

Household Energy Storage System

Introduction

Supply electricity for some residents without grid or with instable grid



Output 110/220/230/240VAC±1%; Frequency 50/60±1%Hz

Product advantages

Applicable to off-grid or instable grid Environment friendly, convenient, longlife Fasy to install and use Seamless power switch Can be customized

Technical data

Туре	Total load	Available Energy	Charging	Recommended
500W Off-grid system	≤500W	2kWh	8h	≤1.2kWh
1000W Off-grid system	≤1000W	4.2kWh	8h	≤2.1kWh
2KW Off-grid system	≤2000W	8.4kWh	8h	≤4.2kWh
3KW off grid system	≤3000W	8.4kWh	8h	≤4.2kWh
4KW off grid system	≤4000W	10kWh	8h	≤5kWh
5KW off grid system	≤5000W	16.8kWh	8h	≤8.4kWh
10KW off grid system	≤10KW	37.8kWh	8h	≤18.9kWh
15KW off grid system	≤15KW	42kWh	8h	≤21kWh
20KW off grid system	≤20KW	67.2kWh	8h	≤33.6kWh

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500W Off-grid system

1. Total load≤500W; 2. provide 2kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption 1-1.2kWh.

	Configuration						
NO.	Product name	Specification	Qty	Note:			
1	Solar panel	POLY275W	2 pcs	2 in series			
2	Bracket	C-type steel	1 set	Hot dip galvanized			
	Inverter&Controller			1, 20A PWM controller built-in			
3	integrated cabinet	VDC24-500W	1 pcs	2,Power frequency sine wave output			
	with battery pack			3, Grid/Diesel input supported			
4	Lead acid battery	12V-120AH	2 pcs	Daily discharge: 2kWh; 2 in series connection			
5	Connector	MC4	2 pairs				
6	PV Cable	PV-F1*4mm²	40M	Panels to Inverter&Controller integrated cabinet			
7	Cable	BVR16 mm²	20M I	Connecting cables between batteries and battery pack to			
/				controller&Inverter BAT terminal			

1000W Off-grid system

1. Total load≤1000W; 2. provide 4.2kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption ≤2.1kWh.

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No.	Product name	Specification	Qty	Note:
1	Calarmanal	POLY-275W	4000	2 in series connection* 2 parallel, 2 parallel connected for 1
'	Solar panel	FOLT-275W	4pcs	by MC transfer connector
2	Bracket	C-type Steel	1set	Hot dip galvanized
	Inverter&Controller			1, 60A PWM controller built-in
3	integrated cabinet	VDC24-2KVA	1set	2,Power frequency sine wave output
	with battery pack			3, Grid/Diesel input supported
4	Lead acid battery	12V-250AH	2pcs	Daily discharge: 4.2kWh; 2 in series
5	Connector	MC4	4pairs	
6	Transfer connector		1pair	
7	PV Cable	PV-F1*4mm²	40M	Panels to Inverter&Controller integrated cabinet
8	Cable	BVR16 mm²	20M	Connecting cables between batteries and battery pack to controller&Inverter BAT terminal

2KW Off-grid system

1. Total load≤2000W; 2. provide 8.4kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption ≤4.2kWh.

Configuration

No.	Product name	Specification	Qty	Note
1	Solar panel	POLY-275W	6pcs	3 series connection* 2 parallel
2	Bracket	C-type Steel	1set	Hot dip galvanized
	Inverter&Controller			1, 60A MPPT controller built-in
3	integrated cabinet	VDC48-3KVA	1set	2,Power frequency sine wave output
	integrated cabinet			3, Grid/Diesel input supported
4	Lead acid battery	12V-250AH	4pcs	Daily discharge: 8.4kWh; 4 in series connection
	Cable	PV-F1*4mm²	40M	Panels to Inverter&Controller integrated cabinet
5		BVR-16mm²	10M	Batteries to (battery end of)Inverter&Controller integrated cabinet
		BVR-4mm ²	10M	Inverter&Controller integrated cabinet AC output
6	Battery pack	Angle steel	1	Connecting wires between batteries included
7	Connector	MC4	4pairs	
8	Transfer connector		1pair	



