

SMCIH-HB(S) Series

Sunstone MPPT Charger Inverter Hybrid Single Phase

SMCIH-HB(S) Series is a flexible and intelligent hybrid inverter that utilizes solar power, AC utility, and battery power source to supply continuous power.

It's a simple and smart solar power storage system for home users to either store energy into a battery for night-time usage or use for self-consumption first depending on demands. Priority for the power source is programmable through smart software. During nighttime or power failure, it will automatically consume reserved power from the battery. In this way, it will reduce dependence on the utility.

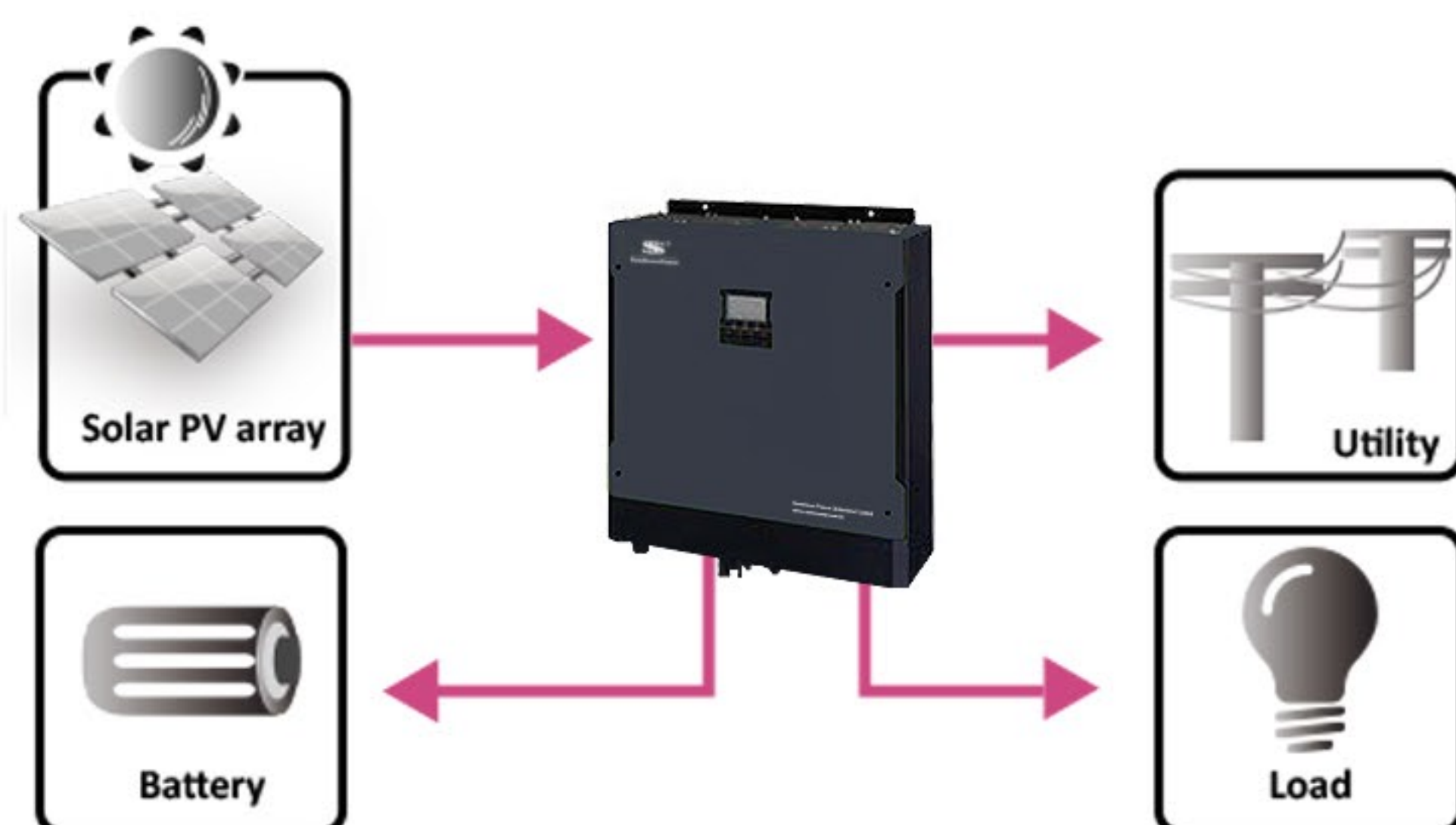


Features

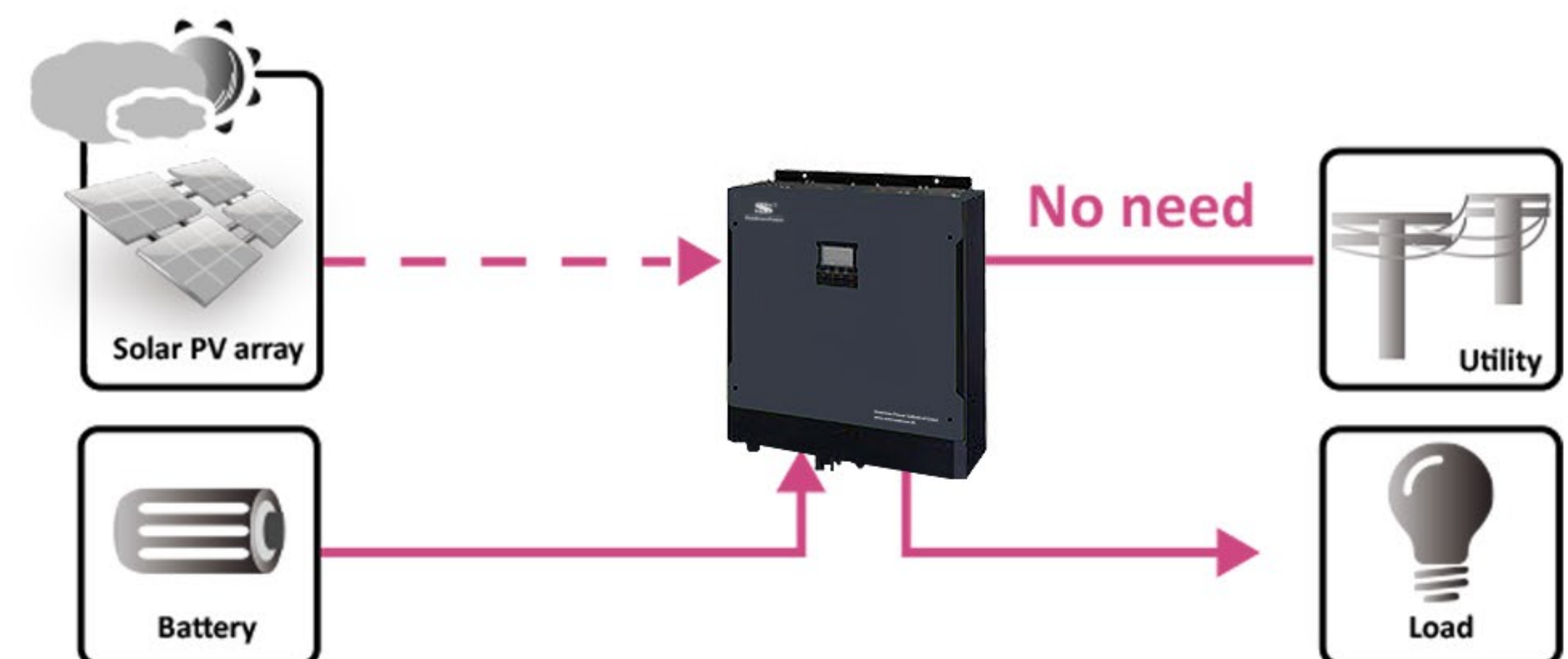
- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable battery charging current suits different types of batteries
- Programmable multiple operation modes: grid-tie, off-grid and grid-tie with backup
- Built-in timer for various mode of on/off operation
- Built-in 2 strings of MPP trackers
- 60A of AC & PV charge capability



Operate as an off-grid inverter when AC failed



Use battery energy first when PV energy is low



Specification

MODEL	SMCIH60-5.5KW-48V-HB(S)
Maximum PV Input Power	6500W
Rated Output Power	5500W
Maximum Charging Power	2880W
GRID-TIE OPERATION	
PV INPUT(DC)	
Nominal DC Voltage /Maximum DC Voltage	360 VDC/500 VDC
Start-up Voltage /Initial Feeding Voltage	116 VDC/150 VDC
MPP Voltage Range	120 VDC~450 VDC
Number of MPP Trackers/Maximum Input Current	2/2×13A
