



PRODUCT OVERVIEW

The HF series is a new all-in-one hybrid solar charger inverter which integrates solar energy storage and grid power storage with sine wave AC output. Thanks to DSP control and an advanced control algorithm, the HF series has a high response speed, high reliability and meets top industry standards.

FEATURES

- Full digital voltage and double closed loop current control, SPWM technology and pure sine wave output.
- Two output modes – grid power bypass/inverter output & uninterrupted power supply.
- Available in 4 charging modes: solar only, grid priority, solar priority, grid and solar hybrid charging.
- Advanced MPPT technology with 99.9% efficiency.
- Compatible with various battery types.
- ON/OFF rocker switch for AC output control.
- Power saving mode available to reduce no-load loss.
- Intelligent variable speed fan for efficient thermal management and extended system life.
- Lithium battery activation design, allowing access for lead-acid batter and lithium battery.
- 360° all-around protection including overload, short circuit and over-current.

APPLICATIONS

- Emergency power supply.
- Home backup storage.
- Data storage/UPS backup systems.
- Off-grid power storage.
- Solar power storage.

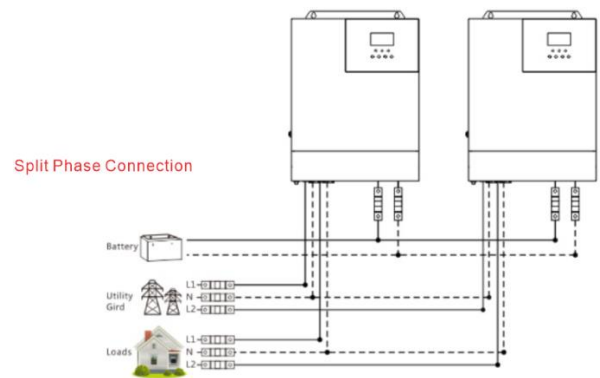
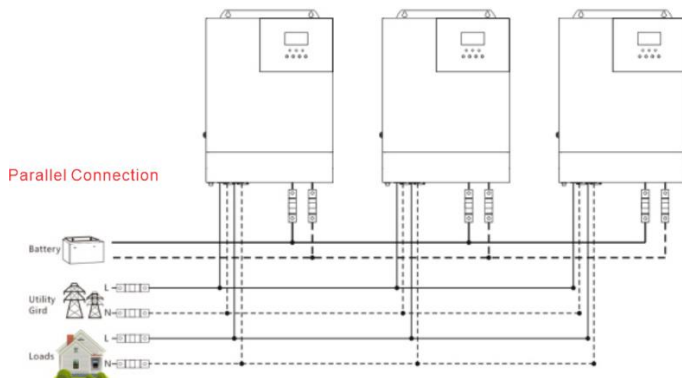
Product Description

PART#	DESCRIPTION	OUTPUT VOLTAGE	INPUT VOLTAGE	POWER OUTPUT	WEIGHT
EV-HFP4850S80	220/230VAC Hybrid Inverter	230VAC	48V	5000W	22.04 LBS

