

50KVA

Hybrid Solar Inverter

High-voltage | Three Phase

Features

- Supports WiFi monitoring and Fsolar smart cloud monitoring system.
- Seamless power supply switching within 10ms.
- Configurable parameters and working mode via LCD touch screen.
- Programmable supply priority for battery or grid.
- Programmable multiple operation modes: On grid, off grid and UPS.
- 8-channel PV, 4-channel MPPT, 2 times over configuration capacity.
- 2 independent battery inputs, effectively reducing inter-cluster circulation.
- Wide battery voltage input and high battery charge and discharge current up to 100A(50A+50A).
- Programmable generator port, support smart load and micro inverter access.
- IP65 protection level.
- 12pcs in parallel maximum.
- Auto restart while AC is recovering.



IVGM50KHP3G2

Model	IVGM50KHP3G2	
Battery Input Data		
Battery Type	LFP (LiFePO4)	
Battery Voltage Range	160~800Vdc	
Max. Charging Current	50+50(A)	
Max. Discharging Current	50+50(A)	
Number of Battery Input	2	
PV String Input Data		
Max. DC Access Power	100kW	
Max. DC Input Power	80kW	
Max. DC Input Voltage	1000Vdc	
Min. DC Input Voltage	150Vdc	
Start-up Voltage	180Vdc	
Rated DC Input Voltage	600Vdc	
MPPT Range	150~850Vdc	
Full Load DC Voltage Range	550~850Vdc	
PV Input Current	36+36+36+36(A)	
Max. PV Isc	55+55+55+55(A)	
No.of MPP Trackers	4	
No.of Strings Per MPP Tracker	2	
AC Output Data		
Rated AC Output Power	50kW	
Max. AC Output Power	55kW	
AC Output Rated Current	72.5A	
Max. AC Current	79.7A	
Rated AC Voltage	110V/190V, 115V/200V, 120V/208V, 127V/220V, 133V/230V, 200V/346V, 220V/380V, 230V/400V, 240V/415V, 277V/480V	
AC Wiring Mode	3L+N+PE	
Rated AC Frequency	50 /60 Hz (45~55Hz/55~65Hz)	
THDI	<3% (At Rated Power)	
Power Factor	0.8(Leading) to 0.8(Lagging)	
Safety and Standards		
Surge Protection Level	TYPE II(DC), TYPE II(AC)	
Over Voltage Category	OVCII (DC), OVC III (AC)	
Grid Regulation	NTS & UNE217001 & UNE217002、CEI 0-21、NRS 097-2-1、EN50549-1/-10+Poland Deviations、VDE 4105、G99、EN50549-1/-10、EN50549-1/-10+ Netherlands Deviations	
Safety Regulation	EN 62477-1、IEC 62109-1/-2	
EMC	IEC/EN 61000-6-2/4、EN/IEC 61000-3-11/12	
Protection		
PV Input Lightning Protection	Integrated	
PV String Input Reverse Polarity Protection	Integrated	
Battery Input Lightning Protection	Integrated	
AC Output Lightning Protection	Integrated	
Battery Input Reverse Polarity Protection	Integrated	
Insulation Resistor Detection	Integrated	
Residual Current Monitoring Unit	Integrated	
Output Over Current Protection	Integrated	
Output Short-Circuit Protection	Integrated	
Output Over Voltage Protection	Integrated	
Anti-islanding Protection	Integrated	
General Data		
Net Weight	87.1KG	
Gross Weight	107.1KG	
Product Dimension	940*582*340MM	
Package Dimension	1114*774*469MM	
Protection Degree	IP65	
Operating Temperature Range	-40 to 60°C(> 50°C Derating)	
Humidity	0~ 95 % (No Condensation)	
Cooling	Smart Cooling	
Communication with BMS	RS485,CAN	
Monitor Module	WiFi/GPRS	
Installation Style	Wall-mounted	
Warranty	10 Years	

*Refer to Felicitysolar's Warranty Policy for applicable conditions.

