

20kW

Hybrid Solar Inverter

IVGM Series Low-voltage | Three Phase

Features



Remote Monitoring
via F-solar APP



1.6 x PV
input oversizing



Supports 100% Unbalanced
Three-phase Output,
Flexible Load Connection



Supports Single-
phase/Three-
phase Output



IP65-rated
Protection



Time of
Use Function



Generator / Smart Load /
Microinverter Compatible



Max. 10 Units
in Parallel



IVGM10~20KLP3G1

Model	IVGM20KLP3G1	IVGM18KLP3G1	IVGM16KLP3G1	IVGM15KLP3G1	IVGM14KLP3G1	IVGM12KLP3G1	IVGM10KLP3G1
Battery Input Data							
Battery Type	Li-Ion / Lead-acid						
Battery Voltage Range	40V~60V						
Max. Charging/Discharging Current	350A	330A	300A	280A	260A	240A	210A
PV String Input Data							
Max. PV Input Power	32kW	28.8kW	25.6kW	24kW	22.4kW	18kW	15kW
Max. PV Input Voltage	800V						
Start-up Voltage	160V						
MPPT Voltage Rang	160V-650V						
Rated DC Input Voltage	550V						
Full Load DC Voltage Range	550V-800V	500V-800V	445V-800V	416V-800V	389V-800V	347V-800V	289V-800V
Max. Operating PV Input Current	36+36(A)					26+26(A)	
Max. Input Short-Circuit Current	54+54(A)					39+39(A)	
No. of MPP Trackers /No. of Strings MPP Tracker	2/2+2						
AC Input/Output Data							
Rated AC Input/Output Active Power	20kW	18kW	16kW	15kW	14kW	12kW	10kW
Max. AC Input/Output Apparent Power	22kVA	19.8kVA	17.6kVA	16.5kVA	15.4kVA	13.2kVA	11kVA
Peak Power (Off-grid)	2 Times of Rated Power, 10s						
Rated AC Input/Output Current	28.9A	26.1A	23.2A	21.8A	20.3A	17.4A	14.5A
Max. AC Input/Output Current	31.9A	28.7A	25.5A	23.9A	22.3A	19.2A	16A
Max. Continuous AC Passthrough (Grid to Load)	70A					45A	
Max. Output Overcurrent Protection	92A					65A	
Rated Input/Output Voltage/Range	220/380,230/400Vac(-20%~+15%)						
AC Wiring Mode	3L+N+PE						
Rated Input/Output Grid Frequency/Range	50/60 Hz(45~55Hz/55~65Hz)						
Equipment Protection							
DC Polarity Reverse Connection Protection	Yes						
AC Output Overcurrent Protection	Yes						
AC Output Overvoltage Protection	Yes						
AC Output Short Circuit Protection	Yes						
Thermal Protection	Yes						
DC Terminal Insulation Impedance Monitoring	Yes						
DC Component Monitoring	Yes						
Ground Fault Current Monitoring	Yes						
Arc Fault Circuit Interrupter (AFCI)	Yes						
Power Network Monitoring	Yes						
Island Protection Monitoring	Yes						
Earth Fault Detection	Yes						
DC Input Switch	Yes						
Overvoltage Load Drop Protection	Yes						
Residual Current (RCD) Detection	Yes						
Surge Protection Level	TYPE II(DC), TYPE II(AC)						
Certification and Standards							
Grid Regulation	NRS 097-2-1, VDE4105, EN50549-1, AS 4777.2, GB / T 34120, GB / T 34133, GB / T 34129						
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2						
General Data							
Net Weight(KG)	48.7KG						
Gross Weight(KG)	60.2KG						
Product Dimension(MM)	750x450x268MM						
Package Dimension(MM)	889x566x397MM						
Protection Degree	IP65						
Communication with BMS	RS485/CAN						
Monitor Module	WiFi/4G						
Warranty	10 Years						

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