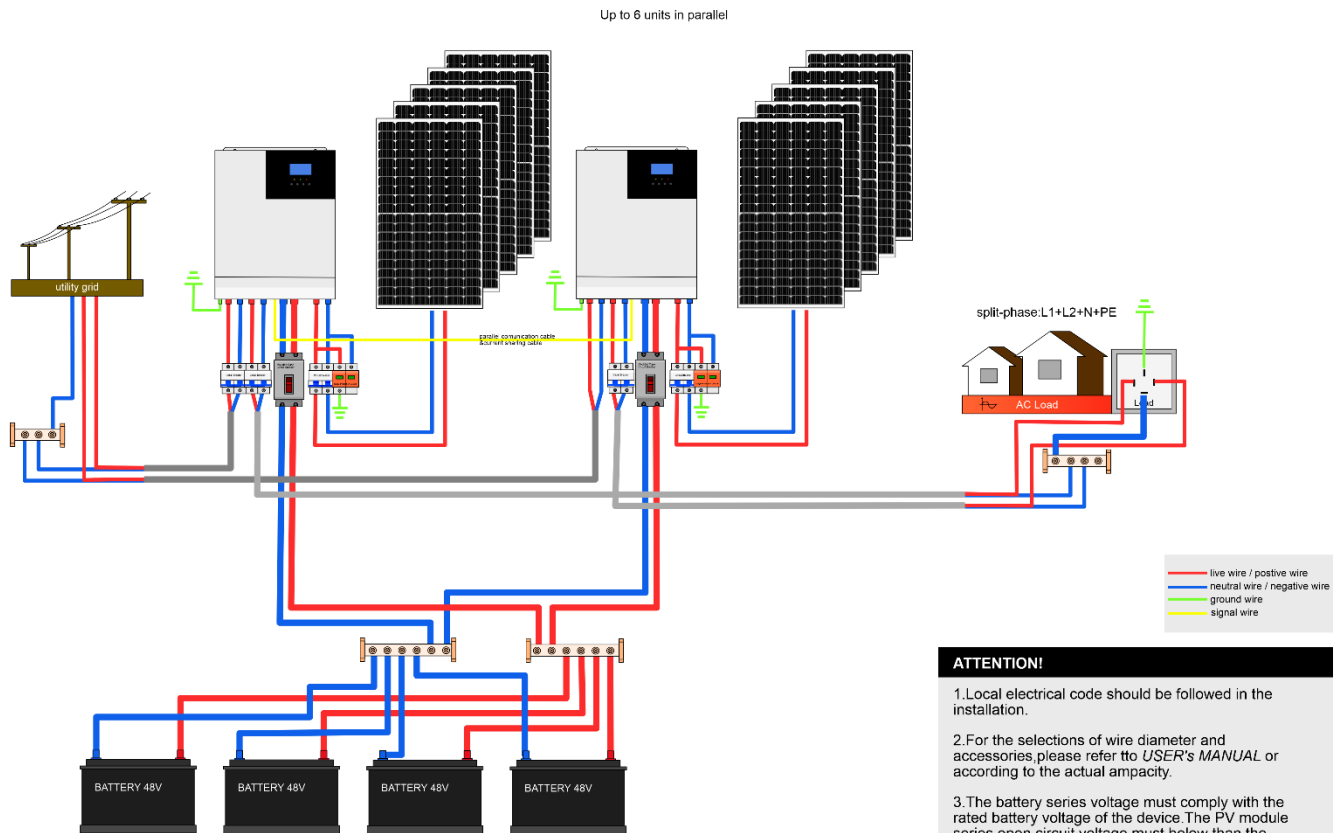
Specifications

MODEL#	EV-HFP4850S80
AC MODE	
Rated Input Voltage	220/230VAC
Input Voltage Range	(170Vac~280Vac) ±2%/(90Vac-280Vac)±2%
Frequency	50Hz/ 60Hz (Auto detection)
Parallel Connection	Connect up to 6 units in parallel
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz)
Overload/Short Circuit Protection	Circuit breaker
Efficiency	>95%
Conversion Time (Bypass & Inverter)	10ms (Typical)
AC Reverse Protection	Available
Maximum Bypass Overload Current	40A
INVERTER MODE	
Output Voltage Waveform	Pure sine wave
Rated Output Power (VA)	5000VA
Rated Output Power (W)	5000W
Power Factor	1
Rated Output Voltage	230VAC
Output Voltage Error	±5%
Output Frequency Range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz
Efficiency	>90%
Overload Protection	(102% < load < 125%) ±10%: report error and turn off the output after 5 seconds; (125% < load < 150%) ± 10%: report error and turn off the output after 10 seconds; Load > 150% ±10%: report error and turn off the output after 5 seconds;
Peak Power	10000W
Loaded Motor Capability	4HP
Output Short Circuit Protection	Circuit breaker
Bypass Breaker Specifications	40A
Rated Battery Input Voltage	48V (Minimum starting voltage 44V)
Battery Voltage Range	40.0VDC~60VDC ± 0.6VDC (undervoltage alarm/turnoff voltage/overvoltage alarm/overvoltage restoration...set on LCD screen)
Power Saving Mode	Load ≤25W
AC CHARGING	
Battery Type	Lead acid or lithium battery
Maximum Charge Current	60A
Charge Current Error	± 5ADC
Charge Voltage Range	40-58VDC
Short Circuit Protection	Circuit breaker and fuse
Circuit Breaker Specifications	40A
Overcharge Protection	Alarm and charging shutoff after 1 minute

MODEL#		EV-HFP4850S80
PV CHARGING		
Maximum PV Open Circuit Voltage		145VDC
PV Operating Voltage Range		60-145VDC
MPPT Voltage Range		60-115VDC
Battery Voltage Range		40-60VDC
Maximum Output Power		4200W
PV Charging Current Range (Can be set)		0-80A
Charging Short Circuit Protection		Fuse
Wiring Protection		Reverse polarity protection
CERTIFIED SPECIFICATIONS		
Certification		CE(IEC/EN62109-1,-2) ROHS2.0, ETL
EMC Certification Level		EN61000
Operating Temperature Range		5°F to 131°F
Storage Temperature Range		-13°F ~ 140°F
Humidity Range		5% to 95% (Conformal coating protection)
Noise		≤ 60dB
Heat Dissipation		Forced air cooling, variable speed of fan
Communication Interface		USB/RS485(Bluetooth/WiFi/GPRS)/Dry node control
Dimensions		16.29" x 13.30" x 4.96"
Weight		22.04 LBS



System Schematic: HFP series in parallel connection (split-phase AC coupling)



The battery connection cables need to be as short as possible and each cable as equal in length as possible.

ATTENTION!

1. Local electrical code should be followed in the installation.
2. For the selections of wire diameter and accessories please refer to *USER'S MANUAL* or according to the actual ampacity.
3. The battery series voltage must comply with the rated battery voltage of the device. The PV module series open circuit voltage must be below than the Max.Voc of the device.
4. This diagram is for reference only, please decide on the connection method according to the actual situation.