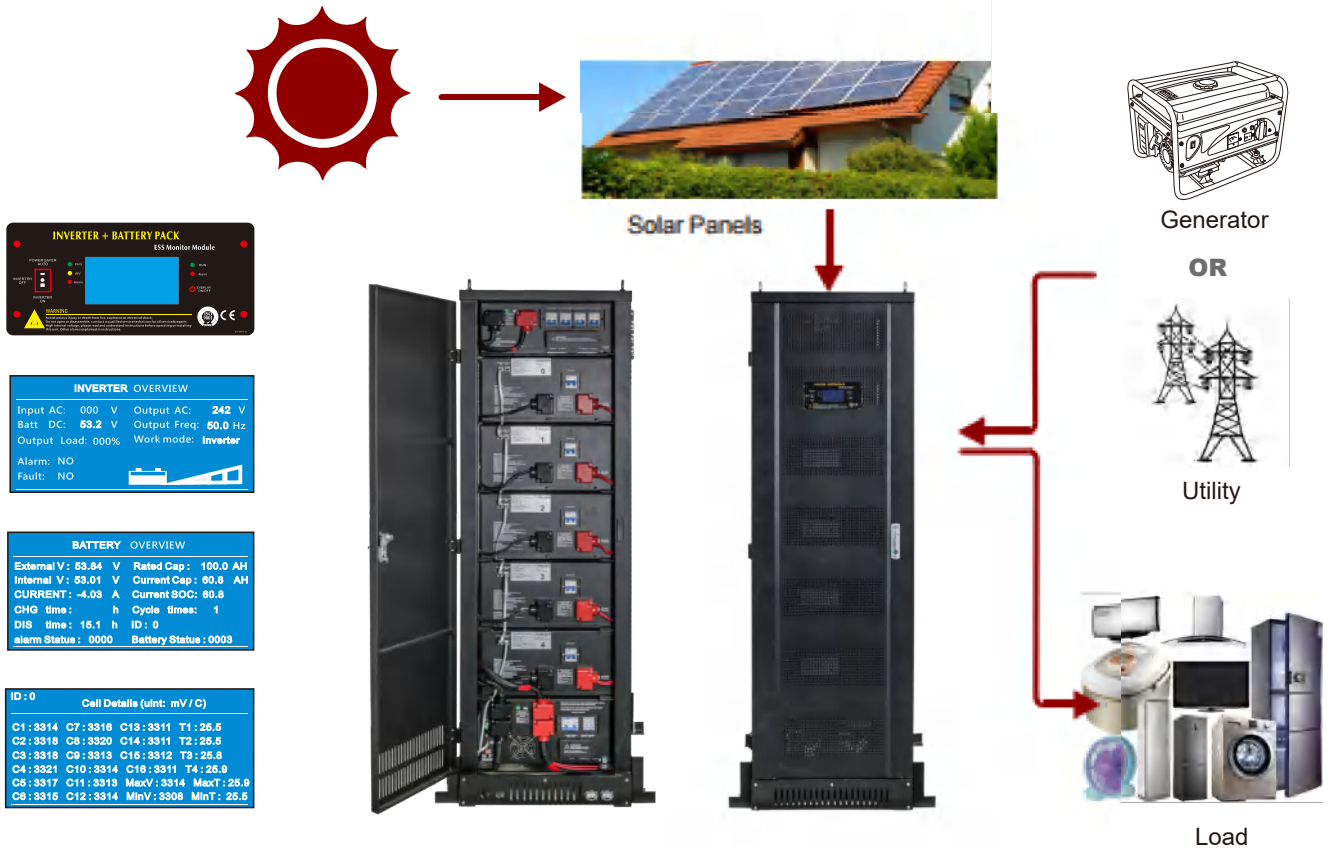
## ESS18048E1000P4

51.2KWH Battery  
 18 KW Inverter & AC Charger  
 240A MPPT Solar Charger



## Product Application

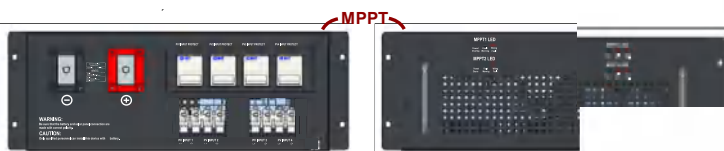
Energy storage in power system including solar panels, inverter (for AC and DC conversion), and provide backup power for the main electrical backup lines. Household electricity demand different choice of different components.



