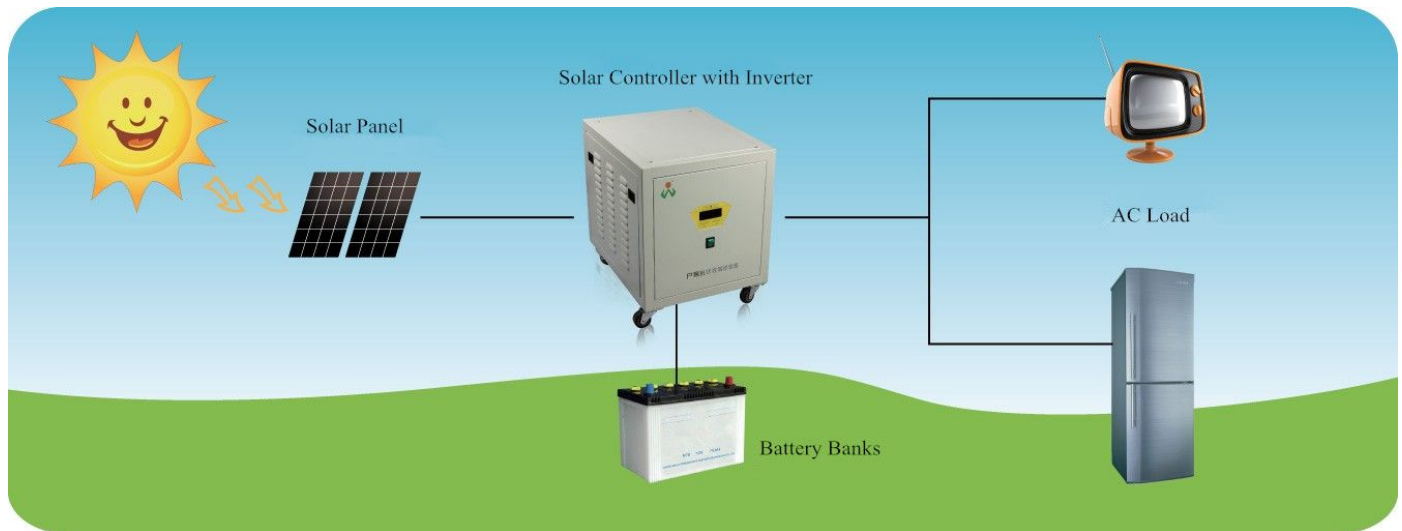


I. PRODUCT INTRODUCTION

Solar controller with inverter is the intelligent power supply with integration of solar and DC to AV inverse. The apparatus is mainly used for solar power system; provide effective power for traffic inconvenience, the harsh environment of the mountain area, a pasturing area, border, islands and other areas without electricity. With decent appearance, easy operation, and visual indication of LCD, the apparatus has perfect protection function, high charging efficiency, and low no-load loss.

II. SYSTEM DRAWING



III. MODEL SPECIFICATION

Model Sample	<u>WSI</u> <u>06</u> <u>06</u> - <u>24</u> - <u>3</u> <u>N</u> <u>01</u>						
	1	2	3	4	5	6	7
Number	1	2	3	4	5	6	7
Model Specification	Part "1" refers to the solar controller with inverter	Part "2" refers to the rated solar power 03: solar power 300W 05: solar power 500W 06: solar power 600W 10: solar power 1kW	Part "3" refers to the rated inverter capacity 03: inverter capacity 300VA 05: inverter capacity 500VA 06: inverter capacity 600VA 10: inverter capacity 1kVA	Part "4" refers to the battery voltage 12: battery voltage 12V 24: battery voltage 24V 36: battery voltage 36V 48: battery voltage 48V			
Number	5	6	7	/			
Model specification	Part "5" Refers to inverter output voltage 1: output voltage 110V _{AC}	Part "6" With or without By-pass function N: without By-pass	Part "7" Refers to inverter output frequency 01: output frequency	/			

	2: output voltage 120V _{AC} 3: output voltage 220V _{AC} 4: output voltage 230V _{AC} 5: output voltage 240V _{AC}	function M: with By-pass function	50HZ 02:output frequency 60HZ	
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IV. PERFORMANCE FEATURES

- ✧ Perfect protection function, thus the system has higher reliability.
- ✧ LCD display function, visually display battery voltage and charge current.
- ✧ Integrated design of controller and inverter, with simple structure and easy maintenance.
- ✧ PWM stepless unload mode, which burn excess power into Dump load, making the battery charging in the best status.
- ✧ Frequency toroidal transformer ensures that inverter has high efficiency and low no-load loss.
- ✧ Pure sine wave output, compared with square wave or modified wave, has higher efficiency and higher capability of driving load.

