

# WP Inverter Charger/Hybrid Solar Inverter

## Feature

- Adopt EI transformer, strong impact resistance ability;
- Pure sine wave output adapt a variety type of loads ;
- Intelligent LCD integrated display, real-time view of operating status and setting data;
- AC charging current 0~20A adjustable, more flexible user battery capacity configuration;
- 3 type working modes (AC first / Battery first / Saving energy mode);
- Built-in PWM or MPPT solar controller optional;
- Adding fault code interrogate function, easy for real-time operating status monitoring;
- Supports diesel or gasoline generator, adapt any tough electricity occasions;
- Protection against overload, overheat, short circuits, safety and reliable;
- Support RS485 communication port / mobile APP (optional).

## Application Area

- Office and public facilities, household system, network transmission equipment, manufacturing, control system, solar energy system, oil field, drilling field operation, etc.
- Provide stable, reliable and safe solutions for families, islands, ships and other small photovoltaic power systems



**System Application Diagram**



## Technical Parameters

Model: WP	70112/24	10212/24	15224/48	20224/48	30224/48	40248/96	50248/96	60248/96							
Rated Power	700W	1000W	1500W	2000W	3000W	4000W	5000W	6000W							
Peak Power (20ms)	2100VA	3000VA	4500VA	6000VA	9000VA	12000VA	15000VA	18000VA							
Start Motor	0.5HP	1HP	1.5HP	2HP	3HP	3HP	4HP	4HP							
Battery Voltage	12/24VDC	12/24VDC	24/48VDC	24/48VDC	24/48VDC	48/96VDC	48/96VDC	48/96VDC							
Max AC charging current	0A~20A (Depending on the model, The maximum charging power is 1/4 of the rated power)														
Built-in solar controller charging current (optional)	10A~60A(PWM or MPPT)			24/48V(PWM:10A~60A/ MPPT:10A-100A)		48V(PWM:10A~120A/MPPT:10A~100A) / 96V(50A/100A(PWM or MPPT))									
Size(L*W*Hmm)	345*170*290			410*225*390		490*260*500									
Packing Size(L*W*Hmm)	395*220*350			470*285*460		550*320*560									
N.W.(kg)	12	14	16	21	26	45	48	50							
G.W.(kg) (Carton packaging)	14	16	18	24	29	49	52	54							
Installation Method	Tower														
Input	DC Input Voltage Range	10.5-15VDC (Single battery voltage)													
	AC Input Voltage Range	73VAC~138VAC(110VAC)/83VAC~148VAC(120VAC)/145VAC~275VAC(220VAC)/155VAC~285VAC(230VAC)/165VAC~295VAC(240VAC)													
	AC Input Frequency Range	45Hz~55Hz (50Hz, 55Hz~65Hz (60Hz)													
	AC charging method	Three-stage (constant current, constant voltage, floating charge)													
Output	Efficiency(Battery Mode)	≥85%													
	Output Voltage(Battery Mode)	110VAC±2% / 120VAC±2% / 220VAC±2% / 230VAC±2% / 240VAC±2%													
	Output Frequency(Battery Mode)	50Hz±0.5 or 60Hz±0.5													
	Output Wave(Battery Mode)	Pure Sine Wave													
	Efficiency(AC Mode)	≥99%													
	Output Voltage(AC Mode)	Follow input													
	Output Frequency(AC Mode)	Tracking Automatically													
	Output waveform distortion(Battery Mode)	≤3% (Linear load)													
	No load loss(Battery Mode)	≤1% rated power													
	No load loss(AC Mode)	≤2% rated power ( charger does not work in AC mode)													
	No load loss(Energy saving Mode)	≤10W													
Battery Type (selectable)	VRLA Battery	Charge Voltage :14.2V; Float Voltage:13.8V(Single battery voltage)													
	Customize battery	Charging and discharging parameters of different types of batteries can be customized according to user requirements (charging and discharging parameters of different types of batteries can be set through the operation panel)													
Protection	Battery undervoltage alarm	Factory default: 11V (Single battery voltage)													
	Battery undervoltage protection	Factory default: 10.5V (Single battery voltage)													
	Battery overvoltage alarm	Factory default: 15V (Single battery voltage)													
	Battery overvoltage protection	Factory default: 17V (Single battery voltage)													
	Battery overvoltage recovery voltage	Factory default: 14.5V (Single battery voltage)													
	Overload power protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)													
	Inverter output short circuit protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)													
	Temperature protection	>90°C (Shut down output)													
Alarm	A	Normal working condition, buzzer has no alarm sound													
	B	Buzzer sounds 4 times per second when battery failure, voltage abnormality, overload protection													
	C	When the machine is turned on for the first time, the buzzer will prompt 5 when the machine is normal													
Inside Solar controller (Optional)	Charging Mode	PWM or MPPT													
	PV Input Voltage Range	PWM: 15V-44V(12V system); 30V-44V(24V system); 60V-88V(48V system); 120V-176V(96V system) MPPT: 15V-120V(12V system); 30V-120V(24V system); 60V-120V(48V system); 120V-240V(96V system)													
	Max PV Input Voltage(Voc) (At the lowest temperature)	PWM: 50V(12V/24V system); 100V(48V system); 200V(96V system) / MPPT: 150V(12V/24V/48V system)													
	PV Array Maximum Power	12V system: 140W(10A)/280W(20A)/420W(30A)/560W(40A)/700W(50A)/840W(60A)/1120W(80A)/1400W(100A); 24V system: 280W(10A)/560W(20A)/840W(30A)/1120W(40A)/1400W(50A)/1680W(60A)/2240W(80A)/2800W(100A); 48V system : 560W(10A)/1120W(20A)/1680W(30A)/2240W(40A)/2800W(50A)/3360W(60A)/4480W(80A)/5600W(100A)/6720W(PWM 120A)/5.6KW&11.2KW(MPPT 100A/200A); 96V system: 5.6KW(50A)/11.2KW(100A);													
	Standby loss	≤3W													
	Maximum conversion efficiency	>95%													
Working Mode	Battery First/AC First/Saving Energy Mode														
Transfer Time	≤4ms														
Display	LCD														
Thermal method	Cooling fan in intelligent control														
Communication(Optional)	RS485/APP (WIFI monitoring or GPRS monitoring)														
Environment	Operating temperature	-10°C~40°C													
	Storage temperature	-15°C~60°C													
	Noise	≤55dB													
	Elevation	2000m (More than derating)													
	Humidity	0%-95%, No condensation													
	Warranty	1 year													

Note: 1. Specifications are subject to change without prior notice; 2. Special voltage and power requirements can be customized according to the actual situation of users.