

LiFePO4 Battery System

7.PRODUCT INFORMATION

1. FLH48100UMG1 is a battery module, it needs to be used with FLH48100UCG1 controller;
2. FLH48100UCG1 is the controller of the whole system, so each system must have four FLH48100UMG1;
3. Our system consists of at least 1 FLH48100UCG1 + 4 FLH48100UMG1 and up to 12 FLH48100UMG1.

7.1 Battery Module Specifications

Model	FLH48100UG1		
Battery Type	LiFePO4		
Nominal Energy	5.12kWh		
Nominal Voltage	51.2V		
Nominal Capacity	100Ah		
Number of Battery Modules	4 (Min)	8	12
System Nominal Energy	20.48kWh	40.96kWh	61.44kWh
System Nominal Voltage	204.8V	409.6V	614.4V
System Operating Voltage	192-230.4V	384-480.8V	576-691.2V
Recommend Charge/Discharge current	50		
Max. continuous charge/Discharge current[1]	100A		
Peak Charge/Discharge current(15S)	120A		
Depth of discharge(DOD)	≥95%		
Display type	LED+LCD(Touch)		
IP Rating of Enclosure	IP21		
Working Temperature Range	Charge:0°C~+55°C		
	Discharge:-20°C~+55°C		
Storge Temperature Range	0°C~+35°C		
Humidity	5%~95%		
Altitude	≤2000m		
Cycle Life[2]	≥ 6000 Cycles		
Installation	Rack-Mounting		
Protection	Built-in smart BMS, Breaker, Fuse		
Communication Port	RS485 / CAN		
Warranty Period[3]	10 Year		
Control Module FLH48100UCG1	Product Dimension	482,6x565x150mm	
	Package Dimension	687x562x269mm	
	Product Weight Approximate	10.3kg	
	Package Weight Approximate	16.7kg	

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Battery Module FLH48100UMG1	Product Dimension	482,6x565x131mm
	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
Rack FLH48100R13G1	Product Dimension	560×590×2137.5mm (13th floor)
	Package Dimension	165×640×2142mm
	Product Weight Approximate	62kg
	Package Weight Approximate	69.5kg
Rack FLH48100R9G1	Product Dimension	560×590×1565.5mm (9th floor)
	Package Dimension	168×642×1570mm
	Product Weight Approximate	46kg
	Package Weight Approximate	52kg(Approx)
[1] Max, continuous charge/discharge current is affected by temperature and SOC.		
[2] Test conditions: 0.2C Charging/Discharging @25°C, 80% DOD.		
[3] Conditions apply, refer to Felcitysolar Warranty policy.		
[4] "N"means the number of battery packs connected parallel and should not exceed 12.(N≤12)		

Charging method:

When the battery and inverter establish communication, the constant current of 100A is charged until the battery voltage reaches 54.4V * N, and then the current decreases linearly until the voltage reaches 56.8V * N and the current drops to 0A (N is the number of battery packs in series)