

Hybrid Solar Inverter

FGI-P12000

Datasheet

1.Information

This datasheet is valid for the following machine:

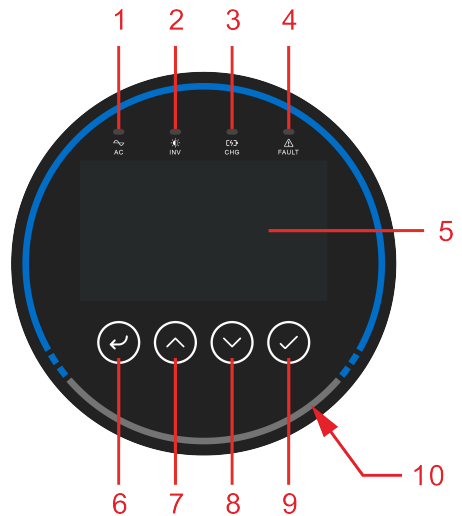
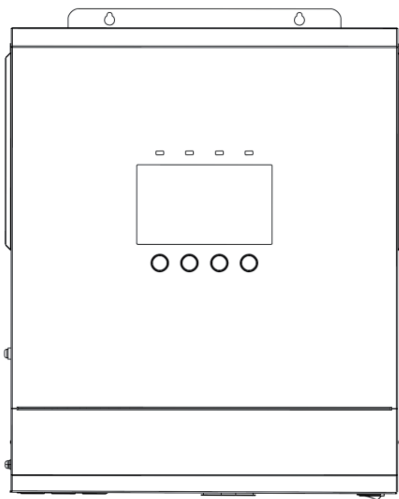
- 12000W single inverter / 12000W parallel inverter

2.Introduction

2.1 Features

- Rated power 12kW/12kVA, power factor 1
- MPPT range 60V~450V, 500Voc
- Dual MPPTs Input, 27A*2, 15000W total
- 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
- Parallel up to 6 units (optional)

2.2 Product Overview



① AC Indicator

② Invert Indicator

③ Charging Indicator

⑩ RGB Light

④ Fault Indicator

⑤ LCD Display

⑥ ESC Button

⑦ Up Button

⑧ Down Button

⑨ Enter Button

Standby mode : White



Battery mode : Red

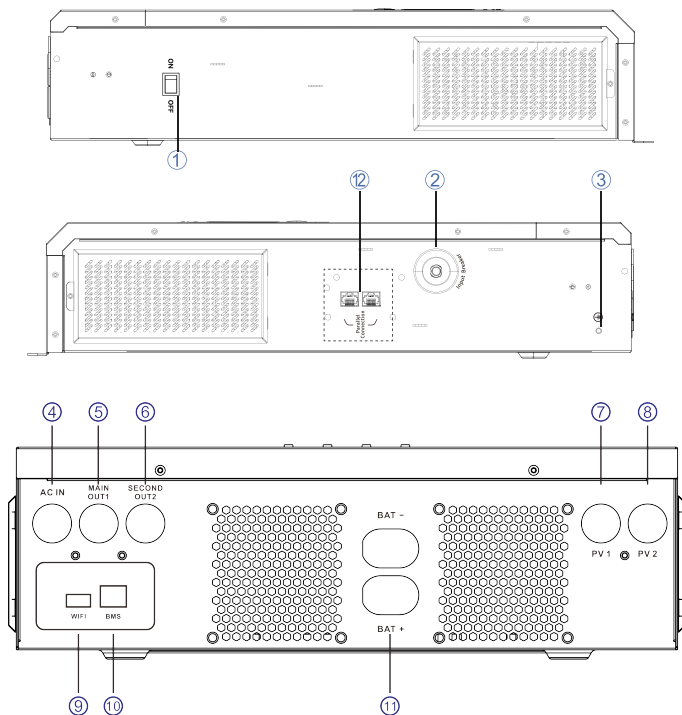


City electricity mode : blue



PV mode : Orange





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|-----------------------|-------------------------|-----------------------------|
| 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 | ⑫ Parallel Ports (optional) |

Note: Single inverter doesn't have parallel ports.

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
7	Ethernet Cable	1	Optional	For parallel communication

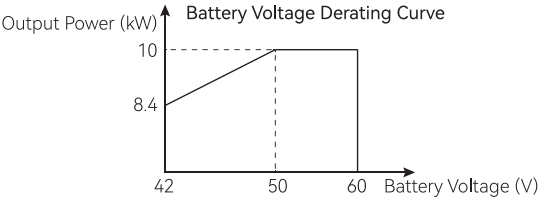
4.Specifications

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 (PV+Battery mode / PV mode)	1min@ 102%~125% load; 10s@ 125%~200% load
Max. Efficiency (Battery Mode)	94%@48V
Parallel Quantity	6
Charger(PV/AC)	
Solar Charger Type	MPPT
Max PV Input Current/Power	Single PV Input: 27A/9000W Dual PV Input: 27A+27A/15000W total
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/Lead-acid
General Data	
HMI	LCD
Interface	RS232/RS485/CAN, Parallel ports (optional)
Monitoring	WiFi(Optional)
Ingress Protection	IP21
Operating Temperature (°C)	-10~60
Relative Humidity	5%~95% (Non-condensing)
Storage Temperature (°C)	-15~60
Max. Operating Altitude (m)	4000 (Derating above 2000)

Maximum Load Capacity of Inverter

Only Battery	10000W@50V
Battery+PV	12000W
Bypass Current	70A @25°C



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

