



More Detailed Information

# C&I Energy Storage System

**IVGM 50kW inverter & FLH 614.4V high-voltage LFP battery**

## System Features

-  Maximum energy storage capacity reaching 5.7 MWH.
-  Supports single-phase input, three-phase output.
-  Supports 150% unbalanced three-phase output (max. single-phase output up to 25 kW).
-  LFP battery with built-in aerosol fire extinguishing system.
-  Compatible access for generator, smart load, or micro inverter.
-  Meets global different grid standards.
-  Time of Use function, smarter grid utilization.
-  1000V PV input for maximum solar energy harvest.
-  Real-time monitoring, better management.
-  Inverter with IP65 protection.
-  High scalability for flexible system expansion



**IVGM50KHP3G2**

**FLH48100UG2**

## Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels



<b>Inverter Model</b>	<b>IVGM50KHP3G2</b>
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<b>Battery Input Data</b>	
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Battery Type	LFP (LiFePO4)
Battery Voltage Range	160~800Vdc
Max. Charging/Discharging Current	50+50(A)
Number of Battery Input	2

<b>PV String Input Data</b>	
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Max. DC Access Power	100kW
Max. DC Input Power	80kW
Max. DC Input Voltage	1000Vdc
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

<b>AC Output Data</b>	
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Rated AC Output Power	50kW
Max. AC Output Power	55kW
AC Output Rated Current	72.5 A
Max. AC Current	79.7 A
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)

<b>General Data</b>	
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Net Weight	87.1KG
Gross Weight	107.1KG
Product Dimension	940*582*340MM
Package Dimension	1114*774*469MM
Protection Degree	Ip65
Warranty	10 Years

<b>Battery Model</b>	<b>FLH48100UG2</b>		
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Battery Type	LiFePO4		
Nominal Energy	5.12kWh		
Nominal Voltage	51.2V		
Nominal Capacity	100Ah		
Number of Battery Modules	5 (Min)	8	12
System Nominal Energy	25.6kWh	40.96kWh	61.44kWh
System Nominal Voltage	256V	409.6V	614.4V
System Operating Voltage	232~288V	371.2~460.8V	556.8~691.2V
Recommend Charge/Discharge Current	50A		
Max. Continuous Charge/Discharge Current[1]	100A		
Depth of Discharge(DOD)	90%		
Display Type	LED+LCD		
IP Rating of Enclosure	IP21		
Cycle Life[2]	≥ 6000 Cycles		
Installation	Rack-Mounting		
Warranty Period[3]	10 Year		
Control Module FLH48100UCG2	Product Dimension	482.6x565x150MM	
	Package Dimension	687x562x269MM	
	Product Weight Approximate	10.3KG	
	Package Weight Approximate	16.7KG	
Battery Module FLH48100UMG2	Product Dimension	482.6x565x133MM	
	Package Dimension	687x562x250MM	
	Product Weight Approximate	41.3KG	
	Package Weight Approximate	45KG	
Battery Designation[4]	IFpP/54/150/120/[(1P16S)NS]M/-20+50/95		

[1] Max. Continuous Charge/Discharge Current/Power is Affected by Temperature and SOC.

[2] Test Conditions: 0.5C Charging/Discharging @25±2°C, EOL70%.

[3] Refer to Felicitysolar's Warranty Policy for applicable conditions.

[4] "N" Means the Number of Battery Packs Connected Series and Should not Exceed 17. (N≤17)

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

