LiFe Series Battery Settings for **Solis** Inverters

OVERVIEW

Settings listed are only applicable to battery charge and discharge. All other settings are the responsibility of the integrator.

It is the responsibility of the integrator to have a full understanding of the connected PCE prior to programming, and it is preferred that they have attended the manufacturer's training or integration course should they be available.

SoC Drift

State of Charge ("Soc") drift happens when the product that is calculating SoC builds up an accumulative error. This error is generally due to tolerance of components that measure voltage and current, and algorithms used to calculate the SoC. Most products will reset its accumulative error when the system gets to 100% SoC or Float.

It is important that a well-designed battery storage system reaches Float stage as regularly as possible, preferably every one to two days to rest SoC drift.

SoC drift can be addressed in many ways.

Examples:

1. Sufficient solar sized to charge batteries to float on the winter equinox
2. Backup source installed (grid or generator) to allow charging of batteries during extended bad weather or high load events.

How many batteries do I need?

Minimum battery size should be greater than the rated peak output of the inverter.

Battery to PV ratio is no less than 2.5kWh (battery) : 1kw (PV).

The battery quantity is not compulsory, however it's highly recommended as a minimum to reduce possible battery trips due to over current.

Always consult and read the manufactures documentation before designing, installing and programming their devices.

Please Note: These settings are for LiFe4838P batteries with serials after LXXXX6000 only, please contact PowerPlus Energy support for legacy settings.

LiFe4838P batteries with serials prior to LXXXX6000 are not compatible with LiFe4838P batteries with serials after LXXXX6000.

These settings are for using the LiFe4851 in self-managed mode and for confirming operational parameters in managed mode.

Recommended Minimum Battery Modules

	LiFe4833P	LiFe4838P	LiFe4851
5kW	3	3	2
8kW	4	4	3
10kW	6	6	3
12kW	7	7	4
15kW	9	9	4

Battery Settings for **S5** Inverters

	LiFe4833P	LiFe4838P	LiFe4851
Battery Type	Lead Acid Battery		
Battery capacity	Total Ah Capacity of PowerPlus Energy Battery Bank Installed		
Floating voltage	57.6V	55.7V	56V
I_Max Discharge	Max. 63A per battery installed	Max. 63A per battery installed	Max. 50A per battery installed
I_Max Charge	Max 32A per battery installed	Max. 39A per battery installed	Max. 50A per battery installed
Equalizing Voltage	57.6V	55.7V	56V
Overdischg Voltage	50.2V		
Force Charge Voltage	48V		
ForceChg PLmt	Max. 1600W per battery installed	Max. 2000W per battery installed	Max. 2500W per battery installed
Temp. Compensation	0		
AMB. Temp.Lower	5°		
AMB.Temp.Upper	45°		
Power Limit On	From Grid		
Save and Send			
Environment Temp	Warm		

System Settings for **S6** Inverters

	LiFe4833P	LiFe4838P	Life4851
Battery Type	51.2V Lithium Battery		
Max Charge Current	Max - 0.5C - 50% of total Ah Capacity Installed		
Max Discharge Current	Max. 63A per battery installed		Max. 50A per battery installed
Over Discharging	49V		
Recovery	51V		
Force Charge Voltage	48V		

Battery Settings for **S6** Inverters

	LiFe4833P	LiFe4838P	LiFe4851
Battery Capacity (Ah)	Total Ah Capacity of PowerPlus Energy Battery Bank Installed		
Equalizing Charge Charge Voltage	Max - 0.5C - 50% of total Ah Capacity Installed		
Floating Charge Voltage	57.6V	55.7V	56V
Over Discharging	57.6V	55.7V	56V
Equalization Voltage	57.6V	55.7V	56V
Equalization Interval	21 Days		
Equalization Hours	1h		
TEMPCO	0 mv / °C / cell		

Installers should ensure an adequate system design is carried out at all times. PPE accepts no responsibility for underperforming system designs.
As part of our continued improvement process, settings are subject to change without notice and are correct at time of publishing.