

ESS 10.24kWh~102.4kWh

Battery Energy Storage All-in-One



• Features

- Unique integrated inverter, MPPT and battery pack design
- LiFePO4 Battery inside
- Life cycle at least 4000 cycles.
- Optional WIFI module for real-time remote monitoring • High reliability intelligent BMS .
- Unique automatic calibration active banlancing technology BMS syystem.
- 51.2Vdc voltage output suitable for home energy storage system, communication stations and other applications.

• Applications



On&off-grid



PV generation



Peak & Valley Reduction



Back-up power

• Technical Parameter

ESS Battery Energy Storage All-in-One								
Specifications								
Rated Energy	10.24KWH	15.36KWH	20.48KWH	25.6KWH	30.72KWH	40.96KWH	51.2KWH	102.4KWH
Model	ESS6048 E200P2	ESS8048 E300P3	ESS10048 E400P4	ESS1204 8E500P4	ESS12048 E600P4	ESS15048 E800P4	ESS18048 E1000P4	ESS2000P8
Rated Voltage	51.2V							
Rated Capacity	200Ah	300Ah	400Ah	500Ah	600Ah	800Ah	1000Ah	2000Ah
Battery Configuration	5.12KWH (16S1P) *2PCS	5.12KWH (16S1P) *3PCS	10.24KWH (16S2P) *2PCS	5.12KWH (16S1P) *5PCS	10.24KWH (16S2P) *3PCS	10.24KWH (16S2P) *4PCS	10.24KWH (16S2P) *5PCS	10.24KWH (16S2P) *10PCS
Battery Cell (3.2V100AH)	32PCS	48PCS	64PCS	80PCS	96PCS	128PCS	160PCS	320PCS
Standard Charge								
Operation temperature range @charging	0~60°C							
Rated charge voltage	55.2±0.4V							
Max charge voltage	56.8±0.4V							
Overcharge protection	58.4±0.4V							
Allowed MAX charge current(Total)	220A 30s (110A/pack)	330A 30s (110A/pack)	440A 30s (220A/pack)	550A 30s (110A/pack)	660A 30s (220A/pack)	880A 30s (220A/pack)	1100A 30s (220A/pack)	2200A 30s (220A/pack)
Peak charge current(Total)	240A 5s (120A/pack)	360A 5s (120A/pack)	480A 5s (240A/pack)	600A 5s (120A/pack)	720A 5s (240A/pack)	960A 5s (240A/pack)	1200A 5s (240A/pack)	2400A 5s (240A/pack)
Rated charge current(Total)	200A (100A/pack)	300A (100A/pack)	400A (200A/pack)	500A (100A/pack)	600A (200A/pack)	800A (200A/pack)	1000A (200A/pack)	2000A (200A/pack)
Recommend charge current(Total)	<200A	<300A	<400A	<500A	<600A	<800A	<800A	<1600A
Standard discharge								
Operation temperature range @discharging	-35~60°C							
Output Voltage Range	40~56Vdc							
Recommend Working Range	46~54Vdc							
Discharge Cut-off voltage	40V							
Allowed MAX discharge current(Total)	220A 30s (110A/pack)	330A 30s (110A/pack)	440A 30s (220A/pack)	550A 30s (110A/pack)	660A 30s (220A/pack)	880A 30s (220A/pack)	1100A 30s (220A/pack)	2200A 30s (220A/pack)
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Recommend discharge current(Total)	<200A	<300A	<400A	<500A	<600A	<800A	<800A	<1600A
Communication								
RS485	For LCD remote							
CAN	PC control and monitor							

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Inverter (built-in)								
Mode	ESS6048 E200P2	ESS8048 E300P3	ESS10048 E400P4	ESS1204 8E500P4	ESS12048 E600P4	ESS15048 E800P4	ESS18048 E1000P4	ESS2000P8
Rated Power	6KW	8KW	10KW	12KW	12KW	15KW	18KW	
Output Waveform	Pure Sine Wave/Same as input (Bypass Mode)							
Output Voltage	240Vac(H-H)/120Vac(H-N) ±10% RMS							
Output Frequency	50 或 60±0.3Hz(Inverter mode by sw4 setting)							
Typical Transfer Time	4-6ms (typical),10ms(Max)							
THD	<3%(Rated voltage full load)							
AC Input Range	184-253Vac (UPSWeight) or 140-270Vac(GEN mode)。							
Customized AC Charger	Battery type selector position 9,special design for LFP, make the battery cycle life Maximization							
MAX AC Charge Current	40A	80A	90A	100A	100A	100A	100A	
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							
AC Bypass without charging	Battery type selector position 0							
MPPT(built-in)								
PV POWER	3.0KW*2	3.0KW*3	3.0KW*4	3.0KW*4	3.5KW*4	3.5KW*4	3.5KW*4	3.5KW*8
PV Input Voltage	60-145Vdc							
MPPT Charging Voltage	56.0Vdc (Fast charging)/54Vdc (Float charging)							
MPPT Output Current	50A*2	50A*3	50A*4	60A*4	60A*4	60A*4	60A*4	60A*8
Configuration								
MPPT	100A(50A*2)	150A(50A*3)	200A(50A*4)	240A(60A*4)	240A(60A*4)	240A(60A*4)	240A(60A*4)	480A(60A*8)
INVERTER	6KW	8KW	10KW	12KW	12KW	15KW	18KW	External
BATTERY	200AH (100AH*2)	300AH (100AH*3)	400AH (200AH*2)	500AH (100AH*5)	600AH (200AH*3)	800AH (200AH*4)	1000AH (200AH*5)	2000AH (200AH*10)
Energy	10.24kwh	15.36kwh	20.48kwh	25.6kwh	30.72kwh	40.96kwh	51.2kwh	102.4kwh
Mechanical Characteristics								
Dimension H*W*D (mm)	940*560*785	1360*560*785	1110*560*960	1810*560*785	1360*560*960	1610*560*960	1810*560*960	1650*1120*1000
Shipping H*W*D(mm)	1100*700*870	1540*700*870	1290*700*1050	1960*700*870	1540*700*1050	1790*700*1050	1960*700*1050	1840*1260*1100
Weight(N.W.)	180KG	300KG	350KG	450KG	440KG	560KG	720KG	1300KG
Weight(G.W.)	200KG	330KG	370KG	500KG	480KG	610KG	770KG	1400KG