3KW off grid system

1. Total load≤3000W; 2. provide 8.4 kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption ≤4.2kWh.

	Configuration					
No	Product name	Specification	Qty	Note		
1	Solar panel	POLY-275W	9pcs	3 series connection* 3 parallel		
2	Bracket	C-type steel	1set	Hot dip galvanized		
3	Solar Combiner box	FSB4-1	1set	Lightning protection ; Fuse; Water-proof;		
				1, 60A MPPT controller built-in		
4	Inverter&Controller integrated cabinet	VDC48-4KVA	1set	2,Power frequency sine wave output 110/220/230/240VAC± 1%;50/60±1%Hz		
				3, Grid/Diesel input supported		
5	Lead acid battery	12V-250AH	4pcs	Daily discharge: 8.4kWh; 4 in series connection		
		PV-F1*4mm²	60M	Panels to Combiner		
	Cable	BVR-16mm²	30M	Combiner to Inverter&Controller integrated cabinet		
6		BVR-16mm²	10M	Batteries to (battery end of)Inverter&Controller integrated cabinet		
		BVR-4mm²	10M	Inverter&Controller integrated cabinet to AC power distribution cabinet		
7	Battery rack	Angle steel	1set	Connecting wires between batteries included		
8	AC power distribution cabinet	4KW/220VAC	1set	Air switch、fusing, Lightning protection		
9	Connector	MC4	6pairs			

4KW off grid system

1. Total load≤4000W; 2. provide10.08 kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption ≤5kWh.

1. I ota	1. Total load≤4000W; 2. provide10.08 kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption ≤5kWh.						
	Configuration						
No	Product name	Specification	Qty	Note			
1	Solar panel	POLY-275W	9pcs	3 series connection* 3 parallel			
2	Bracket	C-type steel	1set	Hot dip galvanized			
3	Solar Combiner box	FSB4-1	1set	Lightning protection ; Fuse; Water-proof;			
				1, 60A MPPT controller built-in			
4	Inverter&Controller	VDC48-5KVA	1set	2,Power frequency sine wave output 110/220/230/240VAC±			
4	integrated cabinet	VDC46-5KVA	rset	1%;50/60±1%Hz			
				3, Grid/Diesel input supported			
5	Lead acid battery	12V-150AH	8pcs	Daily discharge: 10.08kWh; 4 in series connection* 2 parallel			
	PV cable	PV-F1*4mm²	60M	Panels to Combiner			
		BVR-16mm²	30M	Combiner to Inverter&Controller integrated cabinet			
6		BVR-25mm²	10M	Batteries to (battery end of)Inverter&Controller integrated cabinet			
		BVR-4mm²	10M	Inverter&Controller integrated cabinet to AC power distribution cabinet			
7	Battery rack	Angle steel	1set	Connecting wires between batteries included			
8	AC power distribution cabinet	5KW/220VAC	1set	Air switch、fusing, Lightning protection			
9	Connector	MC4	6pairs				



5KW off grid system

1. Total load≤5000W; 2. provide 16.8 kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption ≤8.4kWh.

	Configuration					
No	Product name	Specification	Qty	Note		
1	Solar panel	POLY-275W	18pcs	6 series connection* 3 parallel		
2	Bracket	C-type steel	1set	Hot dip galvanized		
3	Solar Combiner box	FSB4-1	1set	Lightning protection ; Fuse; Water-proof;		
				1, 50A MPPT controller built-in		
4	Inverter&Controller	VDC96-8KVA	1set	2,Power frequency sine wave output 110/220/230/240VAC±		
4	integrated cabinet	VDC90-6KVA	rset	1%;50/60±1%Hz		
				3, Grid/Diesel input supported		
5	Lead acid battery	12V-250AH	8pcs	Daily discharge: 16.8kWh; 8 in series connection		
		PV-F1*4mm²	60M	Panels to Combiner		
		BVR-16mm²	30M	Combiner to Inverter&Controller integrated cabinet		
6	Cable	BVR-16mm²	10M	Batteries to (battery end of)Inverter&Controller integrated cabinet		
		BVR-6mm²	10M	Inverter&Controller integrated cabinet to AC power distribution cabinet		
7	Battery rack	Angle steel	1set	Connecting wires between batteries included		
8	AC power distribution cabinet	8KW/220VAC	1set	Air switch、fusing, Lightning protection		
9	Connector	MC4	6pairs			

