

DP Inverter Charger/Hybrid Solar Inverter

Feature

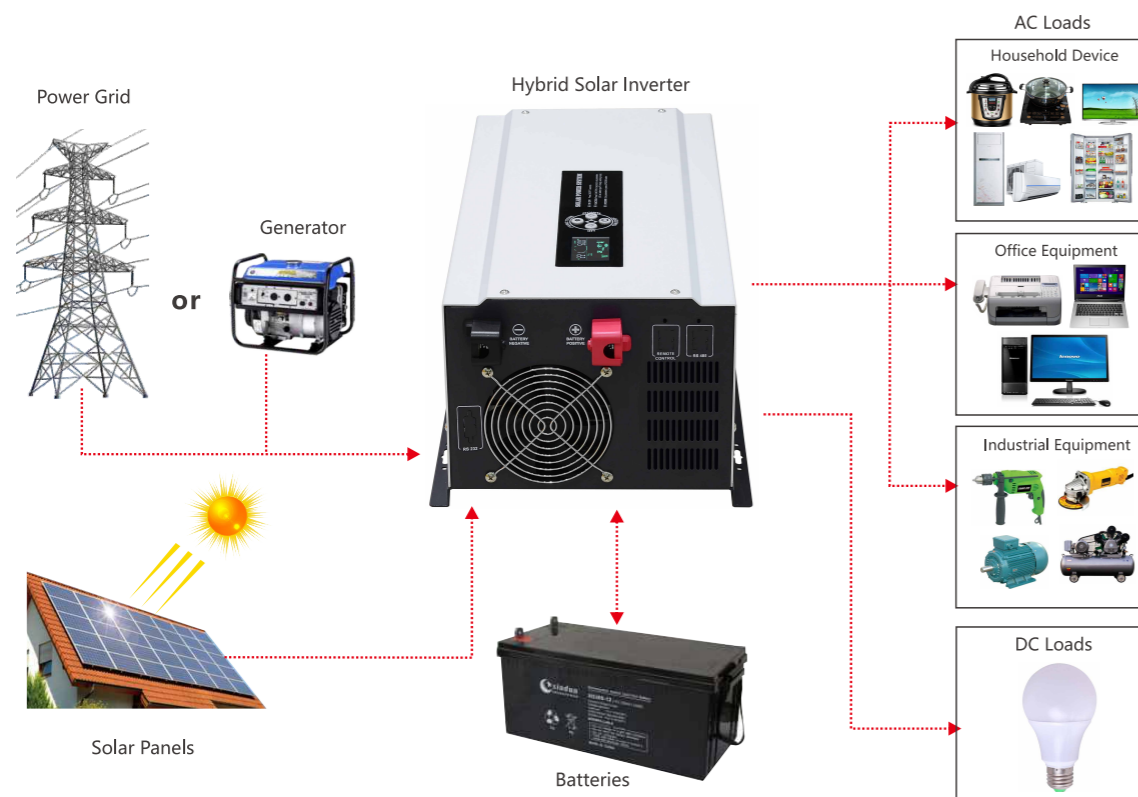
- Pure sine wave output;
- Low frequency toroidal transformer increase efficiency;
- Integrated LCD display; One-button start with an external display screen(optional);
- Dedicated DCP chip design; stable and high-speed operation;
- LCD display, easy to monitor the operation condition in real time;
- AC charge current 0-30A adjustable; battery capacity configuration more flexible;
- Three types working modes adjustable:AC first, DC first, energy-saving mode;
- AVR output, all-around automatic protection function;
- Frequency adaptive function, adapt to different grid environments;
- Built-in PWM or MPPT controller optional;
- Added fault codes query function, facilitate user to monitor the operation state in real time;
- Supports diesel or gasoline generator, adapt any tough electricity situation;
- RS485 communication port/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: DP	10212/24/48	15212/24/48	20212/24/48	30224/48	40224/48	50248	60248	70248
Rated Power	1000W	1500W	2000W	3000W	4000W	5000W	6000W	7000W
Peak Power(20ms)	3000VA	4500VA	6000VA	9000VA	12000VA	15000VA	18000VA	21000VA
Start Motor	1HP	1.5HP	2HP	3HP	3HP	4HP	4HP	5HP
Battery Voltage	12/24/48VDC			24/48VDC	24/48VDC	48VDC		
Size(L*W*Hmm)	555*297*184				615*315*209			
Package Size(L*W*Hmm)	620*345*255				680*365*280			
N.W.(kg)	12	13	15.5	18	23	24.5	26	27.5
G.W.(kg)(Carton Packing)	14	15	17.5	20	25.5	27	28.5	30
Installation Method	Wall-Mounted							
Input	DC Input Voltage Range	10.5-15VDC (Single battery voltage)						
	AC Input Voltage Range	85VAC~138VAC (110VAC) / 95VAC~148VAC (120VAC) / 170VAC~275VAC (220VAC) / 180VAC~285VAC (230VAC) / 190VAC~295VAC (240VAC)						
	AC Input Frequency Range	45Hz~55Hz(50Hz) / 55Hz~65Hz(60Hz)						
	Max AC charging current	0~30A (Depending on the model)						
	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)	50/60Hz±1%						
	Output Wave(Battery Mode)	Pure Sine Wave						
	Efficiency(AC Mode)	>99%						
	Output Voltage(AC Mode)	110VAC±10% / 120VAC±10% / 220VAC±10% / 230VAC±10% / 240VAC±10%						
	Output Frequency(AC Mode)	Tracking Automatically						
	Output waveform distortion(Battery Mode)	≤3% (Linear load)						
	No load loss(Battery Mode)	≤0.8% rated power						
	No load loss(AC Mode)	≤2% rated power(charger does not work in AC mode)						
Battery Type	VRLA Battery	Charge Voltage :14.2V; Float Voltage:13.8V(12V system; 24V system x2 ; 48V system x4)						
	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(12V system; 24V system x2; 48V system x4)						
	Battery undervoltage protection	Factory default: 10.5V (12V system; 24V system x2; 48V system x4)						
	Battery overvoltage alarm	Factory default: 15V(12V system; 24V system x2; 48V system x4)						
	Battery overvoltage protection	Factory default: 17V(12V system; 24V system x2; 48V system x4)						
	Battery overvoltage recovery voltage	Factory default: 14.5V(12V system; 24V system x2; 48V system x4)						
	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						
	Charging current	10A~60A (PWM or MPPT)			10A~60A(PWM) / 10A~100A(MPPT)			
	PV Input Voltage Range	PWM: 15V-44V(12V system); 30V-44V(24V system); 60V-88V(48V system) MPPT: 15V-120V(12V system); 30V-120V(24V system); 60V-120V(48V system)						
	Max PV Input Voltage(Voc) (At the lowest temperature)	PWM: 50V(12V/24V system); 100V(48V 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)						
	Standby loss	≤3W						
Maximum conversion efficiency	>95%							
Working Mode	Battery First/AC First/Saving Energy Mode							
Transfer Time	≤4ms							
Display	LCD (External LCD Display(Optional))							
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.