

MPPT Solar Inverter

FGI-S4000

Datasheet

1.Information

This datasheet is valid for the following machine:

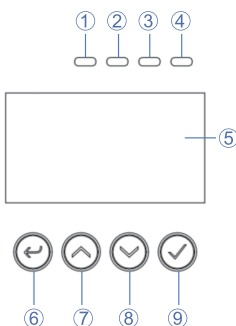
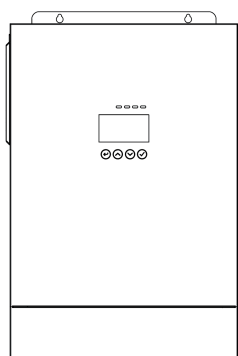
-4000W Inverter

2.Introduction

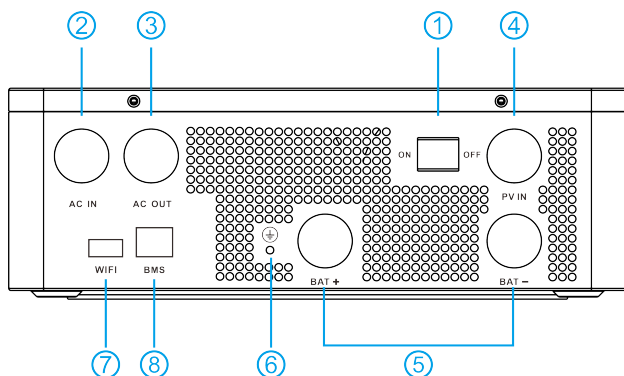
2.1 Features

- Rated power 4.0kVA/kW,power factor1
- MPPT ranges 40V~450V, 500Voc
- 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
- Dual AC output (optional)
- WIFI remote monitoring (optional)
- 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
- ② AC Input
- ③ AC Output
- ④ PV Input
- ⑤ Battery Input
- ⑥ Grounding
- ⑦ WiFi/GPRS Port
- ⑧ BMS Port

3. Packing List

No.	Item	Quantity	Description	Remarks
1	Inverter	1		
2	Datasheet	1	English	
3	User manual	1	English	
4	Tubular Terminal	8	E2510	For AC output, AC input, PV
5	OT Terminal	1		For PE

4. Specifications

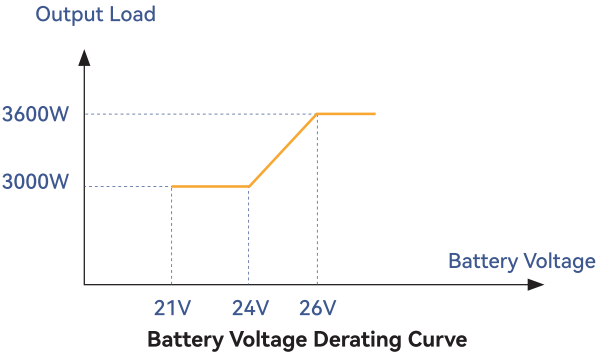
AC Input	
Rated Input Voltage (VAC)	208/220/230/240; L+N+PE
Voltage Range (VAC)	90~280 (APP/GEN mode); 170~264 (UPS mode)
Frequency (Hz)	50/60 (Auto Adaptive)
AC Output	
Rated Capacity (kVA/kW)	4.0 Output Power rating will be reduced to 90%, when setting the Output Voltage to 208V)
Surge Power (kVA)	7.2
Voltage (VAC)	208/220/230/240
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)	60s@102%~110%load; 10s@110%~130%load; 3s@130%~150%load; 0.2s@>150%load
Max. Efficiency (Battery Mode)	92%@24VDC
Charger(PV/AC)	
Solar Charger Type	MPPT
Max PV Input Current/Power	18A/5000W
MPPT Range@Operating Voltage (VDC)	40~450
PV Start-up Voltage (VDC)	60
Max PV Open Circuit Voltage (VDC)	500
Max PV Charge Current (A)	100
Max AC Charge Current (A)	100
Max. Charge Current (PV+AC) (A)	100
Battery	
Normal Voltage (VDC)	24
Battery Type	Lithium and Lead-acid

General Data	
HMI	LCD
Interface	RS485/CAN/RS232
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)

Output Power rating will be reduced due to various conditions.

Battery	PV	AC Input	Max Output Power
L	N	N	Follow the Battery Voltage Derating Curve as shown below.
N	L	N	Depends on the PV input power and Maximum is 3.6kW.
N	N	L	Input Voltage * Input Max current 20A
L	L	N	Two ways to achieve 3.6kW are as follows: 1. Battery Voltage $\geq$ 26V; 2. Battery Voltage $\geq$ 21V and PV Input Power $\geq$ 900W; If none of the above conditions are met, then follow the Battery Voltage Derating Curve as shown below.
N	L	L	Input Voltage * Input Max Current 20A
L	N	L	Input Voltage * Input Max Current 20A
L	L	L	Input Voltage * Input Max Current 20A

Note:The 'L' in the diagram represents the meaning of being accessed or connected, while the "N" signifies the meaning of not being accessed or not being connected.



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