V. APPLICATION AREAS

- ✧ Photovoltaic power station
- ✧ Domestic household photovoltaic power system
- ✧ Coastal islands, remote mountainous, border posts for regions shortage of or without electricity.
- ✧ Government demonstration projects, landscape lighting projects, etc.
- ✧ Mobile communication base station, expressway and other non-residential regions.

VI. PRODUCTS DISPLAY



VII. 300W-500W TECHNICAL PARAMETERS

product model	WSI0303-12	WSI0303-24	WSI0505-12	WSI0505-24
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Rated solar power	300 W	300 W	500 W	500 W
Floating charge voltage	14.5 V	29 V	14.5 V	29 V
Rated inverter output capacity	300 VA	300 VA	500 VA	500 VA
Rated battery voltage	12 V	24 V	12 V	24 V
Over voltage shutoff	17 V	34 V	17 V	34 V
Over voltage recovery	16.5 V	33 V	16.5 V	33 V
Battery over-discharge shutoff	10.8 V	21.6 V	10.8 V	21.6 V
Battery over-discharge recovery	12 V	24 V	12 V	24 V
No-load loss current	≤ 0.9 A	≤ 0.4 A	≤ 1 A	≤ 0.5 A
Net weight	8 kg	8 kg	9 kg	9 kg
Dimension	402×163×202 mm			
Output wave	Pure sine wave			
Display mode	LCD			
Cooling	Fan			
Rated output voltage	110/120/220/230/240 V _{AC}			
Wave distortion	$\leq 4\%$			
Output frequency	50/60±0.5 Hz			
Dynamic response	5%			
Power factor	≥ 0.8			
Over-load capacity	120% 1min, 150% 10s			
Inverter efficiency	Maximum 90%			
Isolating mode	Frequency Toroidal transformer			
Protection Level	IP20 (Indoor)			
Noise (1m)	≤ 40 dB			
Insulating Strength	1500V _{AC} , 1min			
Protection Functions	Inverter input over-voltage protection; battery over-discharge protection; battery anti-reverse-connection protection; output over-load protection; output short circuit protection; overheating protection			
Ambient Temperature	-20~+55℃			
Ambient Humidity	0~93%, without condensing			
Working Altitude	≤ 4000 m			
In order to serve our customers better. Our company can adjust parameters configuration according to customer's requirement.				

VIII. 600W-1KW TECHNICAL PARAMETERS

Product Model	WSI0606-24	WSI1010-24	WSI1010-48
Rated solar power	600 W	1000 W	1000 W
Floating charging voltage	29 V	29 V	58 V
Rated inverter output capacity	600 VA	1000 VA	1000 VA
Rated battery voltage	24 V	24 V	48 V
Over voltage shutoff	34 V	34 V	68 V
Over voltage recovery	33 V	33 V	66 V
Battery over-discharge shutoff	21.6 V	21.6 V	43.2 V
Battery over-discharge recovery	24 V	24 V	48 V
No-load loss current	≤0.7 A	≤0.7 A	≤0.5 A
Net weight	10 kg	12 kg	12 kg
Dimension	402×163×202 mm		
Output wave	Pure sine wave		
Display mode	LCD		
Cooling	Fan		
Rated output voltage	110/120/220/230/240 V _{AC}		
Wave Distortion	≤4%		
Output Frequency	50/60±0.5 Hz		
Dynamic Response	5%		
Power Factor	≥0.8		
Over-load Capacity	120% 1min, 150% 10s		
Inverter Efficiency	Maximum 90%		
Isolating Mode	Frequency Toroidal Transformer		
Protection Level	IP20 (Indoor)		
Noise (1m)	≤40dB		
Insulating Strength	1500V _{AC} , 1min		
Protection Functions	Inverter input over-voltage protection; battery over-discharge protection; battery anti-reverse-connection protection; output over-load protection; output short circuit protection; overheating protection		
Ambient Temperature	-20~+55℃		
Ambient Humidity	0~93%, without condensing		
Working Altitude	≤4000m		

In order to serve our customers better. Our company can adjust parameters configuration according to customer's

requirement.

IX. APPENDIX

Optional Functions			
➤	By-pass Function: It will switch to the city grid automatically when the battery is under voltage, which ensures the continuity and stability of system.		
➤	English display function: It can display in English.		
Friendly reminder: customers should provide the following information when ordering Solar Controller with Inverter			
➤	Rated battery voltage	➤	Load power and load characteristics
➤	Rated solar panel power	➤	Inverter output capacity
➤	With or without by-pass function	➤	Rated output voltage and rated output frequency

Declare: Our Company reserves the right to change products. Design and specification are subject to change without prior notice.