

# Hybrid Solar Inverter HVM Series



### Smart control

Smart control mode, auto switch for different demand  
usb communication portal



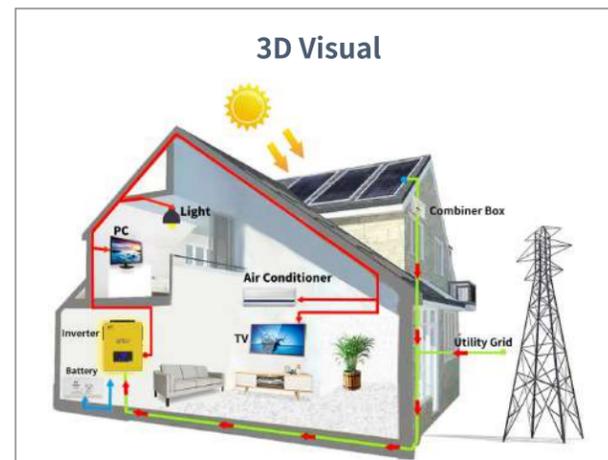
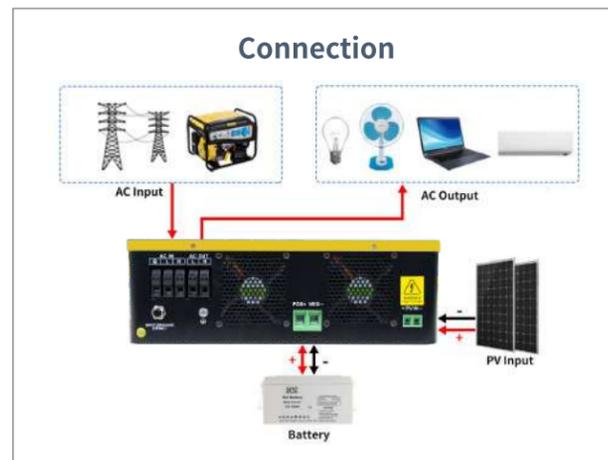
### Wide PV Range

30-450v panels quantity depends on different situations



### Charger

Inbuilt 60A AC charger  
Inbuilt 80A MPPT solar charger



# Technical Specification

Model	HVM-243208
Rated Power	3.2KW
<b>Line Mode Specifications</b>	
Input Voltage Waveform	Sinusoidal (utility or generator)
Nominal Input Voltage	230VAC
Low Loss Voltage	170Vac±7V(UPS);90Vac±7V (Appliances)
Low Loss Return Voltage	180Vac±7V(UPS);100Vac±7V(Appliances)
High Loss Voltage	280Vac±7V
High Loss Return Voltage	270Vac±7V
Max AC Input Voltage	300Vac
Nominal Input Frequency	50Hz/60Hz (Auto detection)
Low Loss Frequency	40±1Hz
Low Loss Return Frequency	42±1Hz
High Loss Frequency	65±1Hz
High Loss Return Frequency	63±1Hz
Output Short Circuit Protection	Circuit Breaker
Efficiency (Line Mode)	>95%( Rated R load, battery full charged )
Transfer Time	10ms typical (UPS);20ms typical (Appliances)
<p>Output power derating: When AC input voltage drops to 170V the output power will be derated.</p>	
<b>Inverter Mode Specifications</b>	
Output Voltage Waveform	Pure Sine Wave
Output Voltage Regulation	230Vac±5%
Output Frequency	50Hz
Peak Efficiency	94%
Overload Protection	5s@≥150% load; 10s@110%~150% load
Surge Capacity	2* rated power for 5 seconds
Nominal DC Input Voltage	24Vdc
Cold Start Voltage	23.0Vdc
Low DC Warning Voltage	
@ load < 50%	22.0Vdc
@ load ≥ 50%	21.0Vdc
Low DC Warning Return Voltage	
@ load < 50%	22.5Vdc
@ load ≥ 50%	22.0Vdc
Low DC Cut-off Voltage	
@ load < 50%	20.5Vdc
@ load ≥ 50%	20.0Vdc
High DC Recovery Voltage	32Vdc
High DC Cut-off Voltage	33Vdc
No Load Power Consumption	<35W
<b>Charge Mode Specifications</b>	
Charging Algorithm	3-Step
AC Charging Current (Max)	60 Amp(@VP=230Vac)
Flooded Battery	29.2
AGM /Gel Battery	28.2
Floating Charging Voltage	27Vdc
<b>MPPT Solar Charging Mode</b>	
INVERTER MODEL	3KW-24V
Max. PV Array Power	3000W
Nominal Pv Voltage	240Vdc
PV Array MPPT Voltage Range	30-430Vdc
Max.PV Array Open Circuit Voltage	450Vdc
Max Charging Current (AC charger plus solar charger)	80Amp
<b>General Specifications</b>	
Safety Certification	CE
Operating Temperature Range	-10°C to 50°C
Storage temperature	-15°C~ 60°C
Humidity	5% to 95% Relative Humidity(Non-condensing)
Dimension(D*W*H), mm	405x303x107
Net Weight, kg	6.18