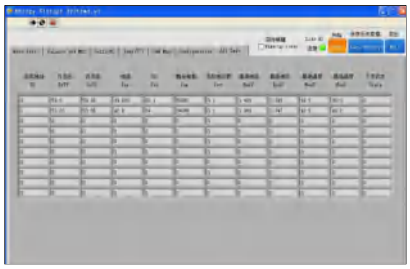
10.24KWH Battery Energy Storage System

ESS6048E200P2

10.24KWH Battery

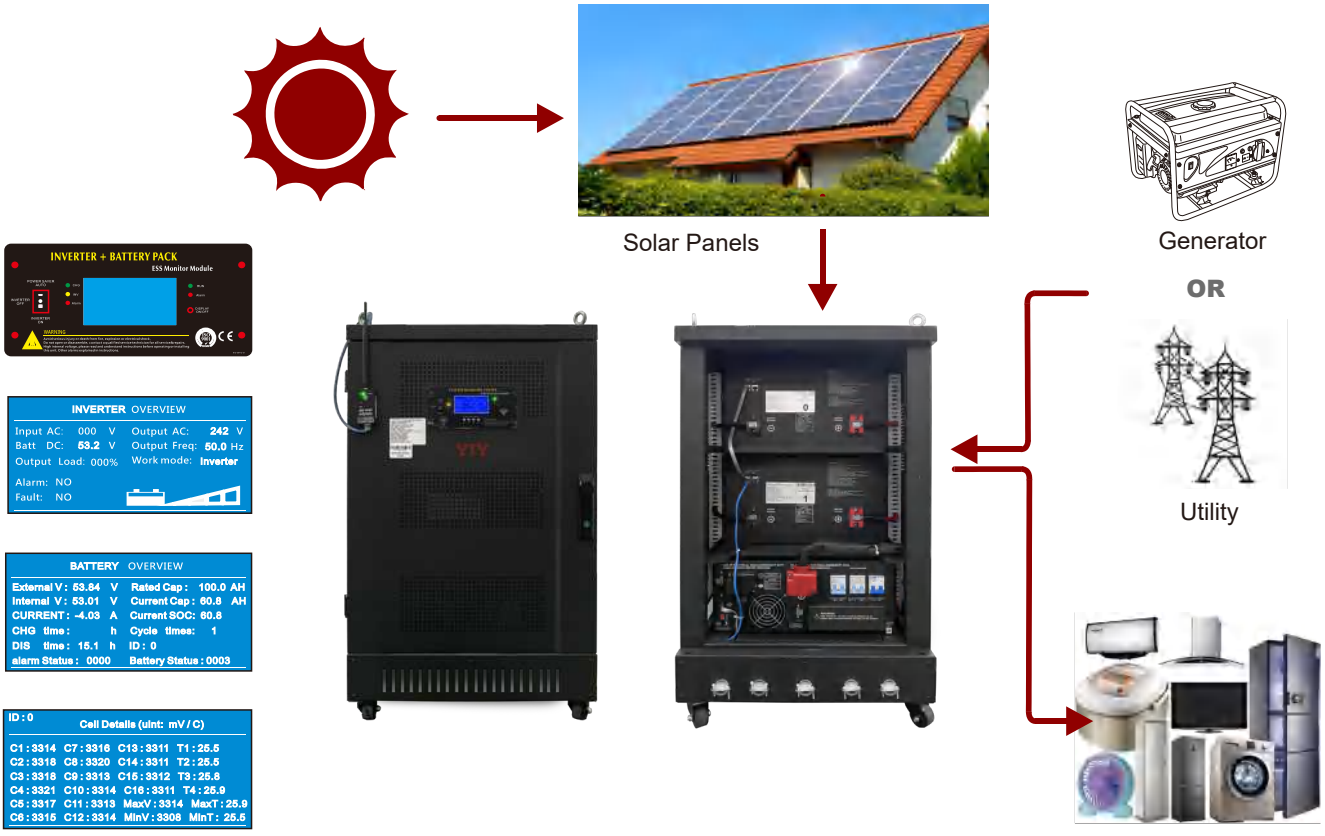
6 KW Inverter & AC Charger

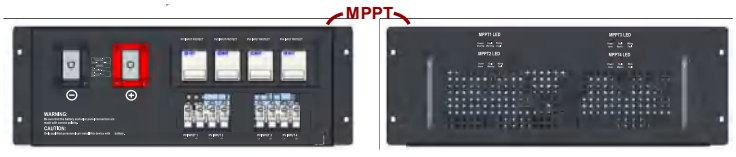
100A MPPT Solar Charger

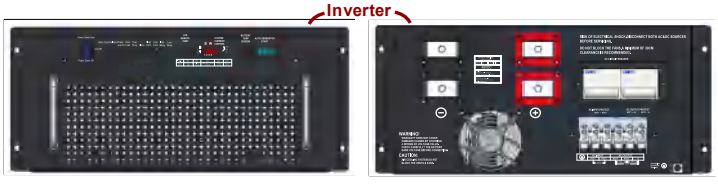


Product Application

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.







Loads Power Source

Day-time(battery priority mode):

PV power>loads power: PV → **MPPT** → inverter → loads; → battery

PV power=loads power: PV → **MPPT** → inverter → loads

PV power<loads power: PV → **MPPT** → inverter → loads; **Battery**

Night-time(battery priority mode):

Battery Full: battery → inverter → loads

Battery Low alarm: City power → inverter → loads; → battery charging

OR

City power → inverter → loads

BASIC Specification

Battery		Description
Normal specification		
1	Rated Voltage	51.2V
2	Rated Capacity	200Ah
3	Rated Energy	10.24KWH
4	Battery Configuration	5.12KWH(16S1P) *2PCS
5	Battery Cell	3.2V100AH 32PCS
Standard Charge		
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)	110A withstand 30s (every pack 55A)
6	Peak charge current(Total)	120A withstand 5s (every pack 60A)
7	Rated charge current(Total)	100A (every pack 50A)
8	Recommend charge current(Total)	<100A
Standard discharge		
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)	220A withstand 30s (every pack 110A)
6	Peak discharge current(Total)	240A withstand 5s (every pack 120A)
7	Rated discharge current(Total)	200A (every pack 100A)
8	Recommend discharge current(Total)	<200A

BASIC Specification

Communication				
1	RS485		For LCD remote	
2	CAN		PC control and monitor	
Inverter (built-in)			**Description**	
Normal specification				
1	Rated Power		6KW	
2	Output Waveform		Pure Sine Wave/Same as input (Bypass Mode)	
3	Output Voltage		240Vac(H-H)/120Vac(H-N) ±10% RMS	
4	Output Frequency		50 or 60± 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		50A	
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	
MPPT (built-in)			**Description**	
Normal specification				
1	PV POWER		3.0KW*2	
2	PV Input Voltage		60-145Vdc	
3	MPPT Charging Voltage		56.0Vdc (Fast charging)/54Vdc (Float charging)	
4	MPPT Output Current		50A*2	
Model	**Configuration**			
ESS6048 E200P2	MPPT	INVERTER	BATTERY	Energy
	100A(50A*2)	6KW	200AH(100AH*2)	10.24kwh
Mechanical Characteristics				
ESS6048 E200P2	Dimension H*W*D	Shipping H*W*D	Weight(N.W.)	Weight(G.W.)
	940*560*785mm	1100*700*870mm	180KG	200KG