

16kW

Hybrid Solar Inverter

IVGM Series Low-voltage | Single Phase

Features



Remote Monitoring
via F solar APP



Supports high current for
battery charging/discharging.



1.5 x PV
input oversizing



IP65-rated Protection



Time of
Use Function



Generator / Smart Load /
Microinverter Compatible



Max.6 Units
in Parallel



User-friendly
Touchscreen



IVGM12~16KLP1G1



Model	IVGM12KLP1G1	IVGM14KLP1G1	IVGM16KLP1G1
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range	40V~60V		
Max. Charging and Discharging Current	220A/220A	250A/250A	290A/290A
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	2		
PV String Input Data			
Max. PV Access Power	24000W	28000W	32000W
Max. PV Input Power	19200W	22400W	25600W
Max. PV Input Voltage	500V		
Start-up Voltage	125V		
MPPT Voltage Range	150V-425V		
Rated PV Input Voltage	370V		
Max Input Short-Circuit Current	44A+44A+44A		
Max Operating PV Input Current	26A+26A+26A		
No.of MPP Trackers/No.of String Per MPP Tracker	3/2+2+2		
Grid Data			
Rated AC Input/Output Active Power	12000W	14000W	16000W
Max. AC Input/Output Apparent Power	13200VA	15400VA	17600VA
Peak Power (off-grid)(W)	2 Times of Rated Power, 10s		
Rated AC Input/Output Current	54.5A/52.2A	63.6A/60.9A	72.7A/69.6A
Max. AC Input/Output Current	60A/57.4A	70A/67A	80A/76.5A
Max. Continuous AC Passthrough (grid to load)	100A		
Rated Input/Output Voltage/Range	220V/230V 0.85Un-1.1Un		
Grid Connection Form	L+N+PE		
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz		
Power Factor Adjustment Range	0.8 Leading to 0.8 Lagging		
Total Current Harmonic Distortion THDi	<3% (of Nominal Power)		
DC Injection Current	<0.5% In		
Protection			
DC Reverse Polarity Protection	Integrated		
AC Output Overcurrent Protection	Integrated		
Thermal Protection	Integrated		
AC Output Overvoltage Protection	Integrated		
AC Output Short Circuit Protection	Integrated		
DC Component Monitoring	Integrated		
Arc Fault Circuit Interrupter (optional)	Integrated		
Anti-islanding Protection	Integrated		
DC Switch	Integrated		
Insulation Impedance Detection	Integrated		
Residual Current Detection	Integrated		
Surge Protection Level	(TYPE II(DC), TYPE II(AC))		
Interface			
Communication Interface	RS485/RS232/CAN		
Monitor Mode	WIFI/Bluetooth		
General Data			
Operating Temperature Range	-25°C~60°C, >45°C Derating		
Ingress Protection (IP) Rating	IP65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Net Weight	53 kg		
Gross Weight	63,6 kg		
Product Dimension	760*450*285 mm		
Package Dimension	895*570*419 mm		
Type Of Cooling	Intelligent air Cooling		
Warranty	10 Years		
Grid Regulation(In progress)	IEC61727, IEC62116, NRS097		
Safety Regulation & EMC	IEC/EN61000-6-1/2/3/4, IEC/EN62109-1, IEC/EN62109-2		

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

