

OFF-GRID SOLAR INVERTER SMART VMH 3K-10KVA SERIES















Product Introduction

The SMART VMH series is an integrated control machine of pure sine wave high-frequency solar inverter. The controller adopts advanced MPPT calculation method and intelligent battery management to ensure the maximum energy acquisition. With a wide PV input range, the inverter can be carried without battery when the energy is sufficient. It has the advantages of high-power density, simple operation, high overall efficiency, and small no-load loss. The inverter integrates the 3-in-1 function of solar energy, mains power and battery, which can be used for lighting, computers, televisions and other household appliances and electric tools, as well as small-scale industrial electrical equipment.





Battery Voltage 24V/48V



MFD Function (Multi-function Display)



Wide AC input range 170-280Vac/90-280Vac



Work Without Battery



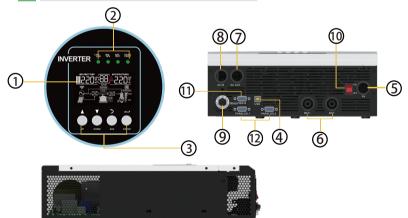
Wide Frequency 50Hz/60Hz



WIFI and Bluetooth

★ Work Without Battery: When the AC state or PV energy is sufficient, it can work without connecting the battery with load, which can reduce the cost of the solar system.

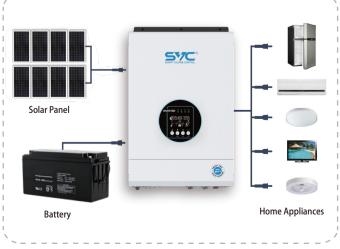
Product Description



- 1. LCD Display
- 2. Status Indicators
- 3. Setting Button
- 4. USB Interface
- 5. PV In
- 7. AC Output

- 8. AC Input
- 9. Input Circuit Breaker
- 10. Power Switch
- 11. RS232 (Expandable WIFI and Bluetooth Functions)
- 6. External Battery Connectors 12. Parallel Communication Port (Only for Parallel Model)

Solar System Connection



SMART VMI SERIES



www.svcpower.com



- Pure sine wave output, Work without Battery
- 450V wide PV circuit voltage can work for the load without battery connected (when the energy is sufficient)
- Built in MPPT solar controller
- Configurable AC/Solar input priority and output priority via LCD settings
- Wide and selectable AC input voltage range
- Multiple protections of battery over discharge, overload, over temperature, short circuit
- · Automatically turn on after the mains is restored
- Cold start function; USB and RS232 monitoring functions
- WIFI and Bluetooth intelligent monitoring function, support mobile APP to view various data (optional)
- Selectable charging for different types of battery via LCD setting
- Built-in or external WIFI and Bluetooth.

MODEL	Smart VMH 3024	Smart VMH 3048	Smart VMH 5048	Smart VMH 8048	Smart VMH 10048
Rated Capacity	3000V	/A/3000W	5000VA/5000W	8000VA/8000W	10000VA/10000W
INPUT					
Input Format	L+N+PE				
Rated Input Voltage	208/220/230/240VAC				
Voltage Range	170~280VAC(For Personal Computers); 90~280VAC(For Home Appliances)				
Frequency Range	50Hz/60Hz(Auto Sensing)				
OUTPUT			,		
Output Format			L+N+PE		
Rated Output Voltage	208/220/230/240VAC±5%				
Output Frequency	50/60Hz±0.1%				
Waveform	Pure Sine Wave				
Transfer Time	10ms(For Personal Computers), 10ms(For Home Appliances)				
Peak Power	6000VA	6000VA	10000VA	16000VA	20000VA
Overload Capacity	Battery Mode: 1min@102%~110% Load 10s@110%~130%Load 3s@130%~150% Load 200ms@>150% Load				
Peak Efficiency (Battery Mode)	>93%	>94%	>94%	>93%	>93%
BATTERY					
Rated Voltage	24 VDC	48 VDC	48 VDC	48 VDC	48 VDC
Constant Charging Voltage (Can Be Set)	28.2 VDC	56.4 VDC	56.4 VDC	56.4 VDC	56.4 VDC
Float Charging Voltage (Can Be Set)	27 VDC	54 VDC	54 VDC	54 VDC	54 VDC
SOLAR CHARGER & AC CHARGER					
Solar Charger Type	MPPT	MPPT	MPPT	MPPT	MPPT
PV Maximum Input Power	4000W	4000W	5500W	8800W(4400W x 2)	11000W(5500W x 2
MPPT Tracking Range	120~430 VDC	120~430 VDC	120~430 VDC	120~430 VDC	120~430 VDC
Maximum PV Input Voltage	450 VDC	450 VDC	450 VDC	450 VDC	450 VDC
Maximum PV Charge Current	80 A	80 A	80 A	80A+80A	80A+80A
Maximum Mains Charging Current	60 A	60 A	80 A	80A+80A	80A+80A
Maximum Charging Current	80 A	80 A	80 A	80A+80A	80A+80A
COMMUNICATION INTERFACE					
RS232	Baud Rate 2400				
Expansion Slot Communication Interface	2×5PIN/Pitch2.54mm,Lithium Battery BMS Communication Card, WIFI and Bluetooth Card, Dry Contact card, E				Dry Contact card, Etc.
Parallel Interface	No Parallel		With Parallel (Optional)		
Environmental Parameters				` '	,
Operating Ambient Temperature	0~40°C				
Operating Environment Humidity	20%~95% (Non-Condensing)				
Storage Temperature	-15~60℃				
Altitude	Altitude Should Not Exceed 1000m, Derating Above 1000m, Maximum 4000m, Refer to IEC62040				
Noise	≤50db				
PHYSICAL PARAMETERS					
D×W×H(mm)	110×300×450 145×620×480				
Weight (for Reference)	7kg	7kg	7.8kg	16kg	16kg
STANDARDS	EN-IEC 60335-1, EN-IEC 60335-2-29, IEC 62109-1				