

HFP SERIES

HYBRID SOLAR INVERTER

1.3KW-12.3KW



Pure sine wave



WiFi



Two-way energy storage design



Configurable working mode



Support working without battery



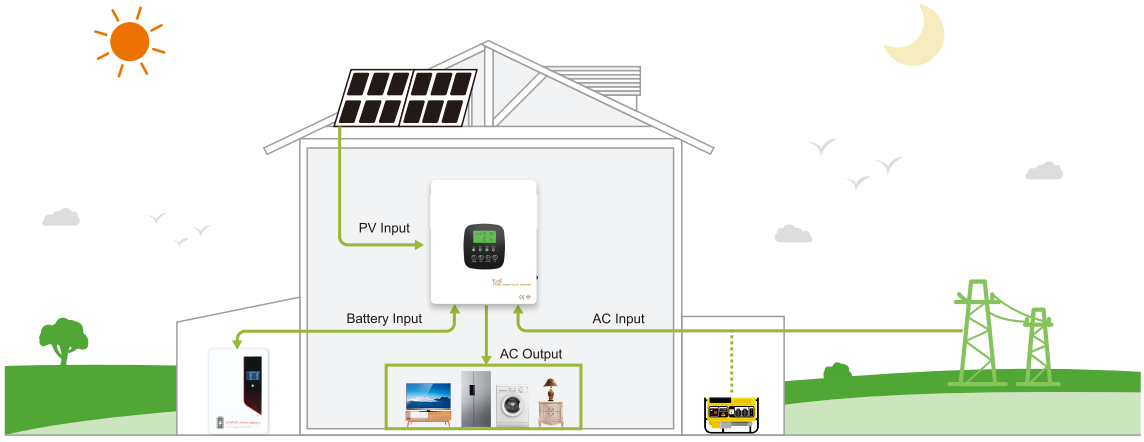
RS485



Features

- Adopting high-frequency design, high power density, small size, and high overall efficiency;
- Bidirectional energy storage design, which can achieve bidirectional flow control of electrical energy, and both photovoltaic and mains electricity can be charged to the battery;
- Ultra wide MPPT range, with a minimum of 40Vdc(24V models) / 80Vdc (48V models);
- Capable of setting working modes (grid connected mode, off grid mode, hybrid mode);
- Equipped with grid connected current setting function;
- Equipped with output priority setting function;
- Equipped with charging priority setting function;
- Equipped with lithium battery BMS communication function;
- Support battery-less operation mode.