INVERTER OVERVIEW	
Input AC: 000 V	Output AC: 242 V
Batt DC: 53.2 V	Output Freq: 50.0 Hz
Output Load: 000%	Work mode: Inverter
Alarm: NO	
Fault: NO	

BATTERY OVERVIEW	
External V: 53.84 V	Rated Cap: 100.0 AH
Internal V: 53.01 V	Current Cap: 60.8 AH
CURRENT: -4.03 A	Current SOC: 80.8
CHG time: h	Cycle times: 1
DIS time: 15.1 h	ID: 0
alarm Status: 0000	Battery Status: 0003

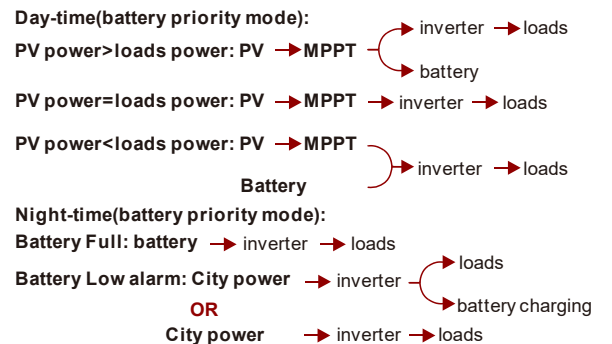
ID:0 Cell Details (uInt: mV / C)			
C1: 3314	C7: 3318	C13: 3311	T1: 25.5
C2: 3318	C8: 3320	C14: 3311	T2: 25.5
C3: 3318	C9: 3313	C15: 3312	T3: 25.8
C4: 3321	C10: 3314	C16: 3311	T4: 25.9
C5: 3317	C11: 3313	MaxV: 3314	MaxT: 25.9
C6: 3316	C12: 3314	MinV: 3308	MinT: 25.8



### WIFI MODULE

Real-time viewing

### Loads Power Source



## ● BASIC Specification

Battery		Description
<b>Normal specification</b>		
1	Rated Voltage	51.2V
2	Rated Capacity	1000Ah
3	Rated Energy	51.2KWH
4	Battery Configuration	10.24KWH(16S2P) *5PCS
5	Battery Cell	3.2V100AH 160PCS
<b>Standard Charge</b>		
1	Operation temperature range @charging	0~45°C
2	Rated charge voltage	55.2±0.4V
3	Max charge voltage	56.8±0.4V
4	Overcharge protection	58.4±0.4V
5	Allowed MAX charge current(Total)	550A withstand 30s (every pack 55A)
6	Peak charge current(Total)	600A withstand 5s (every pack 60A)
7	Rated charge current(Total)	500A (every pack 100A)
8	Recommend charge current(Total)	<400A
<b>Standard discharge</b>		
1	Operation temperature range @discharging	-20~60°C
2	Output Voltage Range	40~56Vdc
3	Recommend Working Range	46~54Vdc
4	Discharge Cut-off voltage	40V
5	Allowed MAX discharge current(Total)	1100A withstand 30s (every pack 110A)
6	Peak discharge current(Total)	1200A withstand 5s (every pack 120A)
7	Rated discharge current(Total)	1000A (every pack 200A)
8	Recommend discharge current(Total)	<800A
<b>Communication</b>		
1	RS485	For LCD remote
2	CAN	PC control and monitor

## **BASIC Specification**

<b>Inverter (built-in)</b>		<b>Description</b>		
<b>Normal specification</b>				
1	Rated Power	18KW		
2	Output Waveform	Pure Sine Wave/Same as input (Bypass Mode)		
3	Output Voltage	240Vac(H-H)/120Vac(H-N) $\pm 10\%$ RMS		
4	Output Frequency	50 or 60 $\pm$ 0.3Hz (Inverter mode by sw4 setting)		
5	Typical Transfer Time	4-6ms typical,10ms(Max)		
6	THD	< 3%(Rated voltage full R load)		
7	AC Input Range	184-253Vac (UPS mode) or 140-270Vac (GEN mode)		
8	Customized AC Charger	Battery type selector position 9, special design for LFP, make the battery cycle life Maximization		
9	MAX AC Charge Current	100A		
10	Battery priority Function	Setting by SW5 on position 1 (inverter mode valid), AC automatic come in when battery voltage low alarm at 48Vdc or 50Vdc		
11	AC Bypass without charging	Battery type selector position 0		
<b>MPPT (built-in)</b>		<b>Description</b>		
<b>Normal specification</b>				
1	PV POWER	3.5KW*4		
2	PV Input Voltage	60-145Vdc		
3	MPPT Charging Voltage	56.0Vdc (Fast charging)/54Vdc (Float charging)		
4	MPPT Output Current	60A*4		
<b>Model</b>	<b>Configuration</b>			
ESS18048	MPPT	INVERTER	BATTERY	Energy
E1000P4	240A(60A*4)	18KW	1000AH(200AH*5)	
<b>Mechanical Characteristics</b>				
ESS18048	Dimension H*W*D	Shipping H*W*D	Weight(N.W.)	Weight(G.W.)
E1000P4	1810*560*960mm	1960*700*1050mm	720KG	770KG

