

# Hybrid (Bi-direction) solar inverter

with isolated transformer

1000W~3000W

PF=1

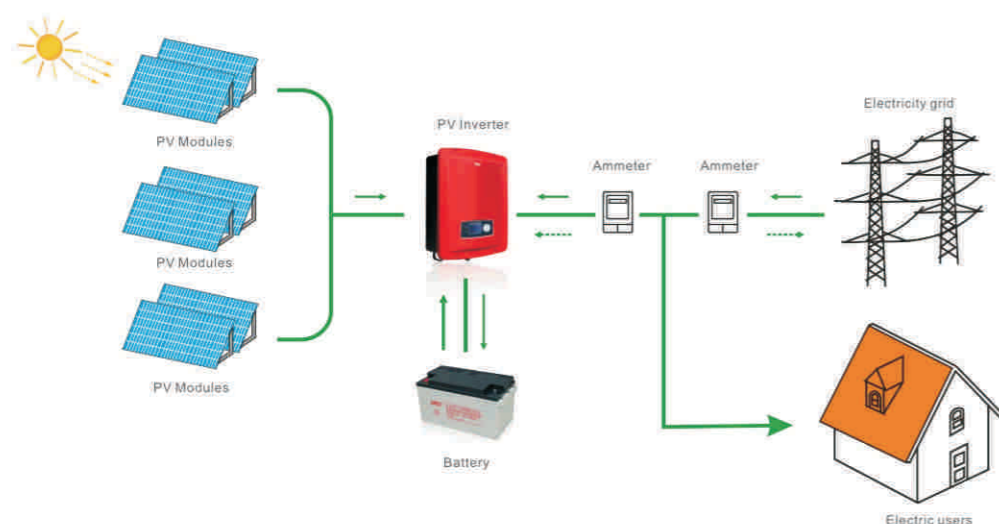


## Overview

Satisfied generate electricity and ensure the backup energy when power outage.

## Features

- Personalized design features to meet different customer 's needs
- Isolated transformer design ,ensure the safe use of electricity
- Multi-lingual LCD display , easy to operate
- Efficient battery management, charging current can be set
- Reverse-battery alarm & protection
- PV reverse protection
- Efficient energy storage charging mode and charging management system
- Perfect energy saving mode, no-load consumption less than 1%.
- Advanced MPPT algorithm
- Staggering power storage and generation



## Technical Data:

Model	HE1K-48V-230V	HE2K-48V-230V	HE3K-48V-230V
Rated power [KW]	1	2	3
Output PF	1.0		
DC voltage	48Vdc		
Piece/cell	4x12V / 24x2V		
Working mode	Grid-tie mode / anti-flow back can be set		
Time control	Energy Saving Priority/power supply priority/AC charging time can be controlled		
<b>PV input</b>			
Max input voltage	150Vdc		
Optimum operating voltage	65-120Vdc		
The maximum conversion efficiency	≥97%		
Max charging current	25A	50A	62A
Recommended maximum PV power	1500W	3000W	3500W
<b>AC input</b>			
Input voltage range	Single phase 230V±15%		
Rated frequency	50/60Hz		
Frequency range	50/60Hz ±5%		
Power factor	≥0.98		
Max charging current	20A	45A	60A
<b>Inverter</b>			
Inverter voltage	230V(220V/240V can set)		
Output voltage accuracy	±3% grid off±10%(grid tied)		
Transient recovery time	=60ms		
Fixed frequency	Automatically be the same frequency as the grid input		
Crest factor	3 : 1(Ipeak/Irms)		
Wave	Pure sine wave		
THD liner load	≤3%		
Overload	≥110%/125%/150%/180%/200%:4mins /1min/5s/20ms/0.5sreansfer to bypass or shutdown(shutdown when AC not available )		
0.1s short circuit current	3times rated current		
Max efficiency %	≥85%		
<b>Battery management</b>			
Battery type setting	Lithium /lead acid battery can be set by customer		
Battery setting	Battery number can be set		
Discharge depth setting	Yes		
Float charging voltage	56 Vdc		
End of discharge	42Vdc		
Charging current	Lead acid battery 0.05 C-0.3 C; lithium battery 0.1 C-1.0 C can set		
Battery intelligent management	Battery bank automatically float charging, automatically temperature compensation		
<b>Transfer time</b>			
Power off modegrid off mode	≤2s		
Grid off modegrid tied mode	≤10ms		
Grid tied modegrid off mode	≤10ms		
<b>Communication</b>			
Remote control	Transfer to bypass, transfer to inverter, shut down		
Computer interface	RS232/RS485/USB/SNMP(optional )		
<b>Environment</b>			
Operating temperature	0 - 45°C		
Max relative humidity	95%(non condensed)		
<b>Others</b>			
Height	1000m, rated power (100m higher,1% derated )Max4000m		
Cooling	Forced cooling (fans speed change with load level)		
Noise	≤50 dB(1 m varies with load and temperature)		
MTBF	200,000 hours		
IP class (EN60529)	IP21		
Weight (kg)	18.8	27.7	35.0
Packing weight(kg)	19.8	28.7	36.0

- All Specifications subject to change without notice.
- Custom-made specifications are acceptable.