10KW off grid system

1. Total load≤10KW; 2. provide 37.8kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption ≤18.9kWh.

	Configuration					
No	Product name	Specification	Qty	Note		
1	Solar panel	POLY-275W	30pcs	10 series connection* 3 parallel		
2	Bracket	C-TYPE	1set	Hot dip galvanized		
3	Solar Combiner box	FSB4-1	1set	Lightning protection; Fuse; Water-proof;		
				1, 50A MPPT controller built-in		
4	Inverter&Controller	VDC220-	1set	2,Power frequency sine wave output 110/220/230/240VAC±		
4	integrated cabinet	15KVA/50A	iset	1%;50/60±1%Hz		
				3, Grid/Diesel input supported		
5	Lead acid battery	12V-250AH	18pcs	Daily discharge: 37.8kWh; 18 in series connection		
		PV-F1*4mm²	60M	Panels to Combiner		
	Cable	BVR-16mm²	30M	Combiner to Inverter&Controller integrated cabinet		
6		BVR-16mm²	10M	Batteries to (battery end of)Inverter&Controller integrated cabinet		
		BVR-16mm²	10M	Inverter&Controller integrated cabinet to AC power distribution cabinet		
7	Battery rack	Angle steel	1set	Connecting wires between batteries included		
8	AC power distribution cabinet	10KW/220VAC	1set	Air switch、fusing, Lightning protection		
9	Connector	MC4	6pairs			



15KW off grid system

1. Total load≤15KW; 2. provide 42kWh; 2.Battery fill time need 8h; 3. Recommended daily consumption ≤21kWh.

	Configuration					
No	Product name	Specification	Qty	Note		
1	Solar panel	POLY-275W	50pcs	10 series connection* 5 parallel		
2	Bracket	C-TYPE	1set	Hot dip galvanized		
3	Solar Combiner box	FSB6-1	1set	Lightning protection ; Fuse; Water-proof;		
				1, 50A MPPT controller built-in		
4	Inverter&Controller integrated cabinet	VDC240- 20KVA	1set	2,Power frequency sine wave output 110/220/230/240VAC± 1%:50/60±1%Hz		
	integrated edemot	201171		3, Grid/Diesel input supported		
5	Lead acid battery	12V-250AH	20pcs	Daily discharge: 42kWh; 20 in series connection		
		PV-F1*4mm²	100M	Panels to Combiner		
	Cable	BVR-16mm²	30M	Combiner to Inverter&Controller integrated cabinet		
6		BVR-16mm²	10M	Batteries to (battery end of)Inverter&Controller integrated cabinet		
		BVR-25mm²	10M	Inverter&Controller integrated cabinet to AC power distribution cabinet		
7	Battery rack	Angle steel	1set	Connecting wires between batteries included		
8	AC power distribution cabinet	15KW/220VAC	1set	Air switch、fusing, Lightning protection		
9	Connector	MC4	10pairs			

20KW off grid system

1. Total load≤20KW; 2. provide 67.2kWh; 2.Battery fill time need 7h; 3. Recommended daily consumption ≤33.6kWh. Configuration No Product name Specification Qty Note POLY-275W Solar panel 72pcs 12 series connection* 6 parallel 2 C-TYPE Bracket 1set Hot tip galvanized 3 Solar Combiner box FSB4-1 2set Lightning protection; Fuse; Water-proof; 1, 100A MPPT controller built-in Inverter&Controller VDC240-2,Power frequency sine wave output 110/220/230/240VAC± 4 1set integrated cabinet 30KVA 1%;50/60±1%Hz 3, Grid/Diesel input supported 5 Lead acid battery 12V-200AH 40pcs Daily discharge: 67.2kWh; 20 in series connection*2 parallel PV-F1*4mm² 120M Panels to Combiner BVR-16mm² 80M Combiner to Inverter&Controller integrated cabinet Cable 6 Batteries to (battery end of)Inverter&Controller integrated BVR-25mm² 10M cabinet Inverter&Controller integrated cabinet to AC power distribution BVR-25mm² 10M cabinet 7 Battery rack Connecting wires between batteries included Angle steel 1set AC power 25KW/220VAC 8 1set Air switch、fusing, Lightning protection distribution cabinet MC4 9 Connector 12pairs



Contact us

Luster Solar Technology(Changzhou) Co., Ltd

Website: www.lustersolar.com

Address: No.2606, Building A, Wanda, Xinbei District, Changzhou city, Jiangsu

Province, China Contact: Ms Wu

E-mail: <u>zheyi.wu@Lustersolar.com</u>

Tel.: +86 519 85859932

Mobile phone:+86 13806122169 Whatsapp: +86 13806122169

Wechat:YZG807