GRID OUTPUT(AC)	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Voltage Range	184-264.5 VAC
Max. Output Current	23.9A
Power Factor	>0.99
EFFICIENCY	
Maximum Conversion Efficiency(DC/AC)	96%
European Efficiency@ Vnominal	95%
OFF-GRID OPERATION	
AC INPUT	
AC Start-up Voltage/Auto Restart Voltage	120-140 VAC/180 VAC
Acceptable Input Voltage Range	170-280 VAC
Maximum AC Input Current	40A
PV INPUT(DC)	
Maximum DC Voltage	500 VDC
MPP Voltage Range	120 VDC~450 VDC
Number of MPP Trackers /Maximum Input Current	2/2×13A
BATTERY MODE OUTPUT(AC)	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Waveform	Pure sinewave
Efficiency (DC to AC)	93%
HYBRID OPERATION	
PV INPUT(DC)	
Nominal DC Voltage /Maximum DC Voltage	360 VDC/500 VDC
Start-up Voltage/Initial Feeding Voltage	116 VDC/150 VDC
MPP Voltage Range	120 VDC~450 VDC
Number of MPP Trackers /Maximum Input Current	2/2×13A
GRID INPUT	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Voltage Range	184-264.5 VAC
Max. Output Current	23.9A
AC INPUT	
AC Start-up Voltage/Auto Restart Voltage	120-140 VAC/180 VAC
Acceptable Input Voltage Range	170-280 VAC
Maximum AC Input Current	40A
BATTERY MODE OUTPUT(AC)	
Nominal Output Voltage	202/208/220/230/240 VAC
Efficiency (DC to AC)	93%
BATTERY & CHARGER	
Nominal DC Voltage	48 VDC
Maximum Solar Charge Current	60A
GENERAL	
PHYSICAL	
Dimension, DxWx H(mm)	110×450×445
Net Weight(kgs)	16
INTERFACE	
External Safety Box(Optional)	RS-232/USB
Communication ports	Optional SNMP, Modbus and AS-400 cards
ENVIRONMENT	
Humidity	0~90% RH(Non-condensing)
Operating Temperature	0~40℃
Altitude	0~1000m