

# **Hybrid Solar Inverter**

**12.0KW-48V**

**Datasheet**

# 1.Information

This datasheet is valid for the following machine:

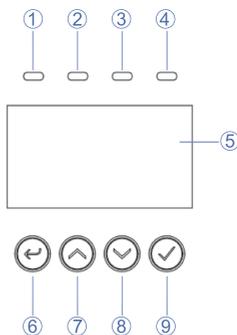
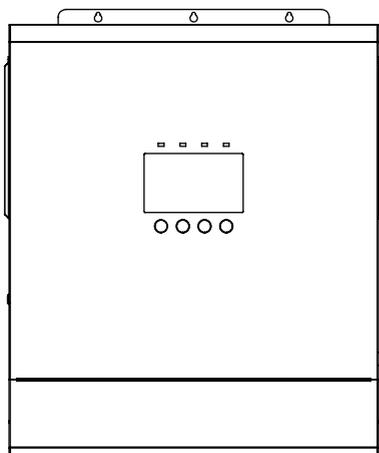
- 12000W inverter

## 2.Introduction

### 2.1 Features

- Rated power 12kW/12kVA, power factor 1
- MPPT range 60V~450V, 500Voc
- Dual MPPTs Input
- 45A Max PV Input
- High frequency with small size and light weight
- Pure sine wave AC output
- Solar and grid power loads at the same time
- CAN/RS485 for BMS communication
- Ability to work without battery
- WIFI remote monitoring (optional)
- Dual AC output
- Feed-in to grid

### 2.2 Product Overview



① AC Indicator

② Invert Indicator

③ Charging Indicator

④ Fault Indicator

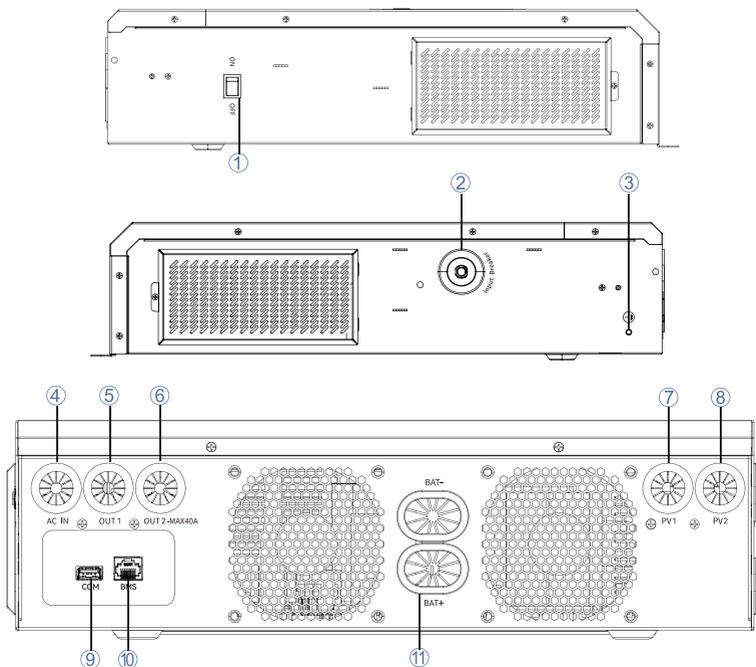
⑤ LCD Display

⑥ ESC Button

⑦ Up Button

⑧ Down Button

⑨ Enter Button



- |                       |                         |                 |
|-----------------------|-------------------------|-----------------|
| ① Power On/Off Switch | ⑤ AC Output 1 (Max 70A) | ⑨ COM Port      |
| ② AC Input Breaker    | ⑥ AC Output 2 (Max 40A) | ⑩ BMS Port      |
| ③ PE                  | ⑦ PV Input 1            | ⑪ Battery Input |
| ④ AC Input            | ⑧ PV Input 2            |                 |

### 3. Packing List

No.	Item	Quantity	Description	Remarks
1	Inverter	1		
2	Datasheet	1	English	
3	User manual	1	English	
4	Tubular terminal	4		For AC input, AC output1
5	Tubular terminal	6		For PV input, AC output2
6	OT terminal	1		For PE

## 4.Specifications

AC Input	
Rated Input Voltage (VAC)	220/230/240; L+N+PE
Voltage Range (VAC)	90~280 (APP/GEN mode); 170~264 (UPS mode)
Frequency (Hz)	50/60 (Auto Adaptive)
AC Output	
Rated Capacity (kVA/kW)	12 (Max current of AC output 1 is 70A. Max current of AC output 2 is 40A)
Surge Power (kVA)	24
Voltage (VAC)	220/230/240
Power Factor (PF)	1
Frequency (Hz)	50/60±0.1%
Switch Time (ms)	10 (APP/UPS mode) / 20 (GEN mode)
WaveForm	Pure SineWave
Overload Capacity (Battery Mode)	1min@ 102%~125% load 10s@ >125% load
Max. Efficiency (Battery Mode)	94%@48V
Charger(PV/AC)	
Solar Charger Type	MPPT
Max PV Input Current/Power	Single PV Input: 27A/9000W Dual PV Input: 22.5*2A/15000W
MPPT Range@Operating Voltage (VDC)	60~450
PV Start-up Voltage (VDC)	80
Max PV Open Circuit Voltage (VDC)	500
Max PV Charge Current (A)	160
Max AC Charge Current (A)	160
Max. Charge Current (PV+AC) (A)	160
Battery	
Normal Voltage (VDC)	48
Battery Type	Lithium and Lead-acid
General Data	
HMI	LCD
Interface	RS232/RS485/CAN
Monitoring	WiFi(Optional)
Ingress Protection	IP21
Operating Temperature	-10°C~60°C
Relative Humidity	5%~95% (Non-condensing)
Storage Temperature	-15°C~60°C
Max. Operating Altitude	4000m (Derating above 2000m)

Notes: Updates to the content and version of this datasheet will not be notified separately.

