HYBRID INVERTER

EV-HF-LV Series Low Voltage

PRODUCT OVERVIEW

The HF series is an all-in-one hybrid 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

- EFFICIENT – Advanced MPPT with up to 99.9% efficiency; Multiple charge and discharge modes are available
- RELIABLE – Outputs high-quality pure sine wave AC power; reliable output for long periods at rated power
- USER FRIENDLY – Industrial design with a modern aesthetic look; easy to install and simple to use
- SAFETY – 360 degrees of security from hardware to software; IEC, SAA, cETL, FCC certification
- ALL IN ONE – Support for many types of batteries; supports Li-ion battery BMS communication
- INTELLIGENT – Exclusive Li-ion battery BMS dual activation; scheduling function to save costs with peak demand charges

APPLICATIONS

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

Product Description

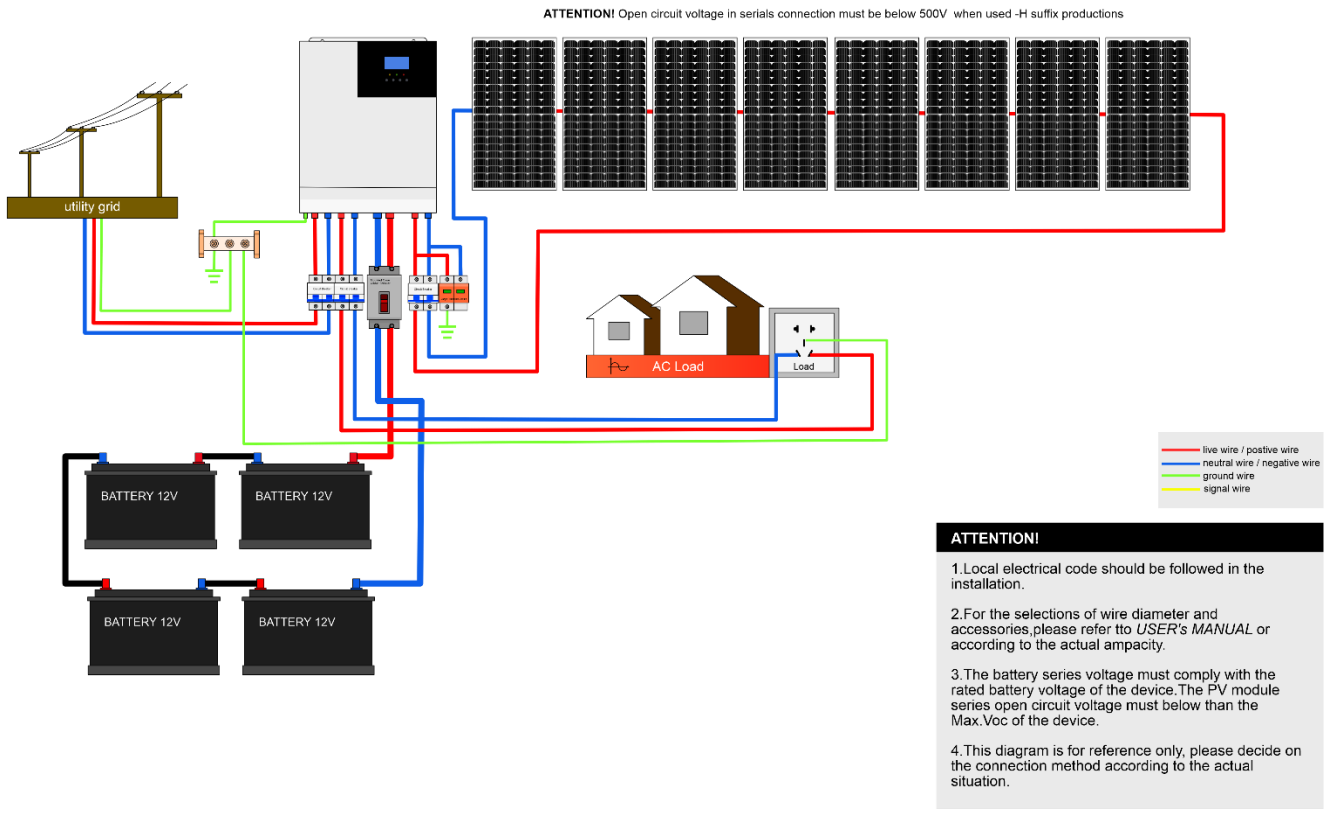
PART#	DESCRIPTION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX PV INPUT VOLTAGE	POWER OUTPUT
EV-HF4835U80-145	Hybrid Inverter	90-140Vac	120Vac	145V	3500W
EV-HF4830U60-145	Hybrid Inverter	90-140Vac	120Vac	145V	3000W
EV-HF2430U60-100	Hybrid Inverter	90-140Vac	120Vac	100V	3000W