Connection Diagram



OEM/ODM



OEM/ODM

Appearance



Colour



Configurable Data



HFP Hybrid Solar Inverter 1.3KW-12.3KW

Technical Parameters

Model: HFP	13212	18212	18224	23224	33224	43224	50248	63248	83248	103248	123248
Rated Power	1300W	1800W	1800W	2300W	3300W	4300W	5000W	6300W	8300W	10.3KW	12.3KW
PV Input											
Max PV Input Power	2000W	2500W	2500W	3000W	5000W		6000W	7000W	4500W*2	6000W*2	6000W*2
MPPT Tracking Voltage Range	30Vdc-240Vdc		40Vdc-350Vdc		40Vdc-450Vdc		80Vdc~450Vdc				
Rated Voltage	180Vdc		240Vdc						280Vdc		
Max PV Input Voltage (VOC) (at the lowest temperature)	300Vdc		400Vdc		500Vdc						
Max PV Input Current	15A				18A			27A	18A*2	22A*2	27A*2
MPPT Tracking Channels(Input Routed)	1 Routed								2 Routed		
Battery & Charging											
Battery Type	Lead-acid Battery/Lithium Battery										
	Custom Battery (Charging and discharging paramcters of different types of batteriescan be set through the operation board)										
Rated Battery Voltage	12Vdc		24Vdc				48Vdc				
Battery voltage Range	10.5~15Vdc (default)		21~30Vdc (default)				42~60Vdc (default)				
Max PV Charging Current	80A	100A	60A	80A	120A	150A	100A	120A	150A	180A	200A
Max AC Charging Current	50A	65A	35A	50A	80A	100A	60A	80A	100A	120A	140A
Max Charging Current	80A	100A	60A	80A	120A	150A	100A	120A	150A	180A	200A
Off-Grid Operation											
AC Input											
Rated Input voltage	230V (220V or 240V Can be set)										
Mains input voltage range	165Vac~280Vac / 120Vac~280Vac (Can be set)										
Rated Input Frequency	50Hz / 60Hz										
Input Frequency Range	45Hz~55Hz(50Hz),55Hz~65Hz(60Hz)										
AC Output											
Rated Output Voltage	230V (220V or 240V Can be set)										
Output Voltage Accuracy	±2%										
Rated Input Frequency	50Hz / 60Hz										
Output Frequency Accuracy	±1%										
Output Wave	Pure Sine Wave										
Hybrid Operation											
AC Input											
Rated Input voltage	230V (220V or 240V Can be set)										
Mains input voltage range	187Vac~264Vac										
Rated Input Frequency	50Hz / 60Hz										
Input Frequency Range	47Hz~52Hz(50Hz),57Hz~62Hz(60Hz)										
AC Output											
Rated Voltage Rated	230Vac (220Vac or 240Vac Can be set)										
Output Current	5.6A	7.8A	7.8A	10A	14.3A	18.7A	21.7A	27.4A	36.1A	44.9A	53.5A
On-Grid Operation											
AC Output											
Rated Output Voltage	230Vac (220Vac or 240Vac Can be set)										
Grid Voltage Range	187Vac ~ 264Vac										
Rated Output Frequency	50Hz / 60Hz										
Frequency Range	47Hz~52Hz(50Hz),57Hz~62Hz(60Hz)										
Rated Output Current	5.6A	7.8A	7.8A	10A	14.3A	18.7A	21.7A	27.4A	36.1A	44.9A	53.5A
Power Factor	> 0.98(Rated Power)										
Regular Parameters											
Maximum Conversion Efficiency (Battery Discharge)	94%(peak value)										
No load loss (Battery Discharge)	1% Rated Power (Typical value)										
MPPT Tracking Efficiency	≥99.9										
Transfer Time	10ms(Typical value)										
Display	LCD+LED										
Cooling Method	Cooling fan in intelligent control										
Communication	RS485/Mobile APP(WIFI Monitoring or GPRS monitoring)(Optional)										
Protection Degree	IP20										
Installation	Wall-Mounted										
Protect											
Battery low voltage alarm	11Vdc(default value)		22Vdc (default value)				44Vdc (default value)				
Battery low voltage protection	10.5Vdc(default value)		21Vdc (default value)				42Vdc (default value)				
Anti-islanding protection	≤2S										
Overload power protection	Automatic Protection (battery mode),Circuit Breaker or Insurance (AC mode)										
Output short circuit protection	Automatic Protection (battery mode),Circuit Breaker or Insurance (AC mode)										
Temperature protection	> 90°C (turn off inverter and charging)										
Environment											
Operating temperature	-10C~50°C										
Storage temperature	-15C~60°C										
Nois	≤55dB										
Elevation	2000m (More than derating)										
Humidity	0%~95% ,No condensation										
Dimensions And Weight											
Product Size(L*W*Hmm)	285*250*91	310*250*91	285*250*91		325*275*102	375*297*102		390*320*112	515*365*117	535*462*117	630*540*130
Package Size(L*W*Hmm)	360*305*156	385*305*156	360*305*156		400*330*167	450*352*167		465*375*187	615*460*212	630*557*212	730*635*225
N.W.(kg)	3.6	4	3.7	3.9	5.5	6.7	7	8	13	14.7	22
G.W.(kg)	4.5	5	4.6	4.8	6.5	7.7	8	9.5	14.5	16.7	24.5

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.