

50KVA

Hybrid Solar Inverter

High-voltage | Three Phase

Features

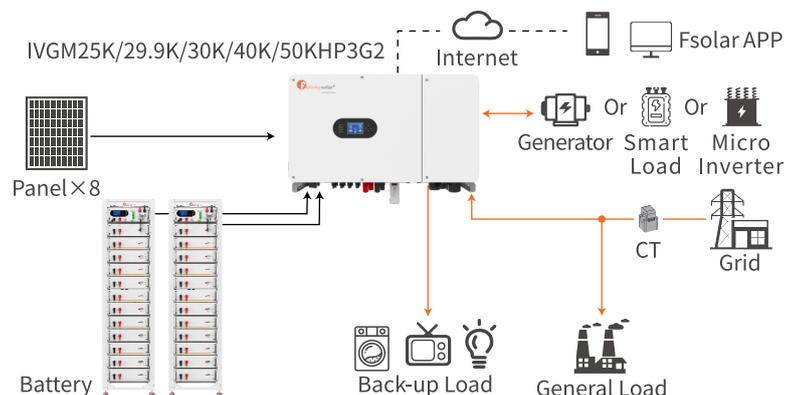
-  Supports WiFi monitoring and F solar smart cloud monitoring system.
-  Customizable battery charge / discharge scheduling.
-  Seamless power supply switching within 10ms.
-  Configurable parameters and working mode via LCD touch screen.
-  Programmable multiple operation modes: On grid, off grid and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



IVGM25K~50KHP3G2

System Configuration

-  DC
-  AC
-  Communication



Model	IVGM50KHP3G2	IVGM40KHP3G2	IVGM30KHP3G2	IVGM29K9HP3G2	IVGM25KHP3G2
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	80kW	60kW	59.8kW	50kW
Max. DC Input Power	80kW	64kW	48kW	47.84kW	40kW
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	444~850Vdc	444~850Vdc	443~850Vdc	555~850Vdc
PV Input Current	36+36+36+36(A)		36+36+36(A)		36+36(A)
Max. PV Isc	55+55+55+55(A)		55+55+55(A)		55+55(A)
No. of MPP Trackers	4		3		2
No. of Strings Per MPP Tracker	2		2		2
AC Output Data					
Rated AC Output Power	50kW	40kW	30kW	29.9kW	25kW
Max. AC Output Power	55kW	44kW	33kW	29.9kW	27.5kW
AC Output Rated Current	72.5A	58A	43.5A	43.4A	36.3A
Max. AC Current	79.7A	63.8A	47.9A	43.4A	39.9A
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、CEI0-21、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.