Specifications

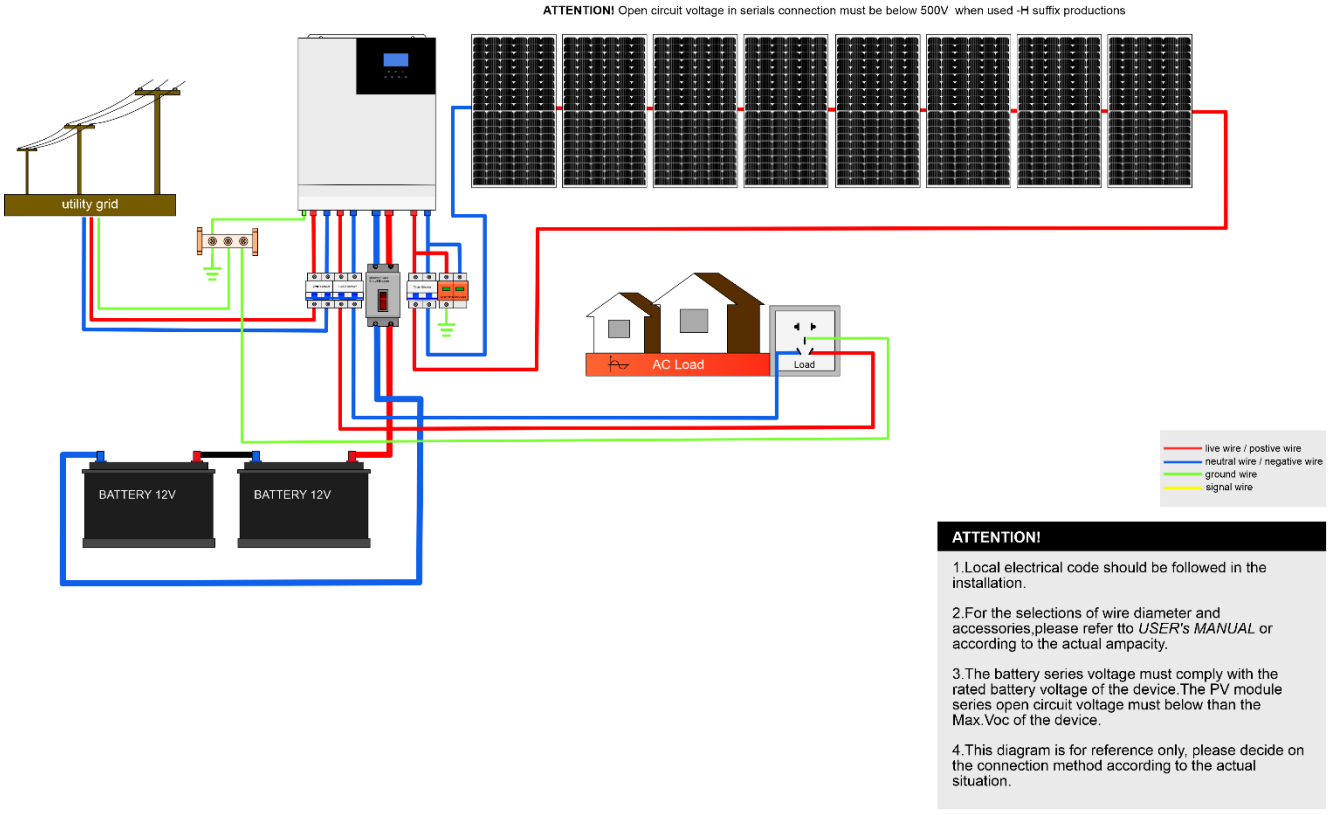
MODEL#	EV-HF4835U80-145	EV-HF4830U60-145	EV-HF2430U60-100
INVERTER OUTPUT			
Rated Output Power	3500W	3000W	3000W
Maximum Peak Power	6000VA		
Rated Output Voltage	120Vac (L/N/PE single phase)		
Load Capacity of Motors	2HP		
Rated AC Frequency	50/60Hz		
Waveform	Pure sine wave		
Switch Time	10ms (typical)		
BATTERY			
Battery Type	Lead-acid / Li-ion / User defined		
Rated Battery Voltage	48Vdc		24Vdc
Voltage Range	40～60Vdc		20～33Vdc
Maximum MPPT Charging Current	80A	60A	
Max. Grid/Generator Charging Current	40A		
Maximum Hybrid Charging Current	120A	100A	
PV INPUT			
Number of MPPT Trackers	1		
Maximum PV Array Power	4400W	3400W	1600W
Maximum Input Current	50A	40A	
Maximum Voltage of Open Circuit	145Vdc		100Vdc
MPPT Voltage Range	60～115Vdc		30～85Vdc
GRID/GENERATOR INPUT			
Input Voltage Range	90-140Vac		
Frequency Range	50/60Hz		
Bypass Overload Current	40A		
EFFICIENCY			
MPPT Tracking Efficiency	99.9%		
Maximum Battery Inverter Efficiency	92%		
GENERAL			
Dimensions	426*322*124mm (1.3*1*0.4ft)	378*280*103mm (1.2*0.9*0.3ft)	
Weight	10.8kg (24lb)	6.2kg (13.6lb)	6.8kg (14.9lb)
Environmental Protection	IP20, Indoor Only		
Operating Temperature Range	-15^{0}C ～55^{0}C (-5^{0}F ～131^{0}F)		
Noise	＜60dB		
Cooling Method	Internal Fan		
Warranty	2 years		

MODEL#	EV-HF4850U80-H	EV-HF4835U60-H	EV-HF2430U80-H
COMMUNICATION			
Embedded Interfaces	RS485 / CAN / USB / Dry contact		
External Modules (Optional)	WiFi / GPRS		
CERTIFICATION			
Safety	cETL, SAA, IEC62109-1, IEC62109-2		
EMC	EN61000-6-1, EN61000-6-3, FCC 15 Class B		
Rohs	Yes		

Typical System Configuration – 48V



Typical System Configuration – 24V



ATTENTION!

1.Local electrical code should be followed in the installation.

2.For the selections of wire diameter and accessories,please refer tto *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 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.