



# HYBRID SOLAR INVERTER IVGM SERIES

## Features

-  Max. charging/discharging current of 100A
-  48V low voltage battery, transformer isolation topology
-  Support **Wi-Fi** for mobile monitoring
-  AC couple to retrofit existing solar system
-  Support storing energy from diesel generator
-  Power supply can be switched automatically and switching time within 20ms

Model	IVGM3648-LS	IVGM4048-LS	IVGM4648-LS	IVGM5048-LS
<b>Battery Input Data</b>				
Battery Voltage Range	40V~60V			
Max. charging and discharging current	100A/100A			
Max. charging and discharging power	3600W	4000W	4600W	5000W
Battery type	Li-Ion /Lead-acid			
<b>DC Input Data (PV side)</b>				
Max. recommended PV power	4700W	5200W	6000W	6500W
Max. PV voltage	550V			
Start voltage	130V			
PV voltage range	90V~550V			
MPPT voltage range	100V~500V			
MPPT Voltage Range for Full Load	160V~500V	175V~500V	200V~500V	220V~500V
Nominal voltage	360V			
Max. input current	15A/15A			
Max. shorted current	18A/18A			
Number of MPP trackers / strings per MPP tracker	2/1			
<b>Grid Data</b>				
Nominal Input Voltage	230Vac			
Input Voltage Range	184~264.5Vac*			
Nominal grid frequency	50/60Hz*			
Max. input current	40A			
Max. Charge Current	100A			
Max. AC output power	3600W	4000W	4600W	5000W
AC Output Rated Current	15.6A	17.4A	20A	21.7A
Max. output current	19.5A	21.7A	25A	25A
Max. Continuous AC Passthrough	30A			
Power factor	>0.99			
Displacement power factor	0.8leading~0.8lagging			
THDI	<3%			
<b>AC Output Data(Back Up)</b>				
Rated output power	3600VA/3600W	4000VA/4000W	4600VA/4600W	5000VA/5000W
Max. Output current	30A			
Rated AC output voltage	230Vac			
Rated AC output frequency	50/60Hz			
<b>Efficiency</b>				
Max. efficiency	97.5%	97.5%	97.6%	97.6%
Euro efficiency	96.7%	96.8%	97.0%	97.0%
MPPT efficiency	99.9%			
<b>Protection</b>				
Output over current protection	Integrated			
Output over power protection	Integrated			
Output shorted protection	Integrated			
Anti-islanding protection	Integrated			
GFCI Protection	Integrated			
Insulation Resistor Detection	Integrated			
<b>General Data</b>				
Operating temperature range	-25°C~60°C,>45°C Derating			
Protection degree	IP65			
Relative humidity	100%			
Cooling concept	Nature			
Altitude	2000m			
Communication	RS232/RS485			
BMS Communication	CAN/RS485			
Monitor module	Wi-Fi/GPRS			
Display	LCD+LED			
Installation Style	Wall-mounted			
Warranty	10 years			
Grid Regulation	VDE-AR-N 4105; G99/1; EN50549-1; CEI 0-21; AS 4777.2; NRS 097-2-1;			
Safety Regulation	IEC 62109-1/2, IEC 62040-1			
EMC	EN61000-6-1, EN61000-6-3			

\* According to local grid-connected standards